



2023

REPORT TO CONGRESS

of the

**U.S.-CHINA ECONOMIC AND
SECURITY REVIEW COMMISSION**

**ONE HUNDRED EIGHTEENTH CONGRESS
FIRST SESSION**

NOVEMBER 2023

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The Commission was created on October 30, 2000 by the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001, Pub. L. No. 106–398 (codified at 22 U.S.C. §7002), as amended by: The Treasury and General Government Appropriations Act, 2002, Pub. L. No. 107–67 (Nov. 12, 2001) (regarding employment status of staff and changing annual report due date from March to June); The Consolidated Appropriations Resolution, 2003, Pub. L. No. 108–7 (Feb. 20, 2003) (regarding Commission name change, terms of Commissioners, and responsibilities of the Commission); The Science, State, Justice, Commerce, and Related Agencies Appropriations Act, 2006, Pub. L. No. 109–108 (Nov. 22, 2005) (regarding responsibilities of the Commission and applicability of FACA); The Consolidated Appropriations Act, 2008, Pub. L. No. 110–161 (Dec. 26, 2007) (regarding submission of accounting reports; printing and binding; compensation for the executive director; changing annual report due date from June to December; and travel by members of the Commission and its staff); The Carl Levin and Howard P. “Buck” McKeon National Defense Authorization Act for Fiscal Year 2015, Pub. L. No. 113–291 (Dec. 19, 2014) (regarding responsibilities of the Commission).

The Commission’s full charter and statutory mandate are available online at: www.USCC.gov/charter.

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

NOVEMBER 14, 2023

The Honorable Patty Murray

President Pro Tempore of the U.S. Senate, Washington, DC 20510

The Honorable Mike Johnson

Speaker of the U.S. House of Representatives, Washington, DC 20510

DEAR SENATOR MURRAY AND SPEAKER JOHNSON:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the Commission's 2023 Annual Report to Congress. This Report responds to our mandate "to monitor, investigate, and report to Congress on the national security implications of the bilateral trade and economic relationship between the United States and the People's Republic of China." The Commission reached a broad and bipartisan consensus on the contents of this Report, with all 12 members voting unanimously to approve and submit it to Congress.

In accordance with our mandate, this Report, which is current as of October 6, includes the results and recommendations of our hearings, research, and review of the areas identified by Congress in our mandate, as defined in Public Law No. 106–398 (October 30, 2000) and amended by Public Laws No. 107–67 (November 12, 2001), No. 108–7 (February 20, 2003), 109–108 (November 22, 2005), No. 110–161 (December 26, 2007), and No. 113–291 (December 19, 2014). The Commission's charter, which includes the 11 directed research areas of our mandate, is included as Appendix I of the Report.

The Commission conducted seven public hearings, taking testimony from 67 expert witnesses from government, the private sector, academia, think tanks, research institutions, and other backgrounds. For each of these hearings, the Commission produced a transcript (posted on our website at *www.USCC.gov*). This year's hearings included:

- China's Military Diplomacy and Overseas Security Activities;
- China's Challenges and Capabilities in Educating and Training the Next Generation Workforce;
- China's Global Influence and Interference Activities;
- China's Pursuit of Defense Technologies: Implications for U.S. and Multilateral Export Control and Investment Screening Regimes;
- Rule by Law: China's Increasingly Global Legal Reach;
- Europe, the United States, and Relations with China: Convergence or Divergence?; and
- China's Current Economy: Implications for Investors and Supply Chains.

The Commission received a number of briefings, both unclassified and classified, by executive branch agencies, the intelligence community, foreign government officials, and U.S. and foreign nongovernmental experts on topics such as Europe's views of China, China's

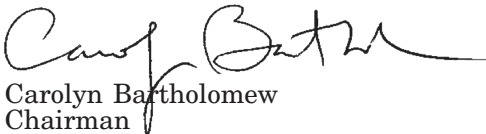
education system and its implications for economic competitiveness, climate for U.S. businesses in China, personnel of the People's Liberation Army, and China's foreign military relations. The Commission includes key insights gained through these briefings either in its unclassified Annual Report or, as appropriate, in a classified annex to that Report.

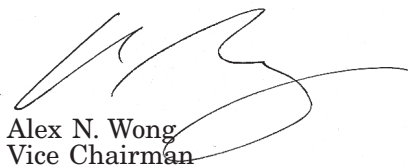
The Commission conducted official fact-finding travel this year to Belgium, Germany, and Lithuania to hear and discuss perspectives on Europe and the United States' relations with China as well as transatlantic cooperation. In these visits, the Commission delegation met with U.S. diplomats, foreign government and alliance officials, business representatives, academics, journalists, and other experts. The Commission also relied substantially on the work of our excellent professional staff (see Appendix IV) in accordance with our mandate (see Appendix I).

The Report includes 30 recommendations for congressional consideration. The Commissioners agreed that ten of these recommendations, which appear on page 26, are the most important for congressional action. The complete list of recommendations appears on page 697 at the conclusion of the Report.

We offer this Report to Congress in the hope that it will be useful for assessing progress and challenges in U.S.-China relations. Thank you for the opportunity to serve. We look forward to continuing to work with Members of Congress in the upcoming year to address issues of concern in the U.S.-China relationship.

Sincerely,

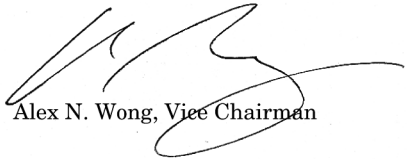

Carolyn Bartholomew
Chairman


Alex N. Wong
Vice Chairman

Commissioners Approving the 2023 Report



Carolyn Bartholomew, Chairman



Alex N. Wong, Vice Chairman



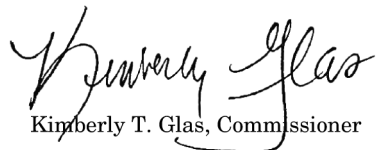
Robert I. Borochoff, Commissioner



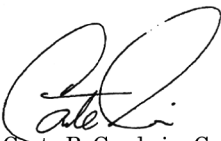
Robin Cleveland, Commissioner



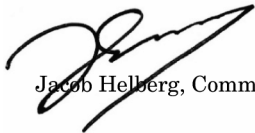
Aaron Friedberg, Commissioner



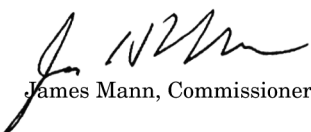
Kimberly T. Glas, Commissioner



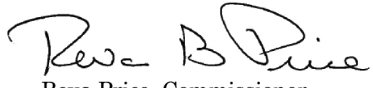
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Jacob Helberg, Commissioner



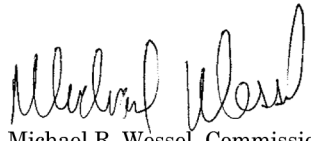
James Mann, Commissioner



Reva Price, Commissioner



Randall Schriver, Commissioner



Michael R. Wessel, Commissioner

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INTRODUCTION

Throughout much of 2023, the public discussion of China in the United States was preoccupied with the short-term ups and downs of the relationship between the two countries. Tensions between the two were said to be rising or easing, warming or chilling, usually as the result of high-level visits (or the lack of them). The underlying reality was that, amid these ups and downs, the rivalry between the United States and China was intensifying. While the top-level contacts reflected a general desire, at least by the United States, to improve the relationship with Beijing and create an air of normalcy, the new normal is one of continuing, long-term strategic and systemic competition.

China's Communist Party (CCP) regime gives no sign of altering its policies, either at home or abroad. Beijing continues to reject cooperation with the United States on fundamental questions of national security, economics, or trade. None of the flurry of visits and other diplomacy over the past year have resulted in any significant change of course by the regime. The result of high-level meetings between the United States and China has been merely the promise of further meetings—that is, of more talk rather than concrete actions. China now appears to view diplomacy with the United States primarily as a tool for forestalling and delaying U.S. pressure over a period of years while China moves ever further down the path of developing its own economic, military, and technological capabilities. Beijing, in a continuing and deepening effort to challenge the existing international order, seeks to create a new one that will be aligned against the United States and its democratic allies in Europe, Asia, and elsewhere.

China may now be on the verge of its most serious economic crisis in 40 years. After over three years of brutally enforced lockdowns, in December 2022 the CCP regime suddenly reversed course and abandoned its previous draconian approach to disease control. The end of “Zero-COVID” was widely expected to reinvigorate China's slumping economy, but despite an initial uptick, growth has remained anemic. This poor performance has raised new doubts about General Secretary of the CCP Xi Jinping's economic management skills as well as China's model for sustaining long-term growth.

After decades of debt-fueled growth, the CCP's ability to use its traditional tools to support the economy is constrained. Households and businesses have now lost confidence in the regime's ability to produce sustained, stable growth and prefer to sit on their money rather than to consume or invest. This is helping to speed the ongoing deflation of China's real estate bubble, which could lead to more bankruptcies for major construction companies as well as bank failures and a loss of wealth for families who have bet on continually rising prices. In addition to its domestic troubles, China also faces

an increasingly inhospitable international environment as the United States and other advanced industrial countries attempt to shift supply chains out of China and “de-risk” their economic relations with it.

Notwithstanding the evident seriousness of the situation, Beijing has thus far responded with relatively minor fixes and empty exhortations designed to revive confidence. Reflecting its habitual secrecy and need for control, the CCP regime has also stopped the publication of some economic data (including youth unemployment figures) and cracked down on Western companies doing independent economic research in China. These measures have only fueled concerns about its long-term trajectory, further depressing foreign direct investment.

Experts (including some in China) have long warned that the country’s growth model, with its heavy dependence on exports and debt-fueled investments in real estate and infrastructure, was unsustainable. Yet, to date, little has been done to change it. The CCP is reluctant to relax its grip on the economy by placing greater reliance on market forces and putting more money and decision-making power in the hands of consumers and private entrepreneurs. Beijing is using subsidies to help its exports gain large shares of the global market for new products like electric vehicles. In the somewhat longer run, it is evidently betting that massive, state-directed investments and continued access to foreign technology can help it to achieve the breakthroughs it needs to boost productivity and maintain growth.

Despite indications that its behavior is generating growing suspicion and resistance from other countries, Beijing continues to hold to the same aggressive course on foreign policy that it has been pursuing in recent years. In the face of Russian war crimes, battlefield setbacks, a coup attempt in Moscow, and persistent criticism from the United States and other democratic countries, Xi Jinping has not wavered in his support for Russian President Vladimir Putin’s unprovoked invasion of Ukraine. China continues to provide “non-lethal” military assistance to Moscow while helping to buffer the Russian economy from Western sanctions by importing increasing volumes of Russian grain, energy, and other raw materials. Meanwhile, military cooperation between the two countries is deepening well beyond Ukraine: last summer, the Russian and Chinese navies conducted joint patrols in the Arctic and near Alaska.

China’s support for Russia has had diplomatic costs, especially in Europe. But the CCP regime appears already to have factored these negative reactions into its calculations and has decided to stand by Russia regardless. China’s criticism of alleged Western double-standards and hypocrisy in its handling of the Ukraine crisis has been more favorably received in parts of the so-called “Global South.” Here, Beijing is working hard to expand its influence, including in March 2023 by launching a so-called “Global Security Initiative” and in August by seeking to assert a leadership role at the BRICS summit.

Although a sustained economic slowdown could force difficult choices and tradeoffs, China continues to pour resources into its unprecedented military buildup. The PLA places particular emphasis

on achieving technological breakthroughs in missiles, space, under-sea warfare, and artificial intelligence, among other areas, in hopes that these might enable it to deter or defeat the forces of the United States and its allies.

Alongside its military buildup, Beijing has stepped up its use of political influence operations to try to shape the perceptions and preferences of foreign elites and publics. The CCP regime has also become more aggressive in attempting to persuade or coerce others into accepting its own antidemocratic definition of legal concepts and in trying to enforce its own laws on foreign soil, such as through the establishment of illegal, covert “police stations” in other countries, including the United States. Its espionage activities have continued unabated. In 2023, the CCP regime continued the methodical and ruthless destruction of Hong Kong’s once-vibrant civil society, completing its transformation into a Chinese—rather than an international—city. In an attempt to sway the outcome of Taiwan’s upcoming January 2024 presidential election, China continues to ramp up pressure on the island, seeking to increase its diplomatic isolation and to impose economic costs. Beijing’s bellicosity is causing growing concern in Europe as well as in Asia.

Despite the evident worsening of its economic prospects and external situation, the CCP regime has thus far done very little to try to allay suspicions about its intentions or to lessen tensions, either with the United States or its major allies. China is attempting a limited “charm offensive” directed primarily at Europe. But Beijing’s support for Russia has heightened suspicion of its motives in European capitals and, at least to date, has reduced the effectiveness of its diplomacy. After refusing meetings with high-level officials, China has shown an increased willingness to engage with the United States, but there is little evidence that it intends to make concessions or modify its own policies to improve relations.

To date, China’s efforts to appear more cooperative with the United States and Europe have been mostly in the realm of rhetoric and abstract ideas rather than concrete action. Europe has moved closer to the United States in now recognizing that China is a systemic rival and that the vague concept of “de-risking” is necessary. European governments increasingly recognize that they have a role to play in helping to dissuade China from attacking Taiwan. But the United States, the EU, and individual nations in both Europe and Asia all need to do much more, in collaboration with one another, to counter China’s aggressive policies overseas and continuing mercantilism at home. Unless and until Beijing changes course, it will not be possible to achieve a genuine improvement in relations. The “new normal” cannot be one in which the United States merely accepts Beijing’s ever-hardening policies and its ever-tightening control over the Chinese people.

Looking ahead to 2024, the U.S. relationship with China is likely to be affected by developments outside that country, including U.S. elections in 2024, the Taiwan presidential elections in January, and the course of the war in Ukraine. Finally, U.S.-China ties could be influenced next year by changing developments inside China, including the possibility that the Chinese economy could experience a deep slump. Amid these uncertainties and the continuing talk of

“tensions” and “thaws” between the United States and China, the prospects for 2024 are for continuing strategic competition and an intensifying systemic rivalry between the two countries.

EXECUTIVE SUMMARY

Chapter 1: Year in Review

Section 1: U.S.-China Bilateral and China's External Economic and Trade Relations

In 2023, the United States pursued diplomatic engagement with Beijing while seeking to de-risk the economic and security relationship. De-risking has seen its most muscular expression in an unprecedented export control regime designed to stifle China's access to advanced semiconductor technologies. At the same time, bilateral trade reflects deep and continuing commercial ties between the United States and China. Beijing's increased control over corporate information flows has significantly complicated the ability of U.S. firms to assess risk in China. Meanwhile, China's role in global debt distress, attempts to internationalize the renminbi (RMB), economic sustainment of Russia and its war in Ukraine, and economic coercion in 2023 all highlight its opportunistic stance: Beijing seeks to reap benefits from the financial instability it sows while attempting to shield itself from effects of the same. China's willingness to help international rule-breakers like Russia sidestep U.S. sanctions is an example of how the Party-state seeks to bend the rules-based order in its favor.

The composition of U.S.-China bilateral trade has changed dramatically in the last five years, owing to U.S. tariffs imposed under the Trump Administration Section 301 investigations, an increasingly uncertain business environment inside China, and other policy initiatives and efforts. Although China dismantled the COVID-19 controls that had sent its economy into unpredictable lockdowns throughout 2022, U.S. businesses and investors are reassessing the stability of China's domestic policy environment. Many of the U.S. industries exposed to trade actions and geopolitical tensions have begun to shift toward suppliers in other parts of Asia. Frequently, however, these suppliers are Chinese companies with overseas operations, and U.S. supply chain exposure remains at risk as Chinese producers expand their presence in regional supply chains, a trend seen most prominently as China's rapidly growing electric vehicle and battery industry invests heavily to establish a footprint overseas.

After a decade of predatory lending through the Belt and Road Initiative (BRI), nearly 60 percent of China's loan holders were in financial distress in 2022, up from just 5 percent in 2010. Beijing has resisted global appeals to address these debt challenges, instead seeking to leverage these troubles and international events to expand the use and reach of the RMB. At the same time, China is expanding its energy partnerships with countries across Central Asia and the Middle East to increase its energy access and security while insulating itself from U.S. economic statecraft.

Key Findings

- U.S. restrictions introduced in 2022 to curb China's ability to manufacture and develop advanced semiconductors have limited China's access to key segments of the chip industry that could advance its military. The controls prompted China to increase efforts to draw foreign talent to its chip industry, circumvent export controls, expand espionage activities, and promote indigenous innovation. In September 2023, Huawei began selling a smartphone that reportedly uses a Chinese-made chip capable of 5G performance despite U.S. restrictions, although China's capacity to domestically produce these chips at scale remains uncertain. The restrictions led to a drop in U.S. semiconductor exports of 50.7 percent in the first eight months of 2023 relative to the same period in 2022—down to \$3.1 billion from \$6.4 billion the year prior.
- Five years after the United States first imposed tariffs under the Trump Administration Section 301 investigations, the composition of bilateral trade has changed dramatically. Many of the U.S. industries exposed to trade actions and geopolitical tensions are seeking to shift toward suppliers based outside of China; however, this may not substantially reduce U.S. reliance on Chinese producers. A growing portion of suppliers in overseas markets are owned by Chinese entities, who also seek to evade trade restrictions by setting up facilities overseas, particularly in other parts of Asia and Mexico. U.S. exposure to China also rose through transshipment of goods through third countries.
- U.S. businesses delayed or reconsidered investment in China amid a weak economic outlook there, contributing to a continued decline of foreign direct investment (FDI) flows into China in 2023 after record lows in 2022. Amid heightened geopolitical tensions, U.S. businesses frequently found their Chinese operations getting caught in the crosshairs of Chinese restrictions. While many U.S. firms continue to view access to China's market as crucial to growth, a growing number of firms are moving to limit exposure and identify alternative strategies.
- As part of China's far-reaching anti-espionage and national security campaign, restrictions on cross-border data flows have cut off offshore businesses and investors from real-time financial and economic data. Amendments to China's Counterespionage Law that went into effect in June broadened the definition of espionage activities to include any information gathering that involves material related to China's broad and ambiguous definition of national security, potentially subjecting any company that collects information to investigation for espionage.
- Developing countries that received loans financed through China's policy banks are facing widespread debt distress, but China is not providing sufficient relief. China's continued free-riding on multilateral relief efforts and persistent refusal to offer debt forgiveness to many distressed borrowers undermines U.S.-led efforts to assist developing countries through comprehensive debt relief and restructuring.

- China is attempting to expand international use of the RMB and encourage participation in its RMB-based cross-border payment system through bilateral currency agreements and swap lines. These steps could provide an alternative financial architecture for countries seeking to circumvent or insulate themselves from U.S. sanctions, but they have not meaningfully increased global settlement in RMB.

Section 2: U.S.-China Security and Foreign Affairs

Throughout 2023, the Chinese Communist Party (CCP) recalibrated its foreign policy to counteract increasingly negative international perceptions of China over its support for Russia's unprovoked war in Ukraine and Beijing's aggression toward neighbors in the Indo-Pacific region. Emerging from Zero-COVID lockdowns in 2022, Chinese diplomats engaged in a flurry of activity in an attempt to assuage key global partners and cast China as a contributor to the global good. These engagements have demonstrated a change in tone but not substance, aimed primarily at preserving Beijing's access to foreign markets, technology, and FDI as well as its global influence. Beijing has sought to cultivate support from governments across Latin America and the Caribbean, Africa, and Europe in order to facilitate these objectives. In practice, Beijing continues efforts to shield Russia diplomatically and provide material support for its war in Ukraine. Sino-Russian defense cooperation is by no means limited to Ukraine, as both countries continue joint military exercises in the Indo-Pacific—including strategic bomber patrols with nuclear-capable aircraft—and ostensibly scientific activities in the polar regions. China may also be exploiting new opportunities to attract talent in artificial intelligence (AI) due to the exodus of Russian technology workers. Meanwhile, in Europe, the CCP has sought to undermine the transatlantic unity that has emerged vis-à-vis China as a response to Beijing's foreign policy choices. The CCP has also continued to engage selectively with the United States while preparing Chinese society for protracted strategic competition, up to and including the possibility of war.

China took several steps this year to reshape the global order. The June 2023 Foreign Relations Law creates a legal basis for sanctions and “countermeasures” against countries for actions Beijing deems threatening to its sovereignty, security, and development interests. Under the law, China's treaty commitments may no longer be binding. In a similar vein, China seeks to influence global governance organizations by promoting new initiatives to rework the norms underpinning these institutions, attempting to change the way they work. Through Beijing's Global Security Initiative, China's leaders hope to undermine U.S. leadership in international security affairs, establishing a role for China in mediating international conflicts and normalizing its selective application of its principle of “noninterference.”

That principle of noninterference does not apply to Beijing's espionage activity. In 2023, actors linked to China's government perpetrated multiple cyberespionage attacks against the United States and foreign governments, demonstrating the growing prowess and danger posed by Beijing's cyber operations. In 2023, media revelations emerged that China has operated an intelligence facility

in Cuba since 2019 and that it is negotiating to establish a new joint military training facility there. A Chinese state-backed hacking group infiltrated the unclassified Microsoft email servers of the U.S. Departments of State and Commerce in May 2023, perpetrating the first publicly known, successful Chinese hack of a Cabinet-level official since 2008. China's unpredictable and increased use of its Counterespionage Law and other national security laws also creates new risks for foreign businesses and their personnel. These and other even more brazen destabilizing activities show a trend of an increasingly assertive foreign policy that Beijing gives every indication of continuing and intensifying.

Key Findings

- In 2023, top CCP leaders portrayed their country as facing “extreme scenarios” and called on Chinese society to steel itself against the alleged efforts of the United States and its allies to blackmail, contain, and pressure China. General Secretary of the CCP Xi Jinping has called repeatedly on the People's Liberation Army (PLA) to prepare for war. This rhetoric has been coupled with a number of war-readiness measures, including new legislation focused on reenlistment and the revision of China's conscription law, a 7.2 percent increase to the official defense budget, and the establishment of new “National Defense Mobilization” offices around the country.
- China continued to support Russia amid its ongoing war in Ukraine, apparently judging that Russia's value as a partner in opposition to the United States outweighed the mounting reputational costs of taking sides with the aggressor. Beijing's diplomatic, technological, and economic assistance provided vital lifelines that kept the Russian government afloat as its military foundered on the battlefield. Farther afield, China and Russia continued to conduct military exercises and scientific missions in the Pacific and polar regions, respectively.
- China's leadership has selectively responded to U.S. efforts to reduce tensions for the purposes of preserving Chinese access to U.S. markets, technology, and FDI. At the same time, China continued to blame the United States for the worsening bilateral relationship and refused to cooperate on key issues, such as reestablishing crisis communications channels and stemming the flow of fentanyl into the United States. China has also selectively engaged with U.S. allies and partners to try to drive a wedge between them and the United States.
- China promoted its new trifecta of foreign policy initiatives known as the Global Security, Development, and Civilization Initiatives to reshape the international system in its favor. At the same time, Beijing sought to burnish its image as a force for world peace by offering to mediate high-profile conflicts and continuing vigorous diplomatic outreach to countries in Africa as well as Latin America and the Caribbean, all of whom it views as important potential allies in its attempts to transform the world order. These efforts are part of Beijing's ongoing work to court countries in the Global South.

- In the Indo-Pacific region, China continued to adopt a heavy-handed and at times confrontational approach to its neighbors. In the South China Sea, China acted aggressively toward claimant states and transiting military forces alike. In East Asia, China sought to drive a wedge between the United States, Japan, and South Korea. Meanwhile, tensions continued to simmer on the border with India, and suspicions toward China's efforts to gain strategic influence in the Pacific Islands grew.
- The PLA honed its expeditionary capabilities through new base construction in Cambodia and a much-publicized mission to evacuate Chinese and foreign nationals from Sudan. At the same time, Beijing continued attempts to enhance its military presence in Cuba through a reported joint military facility that is under negotiation, and it conducted a host of aggressive cyberespionage campaigns against the United States and foreign governments as well as numerous private organizations.

Chapter 2: China's Efforts to Subvert Norms and Exploit Open Societies

Section 1: Rule by Law: China's Increasingly Global Legal Reach

China is attempting to use its own and other countries' legal systems to achieve a suite of strategic and political goals, including silencing critics of the regime, stalling litigation against Chinese firms that steal intellectual property (IP), and targeting other actors that challenge CCP goals. At the same time, the CCP is attempting to draw more foreign business by increasing the efficiency and professionalism of its legal system. Despite using terms and practices consistent with a rule of law system, these reforms should not be confused with acceptance of the principles underlying that system. Instead, China's "rule by law" system aims to strengthen the Party's control through its ability to intervene in rulings and achieve its goals while also applying Chinese law outside its borders. Internationally, China seeks to shape international law in its favor by discrediting established norms, exporting authoritarian elements of its legal system, and influencing laws and norms development in and through emerging fields like space and cyber governance. These efforts pose unique challenges to the integrity of Western judicial institutions and the rule of law. These challenges manifest in three primary ways: China's undermining of international laws that thwart Beijing's objectives; China's ongoing efforts to align international law with its illiberal values; and China's global enforcement of domestic laws, particularly criminal laws. As part of its efforts to enforce its laws outside China's borders, Beijing has placed agents abroad, including in the United States, to coerce or harass Chinese nationals. A prime example was brought to light in April 2023, when the Federal Bureau of Investigation arrested several individuals operating an undeclared overseas Chinese "police station" in Lower Manhattan. While the United States can respond to such challenges domestically, China's continued abrogation of international rules

and norms—committed with impunity—undermine confidence in and the effectiveness of international organizations and treaties.

Key Findings

- The CCP uses law as a tool to wield power, not constrain it. Rather than viewing courts as independent, neutral arbiters of disputes between equal parties, the Party-state leverages the judiciary as a tool to advance its policy and political goals through a rule *by* law system. Under this construct, the CCP pays lip service to clear, stable, and evenly applied laws, taking full advantage when they produce outcomes determined to be favorable to Beijing but quickly departing this system once it impedes CCP interests. Rule by law does not limit the Party's exercise of power or hold central leaders accountable.
- Chinese legislation increasingly includes extraterritorial provisions, and China's government is expanding its ability to apply Chinese laws outside its borders. Its efforts range from extraterritorial enforcement of Chinese laws—sometimes unbeknownst to the host country—to penalizing firms operating in China for their activities in other jurisdictions.
- The CCP seeks to advance techno-authoritarianism beyond China's borders, especially through partnerships and trainings with developing nations and those in BRI. Beijing encourages these governments to acquire its sophisticated surveillance tech and to use it to normalize censorship, lack of privacy, and other authoritarian norms within their countries, dampening the prevalence of Western concepts like “rule of law,” which it denigrates as “erroneous Western thought.”
- China's promotion of surveillance technology to other governments also carries an ulterior benefit for Beijing: exercising certain powers granted to it within the Chinese legal system, the Party-state can compel Chinese firms to provide data from citizens of other countries collected on those platforms. The Party-state may then use these data to enforce its laws beyond China's borders, in effect giving Beijing's domestic laws international force and applications. In this way, Beijing grants itself power within the sovereign borders of other states.
- Beijing's rule by law approach creates hazards for international firms, which must navigate competing legal systems with contradictory requirements, expectations, and mandates. To comply with the legal and regulatory provisions of China's authoritarian system as well as democratic systems, some companies must establish segregated operations in China or even prioritize compliance with one legal system over another.
- In international law, or the rules and norms that govern relations between countries, China actively participates in fora it believes it can influence but deliberately undermines fora and laws that conflict with its objectives. For the former, its efforts are focused on setting rules of the road in emerging areas of international law that could have substantial future commercial impact, such as cyber governance and space.

- China's government exploits the openness of the U.S. legal system to bring meritless lawsuits against its critics in U.S. court, imposing burdensome legal costs on dissidents and adversaries. While some U.S. states have procedural safeguards to throw out these politically motivated suits, there is no federal statute to prevent China from using U.S. federal court to silence critics and dissidents.

Section 2: Battling for Overseas Hearts and Minds: China's United Front and Propaganda Work

Over the past ten years, General Secretary Xi has directed a wide-ranging effort to enhance the potency and reach of China's overseas influence activities. Aiming to discredit the CCP's critics while inducing others to advance its strategic goals, these activities involve a variety of agencies within the Party-state as well as proxies who further its initiatives in foreign countries, often—but not always—unwittingly. Foreign countries' media, politicians, businesses, academic institutions, and ethnically Chinese citizens and residents are all major targets of Beijing's harmful, aggressive, and at times illegal overseas influence efforts. Operating with flagrant disregard for sovereignty and the laws of foreign nations, these activities go well beyond "soft power" and persuasion to include bribery and threats of violence against officeholders and candidates for public office; harassment of the press, including allegedly framing individual reporters for criminal activity; and intimidation of the Chinese diaspora on foreign soil through the use of informants and threats against family in China.

Notably, China's influence operations often seek to undermine political processes and manipulate political or social activity to disguise actions that advance China's interests as being the efforts of domestic constituencies. These efforts may include conducting online disinformation campaigns, co-opting domestic constituencies through the activities of front organizations, or even threatening or punishing political and economic leaders who support policies Beijing regards as disadvantageous. While some of China's harmful overseas influence activities may be illegal in the targeted country, others may be entirely legal or occupy a legal gray zone.

Key Findings

- For CCP leaders, influencing how the outside world views and engages with China is a matter of regime survival and a means of advancing national interests. The Party-state recognizes that the success of certain objectives—such as the CCP's unquestioned rule over China, the absence of criticism regarding CCP policies, the Party's unequivocal claim to speak for the Chinese diaspora in a way the outside world acknowledges, and the unification of Taiwan with the Mainland—depends partly on the behavior of foreign leaders and publics. In the same vein, CCP leaders understand that foreign parties' reactions to their efforts may impact the effectiveness of China's signature foreign policy initiatives, foreign investment, and technology transfer as well as the attractiveness of its global image.

- Under Xi's rule, China's overseas influence activities are now more prevalent, institutionalized, technologically sophisticated, and aggressive than under his predecessors. China's overseas influence activities involve many actors within the Party-state and can be found in countries around the world, regardless of their form of government or level of development.
- The Chinese Party-state exhibits a growing and increasingly brazen tendency to employ coercion in tandem with persuasion to conduct overseas influence activities, often in ways that challenge other countries' sovereignty or threaten the rights of persons living within their borders. Beijing seeks to sow discord in other countries, including the United States, where the uptick in China's influence activities has inflamed rhetoric and contributed to a troubling rise in violence against Asian Americans.
- Certain factors make countries more or less resilient to China's overseas influence activities. These include the presence of liberal democratic institutions, such as a free press and an independent judiciary, the extent of economic dependence on China, the prevalence of domestic corruption, and a foreign society's familiarity with China.
- In the media sphere, China's Party-state aims to bolster its global image by encouraging positive coverage, manipulating local media environments, and silencing critical voices. Content sharing agreements between Chinese state media and foreign media outlets, CCP-sponsored media training programs, investments in local media, disinformation propagated through social media, and intimidation of media figures are all avenues through which the Party-state seeks to control foreign coverage of China.
- In the political sphere, Beijing seeks to empower foreign political figures who will pursue policies it regards as favorable while deterring, threatening, or punishing those who pursue policies it regards as disadvantageous. Covert efforts to influence electoral processes, to violate the civil liberties of people within another country's borders, to curry favor with sitting officials, and to harass unfriendly political figures are all hallmarks of China's overseas political influence activities.
- In the economic sphere, Beijing attempts to align the commercial interests of other countries with its own strategic goals and to distort domestic policymaking. In countries with weak institutions, China often employs outright corruption, enriching ruling elites who advance its objectives. In democracies, industry associations and business councils may serve as proxies for CCP interests. The CCP may also leverage business partnerships in strategic sectors to advocate for policies favorable to China.
- In the academic sphere, the Chinese government endeavors to control access to knowledge about China and, by extension, to influence public opinion regarding the policy choices based on that knowledge. China's influence activities can result in censorship, intimidation, and harassment that shape critical discourse about China in universities around the world.

Chapter 3: Potential Risks to China's Future Economic Competitiveness

Section 1: China Educating and Training Its Next Generation Workforce

Stark contrasts define China's education system, which contains some of the world's most highly rated universities within a broader landscape beset by widespread, systemic weaknesses. These contrasts contribute to and reflect a more general divergence between China's increasing ability to compete with the United States in cutting-edge innovation and its deteriorating productivity growth. Unequal access to quality education, particularly noticeable between urban and rural areas, undermines the country's capacity to cultivate a nationwide skilled workforce. The implications for the United States are mixed: Party-state-led initiatives that funnel resources into strategic sectors such as AI and semiconductors may generate near-term challenges for the United States, while China's broader educational deficiencies may hamper its long-term economic and technological competitiveness.

At the same time, China will likely struggle to maintain economic growth, as its workforce lacks foundational skills to transition to a more knowledge-intensive economy. While China's government invested heavily to drastically increase quantitative enrollment and output indicators, beyond China's wealthiest metropolitan areas, most of the country's primary, secondary, vocational, and higher education institutions suffer major qualitative deficiencies and perform at a level well below that of countries with similar per capita income. China's soaring official youth unemployment is in part related to the limited upskilling of China's workforce and the questionable quality of the education and training a large portion of students receive. Because of a weak domestic training system in many advanced industries, China's leadership remains reliant on talent educated overseas to meet its technological development objectives. These and other challenges in China's education system create obstacles to diffusing productivity boosting knowhow throughout China's economy, contributing to a divide between China's overall development and its advances in cutting-edge technology.

Education in China also serves as a tool of repression against ethnic minorities in Tibet and Xinjiang. Particular facets of the education system, namely boarding schools and vocational training facilities, are core components of the Party-state's campaign of cultural genocide in minority regions and systemic use of forced labor in domestic and global supply chains.

Key Findings

- China's continued economic growth depends on the country's ability to cultivate talent, but its education system faces acute challenges. China's primary, secondary, vocational, and higher education suffer from weak curricula and instruction that leave some graduates poorly trained to enter the workforce, particularly in rural areas.
- The quantitative expansion in China's education system has not been matched by qualitative improvement. Large swaths

of high school and vocational students receive low-quality education, leaving them unprepared to join an increasingly knowledge-intensive economy; at the same time, colleges outside of a top few fail to develop students' cognitive or technical skills. These structural issues are one factor that has contributed to China's soaring official youth unemployment rate, which was above 21 percent in June 2023 before the Party-state abruptly stopped reporting it.

- Despite major challenges facing China's education system, a relatively small number of universities have emerged as world-class institutions that drive global innovation, posing a critical challenge to U.S. security. Research centers at these universities often serve as platforms to advance industrial policy objectives and further China's development of dual-use technologies, such as AI and semiconductors.
- Concentration of resources in a few of China's top universities and select schools in the wealthiest metropolitan areas has come at the expense of broad-based investments in the country's educational system. Even if top universities train scientists and engineers who can develop world-leading technologies, the workforce may lack the technical proficiency to adapt and deploy these innovations.
- The national college entrance exam, the *gaokao*, is the centerpiece of China's education system and is both a key to success for some and a source of mounting challenges. Its focus on intensive memorization inhibits development of critical thinking skills. Despite drawbacks, the Chinese public views the exam as the primary route to upward mobility and a great equalizer in a system that otherwise privileges wealth and connections, making it a bulwark of social stability. Still, this social contract is under stress. University graduates confront a difficult job market in a decelerating economy. Fewer opportunities have led some students to question the system's meritocracy, challenging an idea central to the CCP's legitimacy.

Section 2: Fiscal, Financial, and Debt Problems Weigh Down Beijing's Ambitions

Optimism surrounding China's post-COVID economy at the beginning of 2023 has all but vanished. For two decades, this growth model has relied on debt-fueled investment in both commercial and residential real estate and infrastructure, which combined, have generated employment and revenue, and routinely accounted for 40–45 percent of China's gross domestic product (GDP). CCP policy decisions have contributed directly to weaknesses and the collapse in the real estate and infrastructure sectors. The CCP's approach has left the country encumbered with an unsustainable debt burden and a deeply imbalanced economy, with China unable to consume what it produces and reliant on export-led growth. These structural problems have become acute, posing significant political and economic challenges to the Party-state. Confident that its strong central government balance sheet can prevent systemic instability, the CCP is focused on constraining the rapid growth in debt at the local

levels where some of the largest economic challenges are concentrated. Beijing intends to grapple with structural issues by asserting more top-down control, aiming to defuse debt risks while steering more resources into the Party's technology ambitions.

China's investment-dependent growth model has contributed to the country's rapid increase in overall debt-to-GDP ratio, which has more than doubled since 2008 and is projected to pass 300 percent in 2023. The weight of this accumulated debt is amplified by increasing distress, as defaults on property loans rise while asset prices fall and property sales decline. Irrespective of Beijing's intentions toward deleveraging, its ability to use the banking system as a shock absorber against economic downturn and unemployment is constrained. Additional economic difficulties are also tied to real estate. With roughly 70 percent of household wealth in real estate, falling property prices have dampened consumer spending and confidence. Local governments, meanwhile, long reliant on fiscal revenue from selling land-use rights to property developers, are in increasingly dire fiscal straits as sales have plunged and new revenue sources have failed to materialize. The deeper, structural nature of China's economic challenges call into question the future of the country's investment-led model as well as its overall growth trajectory.

Key Findings

- China has relied upon investment in real estate and infrastructure to create employment, generate revenue for local and central government coffers, support upstream industries like steel and cement, and broadly drive its domestic economy. This decades-old debt-fueled model is now facing its most severe challenge. A crisis in China's real estate sector, which accounts for 25–30 percent of the country's GDP, has cascaded through the economy. Property developers have lost capacity to buy land, purchase construction materials, make payments to contractors, and deliver housing units. Thirty-four of fifty developers have defaulted at some point on dollar-denominated bonds, with the two largest companies in—or at risk of—bankruptcy. Infrastructure construction, which accounts for another 15 percent of GDP, is experiencing similar pressures.
- The property crisis has had a severe impact on local government revenue. Real estate developers' purchase of new land plots has collapsed. Land sales have previously provided roughly one-third of local government revenue essential to education, health, municipal services, and general welfare.
- With roughly 70 percent of household wealth tied up in real estate, falling property sales and prices have shifted consumer focus to reducing existing household debt. This, in turn, is contributing to risks of deflation.
- Despite over two decades of official statements emphasizing the importance of boosting consumption, in 2022, household consumption as a share of GDP dropped to its lowest level in nearly a decade, followed by a slight 2023 rebound. As a result, China will continue to rely on exports to sustain growth, dis-

torting markets and leaning on the rest of the world to absorb its excess production.

- The failure of the real estate model is systemic and the financing mechanism that underpins it is in acute stress. Rising property loan defaults with falling asset sales and prices have created the conditions for broader instability in the financial system. Bank profit margins are declining and consumer deposit rates are shrinking, while bank balance sheets are carrying an increasing load of undeclared nonperforming loans. These financial strains are occurring at a time when the CCP is opening the sector to foreign investment, raising risks for U.S. citizens invested in pension and wealth management products.
- In addition to the pressures of the pandemic, misguided policy choices by the CCP have contributed to the country's overall debt-to-GDP ratio, which has more than doubled since 2008. In 2023 it passed 300 percent. Much of this debt is passed between one state-owned entity and another to hide the volume of debt and the impact of risk. As an example, 80 percent of local government bonds are purchased by state-owned commercial banks.
- Beijing has stated its intention to address the accumulation in local debt; however, policy choices may be constrained by the financial risks and destabilizing impact on households, foreign investor sentiment, and state and non-state-owned enterprise revenue.

Chapter 4: China Seeking Military Influence and Advanced Capabilities

Section 1: China's Relations with Foreign Militaries

China uses the PLA's activities and relationships with foreign militaries to promote a positive image of China as an international security partner, undermine U.S. influence, and pursue military, foreign policy, and economic benefits. China's leadership coordinates a range of military activities with foreign security forces, including bilateral and multilateral meetings, functional exchanges, port calls, exercises, and arms sales. It also uses military exchanges to pursue combat-relevant skills, practice power projection capabilities, and collect intelligence. Most of the PLA's combat and combat support training exercises are conducted with its "no limits" partner Russia in both bilateral and multilateral settings, and the PLA also gains experience by participating in exercises with U.S. allies and partners. China seeks to leverage ostensibly "cooperative" military engagements with its Indo-Pacific neighbors to discourage them from pushing back against China's aggressive pursuit of its own interests in the region. Although China's military diplomacy is expanding, the United States maintains key strengths and advantages in building partner capacity that can help it remain a partner of choice for security cooperation.

The CCP views its military as a tool that not only serves war-fighting objectives but can also influence diplomatic, economic, and

security conditions in peacetime, and Xi Jinping has sought to increase the PLA's leverage internationally. Expanded leadership in international security affairs is seen as an opportunity for Beijing to expressly offer itself as an alternative security partner to the United States. China's military exchanges with foreign countries aim to build influence with partners near key economic locations. For example, China's participation in UN peacekeeping operations in some African countries coincides with greater Chinese investments in energy and critical minerals. China is now the fourth-largest exporter of military equipment in the world, having expanded its global weapons customer base and shifted from a "supplier of last resort" to a more competitive defense industry that has upgraded the quality of its arms for exports. Foreign military relations is an area of U.S.-China competition that is likely to intensify as China continues to use international military interactions to promote the same false narratives about U.S. intentions and strategic goals that it also advances by other means.

Key Findings

- China orients many of its interactions with foreign militaries around undermining U.S. leadership of international security affairs. The PLA's messaging to its foreign counterparts in bilateral and multilateral military engagements aims to enhance China's reputation at the expense of the United States.
- Russia is China's most important military partner, and their relationship serves many of China's interests, such as signaling strategic unity against the United States, undermining U.S. security partnerships, practicing combat-relevant military skills, and obtaining advanced technology. During Russia's unprovoked war in Ukraine, China and Russia have continued to conduct joint exercises both bilaterally and with other partners such as Iran and other members of the Shanghai Cooperation Organization (SCO).
- China's military exercises with foreign counterparts align with Xi's requirement for the military to strengthen its combat effectiveness. The PLA uses bilateral and multilateral exercises to carry out increasingly realistic, combat-oriented training such as live-fire drills, combat simulations, air defense, and strike operations. The PLA also pursues relevant combat support capabilities such as communications, logistics, survival skills, military medicine, and other basic military skills. The PLA accrues additional benefits, including practicing skills that support power projection and gathering military intelligence during exchanges.
- China uses ostensibly cooperative engagements with militaries of neighboring states to encourage greater acquiescence to its plans in the region. Nevertheless, China undermines its own efforts in some cases by continuing to engage in aggressive behavior targeted at these same militaries, such as by harassing the vessels of its supposed "partners" in the South China Sea.
- Many of the activities China conducts with foreign militaries, including exercises and international military education and

training, do little to develop foreign partner military capacity. The United States maintains strong advantages in these areas due to the quality of its programs and focus on building partner capacity that China struggles to replicate.

Section 2: Weapons, Technology, and Export Controls

China's rapid military modernization over the past two decades shows it has not only been successful as a "fast follower" but also is now leading in several technologies as it seeks to "leapfrog" the United States to achieve dominance in the military domain. The United States and China are engaged in a de facto arms competition, and the PLA is preparing for the possibility of open confrontation. If China overtakes longstanding areas of U.S. advantage in undersea warfare and space and establishes a decisive lead in AI, the balance of power in Asia and worldwide could be dramatically altered. But whether China will become the world's defense technology leader remains an open question, depending on how speedily it resolves its own inadequacies in areas such as human capital and certain manufacturing technologies. One potential accelerant of Beijing's efforts is its relationship with Russia. Russia may have no choice but to share its most valuable defense technologies with China, particularly those relevant to undersea warfare, as it becomes increasingly isolated from the world due to its war in Ukraine.

Chinese military leaders perceive AI as an inevitability in warfare. While the U.S. military leads the PLA in several AI applications (such as in the aerial domain), the PLA has focused on new technologies to become increasingly competitive in computer vision and autonomous underwater vehicles. These are potentially paradigm-shifting advances in warfare with broad ramifications. For example, AI advances in underwater vehicles, combined with accelerated Chinese research on satellite-mounted light detection and ranging (LiDAR) technology, could enable China to locate submarines at depths of up to 500 meters. These investments could neutralize the United States' longstanding advantages in the undersea domain at a time when top U.S. military officials and experts are raising concerns the United States is retiring many of its aging submarines faster than they can be replaced.

Further, China's military AI firms have utilized U.S. technologies to create products for the PLA. Many of China's nonstate military AI firms also operate as civilian nonstate technology firms, avoiding the scrutiny and sanctions that come with aiding an adversarial military. Many drew on U.S. technology advancement—in some cases U.S. funding—during their development.

Key Findings

- The CCP aspires to transform China from a "fast follower" into a world leader in defense technologies. Party leaders frame this drive to catch up and surpass the United States in key warfighting domains in terms of the needs for self-reliance in critical technologies and a shift from a model based on copying foreign technologies to one of original innovation.

- China's military-industrial complex produces a variety of quality modern weapons systems that increasingly enable the PLA to challenge the balance of power in the Asia Pacific region. China is also pursuing a space-based nuclear weapon that has the potential to threaten the U.S. homeland with a new global strike capability, and it is developing frontier technologies that could lead to a paradigm shift in warfighting. It does so in spite of the fact that its domestic defense industry is dominated by state-owned monopolies and plagued by inefficiency.
- China is already a world leader in missile and space technologies, and tighter U.S. export controls are unlikely to have an effect on future Chinese innovation in these areas. China's huge inventory of conventional ballistic, cruise, and hypersonic missiles already limits the United States' ability to operate freely within the second island chain. Beijing's pursuit of space-based nuclear weapons and potential development of low-yield warheads could also complicate U.S. deterrence by offering the PLA greater flexibility to threaten or engage in limited nuclear use against U.S. forces in the region.
- China has made significant strides in submarine technology over time and is heavily investing in anti-submarine warfare capabilities to erode the longstanding U.S. advantage in undersea warfare. Current limitations China faces in undersea warfare technologies include quieting technologies for manned nuclear submarines and propulsion systems for small undersea vehicles. Russian technological assistance could, however, decisively affect how quickly China catches up to the United States in this area.
- China's military-civil fusion program has made rapid progress in AI for defense applications by leveraging commercial advances. Investment and procurement patterns suggest the PLA aims to use AI-enabled weapons systems to counter specific U.S. advantages and target U.S. vulnerabilities.
- U.S. export controls toward China have expanded substantially, though they now face significant obstacles to enforcement. Military-civil fusion presents a unique challenge to export controls, requiring a renewed focus on dual-use technologies, particularly in current multilateral regimes, which focus mainly on preventing the spread of military technologies that currently exist rather than preventing the development of new ones.
- Current investment restrictions are insufficient to stem the flow of U.S. and foreign technology, expertise, and capital into China's defense sector. Capital and technology flows are often accompanied by technical expertise, managerial acumen, and business networks—factors much more difficult to contain to intended end users. These intangible benefits can help Chinese firms build operational capabilities that are not covered under current screening mechanisms and into which the U.S. government has limited visibility.

Chapter 5: Changing Relations with Europe, Taiwan, and Hong Kong

Section 1: Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation

Accounting for nearly 25 percent of global GDP and 10 percent of the world's population, Europe has deep economic ties to both China and the United States. Consequently, the continent serves as a locus of geostrategic competition between the United States and China. Europe's approach to China affects the scope and impact of U.S. policies, including those that seek to limit U.S. exposure to and dependence on China, maintain a free and open Indo-Pacific region, and protect the rules-based international order. Ultimately, Europe must confront and mitigate the strategic impact of an increasingly aggressive China while balancing its economic dependence on the Chinese market. For its part, the United States may be confronted with consequences from China's actions through their impact on European markets and security calculations as well as potential spill-over effects from European governments' policy responses to China.

China views Europe as an important region for supporting its economic rise and other political and geostrategic goals—but also one that is increasingly pushing back against its actions and moving into greater convergence with the United States. Economically, China is expanding its coercive capacity over Europe through investments in critical infrastructure, including logistics networks, ports, and 5G capabilities. China also seeks to expand trade volume with the EU's single market and member state economies and to broaden Chinese market access in Europe. As with the United States, however, China's trade relationship with Europe undermines European competitiveness through market distortions caused by China's unfair trade practices. Politically, China seeks to sow division within Europe between EU institutions and member states, undermining EU authority while elevating individual states when their perspectives align with China's own. In addition to actively inflaming tensions, China capitalizes on differing perspectives between the EU and its member states by providing countries an alternative to participation in the EU. It also leverages its extensive economic ties to create competing incentives within individual European countries to reduce their capacity and willingness to respond to China through their national policies.

China's continued disregard for the rules-based international order, increasingly aggressive economic actions, and support for Russia's unprovoked invasion of Ukraine present direct risks to European economic and security interests. In light of these challenges, the EU and most of its member states are shifting their assessments of China from an economic partner to a multidimensional systemic rival, creating the potential for greater convergence in U.S. and European approaches to dealing with China. Important differences nonetheless remain, and diversity in European approaches presents China opportunities to undermine EU action through selective engagement with member states. At the same time, many of the EU's economic policies fail to adequately address China's practices while also presenting challenges for the United States. Taiwan is also a

topic of growing importance in Europe; however, European governments and publics have yet to reach conclusions about the threat the Chinese government's toward Taiwan may pose to their interests and how they should respond.

Key Findings

- China's policies present a range of economic and security challenges to the EU and European countries. Unbalanced trade and substantial Chinese infrastructure investment on the continent undermine economic security and leave European countries potentially vulnerable to China's economic coercion. China seeks to interfere and stoke division in the EU and its member states' politics through media influence, disinformation campaigns, subversion of EU institutions, coercion of individual member states and policymakers, and the uneven provision of economic incentives. China also undermines European security by providing political and economic support for Russia.
- The EU and individual European states' strategic assessments of China are rapidly shifting from primarily seeing China as a potential policy partner and geographically distant economic competitor to increasingly seeing it as a systemic rival with an active presence in Europe. This shift is bringing European policy approaches into greater convergence with the United States, particularly as it relates to China's growing economic threat via unfair trade practices and strategically motivated investments in sensitive infrastructure and technologies.
- Diversity in views between and within EU countries makes consensus-building slow and may limit the scope, speed, and depth of fundamental change in the EU's collective policy approach to China. This complexity in European approaches may affect the U.S. response to China and limit the space for viable policy cooperation with the EU.
- Europe is an important locus of geostrategic competition between the United States and China. Like the United States, the EU seeks to bolster its economic resilience and reduce dependence on China. While it is developing some economic tools to mitigate China's unfair trade practices and economic coercion, these tools are often voluntary and narrower in scope than corresponding U.S. mechanisms, limiting the effectiveness of transatlantic coordination. Significant disagreements over economic policy between the EU and the United States, including differences over preferential subsidies, also complicate policy coordination on China.
- Russia's invasion of Ukraine has increased European governments' focus on challenges from China. Beijing's support for Russia throughout the war has highlighted the threat China poses to European countries across a variety of issue areas, including through its use of disinformation and its willingness to provide diplomatic, economic, and military assistance to other hostile, aggressive powers. It also draws attention to the EU's and its member states' vulnerabilities, such as economic depen-

dency on and supply chain risks from China and the potential economic costs of a conflict in the Taiwan Strait.

- China's leadership perceives increasing challenges to its economic, geostrategic, and political goals in Europe, including increasing economic rivalry with the EU and European economies, greater coordination between the EU and the United States, hardening views of Russia among European governments, and the EU and its member states' intensifying focus on a values-based China policy. Chinese leaders have grown more pessimistic about their ability to prevent further convergence between the United States and its European allies, and they have decided to accept some damage to their relations with the EU and European countries to maintain their strategic partnership with Russia.
- Chinese aggression against Taiwan would have serious economic and strategic consequences for the EU and European countries. Although Taiwan is a topic of growing importance in Europe, European governments and publics have not yet reached definitive conclusions about their interests and possible potential responses to a conflict stemming from Chinese aggression toward Taiwan. Despite deepening ties between Taiwan and Europe and statements from both the EU and individual state governments about their support for stability in the Taiwan Strait, a remaining lack of a coherent European policy toward Taiwan weakens the extent to which these positive steps can contribute to deterrence.

Section 2: Taiwan

In 2023, China accelerated its multifaceted political, military, economic, and information pressure campaign against Taiwan, continuing to raise international concerns about the possibility of Beijing initiating military aggression. Beijing's coercion is aimed at influencing the outcome of the presidential election in January 2024. President Tsai Ing-wen's Administration continues to adopt measures to inoculate Taiwan against these coercive efforts, especially in the security and economic spheres; however, the results of these measures will not be apparent for some time. Reforms to Taiwan's military and efforts to root out election-related disinformation are contributing to greater resilience of the island, even as the PLA has intensified gray zone activities and rehearsals for possible military action. Taiwan's economy remains stable despite the global dip in demand for semiconductors and punitive measures from Beijing aimed, again, at influencing the upcoming election. Over the last year, Taiwan has sought to draw even closer to the United States through new initiatives, strengthening its security and economic ties through the Biden Administration's announcement of drawdown authorities for faster arms transfers and the U.S.-Taiwan Initiative on 21st Century Trade.

Politically, Beijing continues to target Taiwan with disinformation and united front work to amplify societal divisions and demoralize the electorate. Taiwan's population has overwhelmingly rejected the CCP's "one country, two systems" framework, and none of the four major candidates is advocating for moving forward under that par-

adigm. Economically, China continued to ramp up its pressure campaign against Taiwan in the leadup to the election, enacting new bans on targeted imports from the island and opening an investigation designed to call into question the future stability of cross-Strait trade and investment. Internationally, China continued its efforts to isolate Taiwan. In the face of the massive, unrelenting resources Beijing continues to devote to undermine its standing, Taiwan has abandoned previous efforts to compete directly with China's check-book diplomacy. Instead, Taiwan takes a tailored approach to partners and seeks to strengthen relations with a broad range of countries by highlighting its critical industries and its role as a beacon of democracy.

On the security front, the PLA expanded its provocative operations in the air and waters around Taiwan in 2023, violating the island's air defense identification zone (ADIZ) on an almost daily basis in an attempt to normalize its presence. Prominent Chinese state-linked think tanks are also studying the implications of the war in Ukraine for a potential conflict over Taiwan as well as for lessons about U.S. deterrence strategy. Chinese scholars have noted the effective use of dual-use technology, such as drones and Starlink satellites, as well as the United States' use of its intelligence capabilities to influence the information environment prior to the invasion and to enhance Ukraine's military effectiveness. Taiwan has also announced a number of changes to its military in 2023, including a restructuring of its conscription system and future procurement priorities, to enhance its defensive capabilities.

Key Findings

- In the runup to the 2024 elections, Beijing is accelerating its multifaceted coercion campaign against Taiwan. The PLA has continued to ratchet up military activity around Taiwan, continuing a trend over the past five years of increased military coercion that reflects a rising risk of conflict.
- Taiwan's four major presidential candidates have attempted to differentiate their China policies from one another while tailoring their positions to reflect popular consensus among the island's voters. Taiwan's electorate has overwhelmingly rejected the CCP's "one country, two systems" framework, with no major candidate advocating for moving the cross-Strait relationship forward under that paradigm.
- Taiwan's military continues to develop its capabilities to resist a PLA military campaign, announcing plans to enhance both its training and equipment. Taiwan continues to grow its proficiency with advanced U.S.-supplied weapons and is integrating lessons observed in Russia's war against Ukraine. Taiwan's military has begun the process of reforming training for its conscripted members and extending conscripted military service from four months to one year.
- Beijing has stepped up its economic pressure campaign by continuing to ban targeted imports in addition to threatening to roll back decades-old preferential cross-Strait trade arrangements. A drop in global demand for its key exports caused Tai-

wan's economy to temporarily slip into recession in early 2023, raising concerns that while the economy has stabilized, it may still be susceptible to the impact of economic coercion.

Section 3: Hong Kong

Hong Kong now lives under the Mainland's control. Beijing continues to adapt Hong Kong's institutions to mainland preferences and has eliminated the territory's once vibrant civil society. China's central government has installed loyal judges and placed leaders in key roles, leading to the strictest interpretation of the National Security Law (NSL). Hong Kong's move to enforce its NSL beyond its jurisdiction also reveals the stronger mainland influence that is destroying its legal system. The effects of Beijing's authoritarian overreach are driving more Hong Kongers to leave the territory. Those who choose to stay must decide whether to self-censor or risk politically motivated legal action for activities that were once protected by law and common across the Special Administrative Region. As these expats and Hong Kongers leave for other regional hubs such as Singapore, mainland human capital and investment increasingly dominate Hong Kong's business environment, cementing Hong Kong's status as a Chinese, rather than international, city.

Though Hong Kong's role as an international commercial hub has decreased, the territory remains important for Beijing's economic ambitions, particularly its efforts to connect the Mainland to international financial markets. Hong Kong has also reportedly become a transshipment hub for diverting U.S. technology to Russia, while Hong Kong-based firms have joined China in aiding Russian technology supply chains.

The extent of Hong Kong's judicial degradation can be seen in the trials of Jimmy Lai, the Hong Kong 47, and many others. These cases are examples of the complete erosion of civil liberties and should be illustrative of China's future enforcement of the NSL in Hong Kong. Likewise, Hong Kong's faith-based communities, trade unions, and journalists face increasing repression, coercion, and a limited ability to participate in civil society.

Key Findings

- Hong Kong Chief Executive John Lee serves as Beijing's enforcer of the CCP's interests in reversing the territory's once democratic institutions and civil society. The CCP now controls Hong Kong's political, judicial, religious, and education systems.
- Under the NSL, the central government in Beijing has the authority to intervene in any legal case in which it sees an "intractable" problem or determines the city is unable to resolve the problem on its own.
- The Hong Kong government is now attempting to extend its reach, taking an extraterritorial approach to enforcement. It is charging individuals overseas on national security grounds, has placed bounties on some overseas prodemocracy activists, and has attempted to intimidate their family members.
- Hong Kong's civil society was weakened further this year as Beijing's restrictions on religious organizations, labor rights,

and the press led some organizations to choose to disband rather than submit to new restrictions on free speech and assembly.

- Faced with the continued departure of international firms and human capital, Hong Kong is seeking to draw in mainland Chinese business and talent to boost its lagging domestic economy. Chinese nationals and businesses have flooded Hong Kong's labor force and economy, solidifying Hong Kong's reliance on mainland China. Beijing's efforts to rehabilitate Hong Kong's international image are cosmetic, designed purely to attract foreign business.

THE COMMISSION'S KEY RECOMMENDATIONS

The Commission considers 10 of its 30 recommendations to Congress to be of particular significance. The complete list of recommendations appears at the Report's conclusion on page 697.

The Commission recommends:

- I. Congress consider legislation establishing a framework for corporate disclosure requirements to provide investors greater transparency into risks from publicly traded companies' exposure to China. Factors encompassed within the framework may include but not be limited to the percentage of companies' total assets in China, their joint ventures with Chinese firms, the amount and nature of research and development they undertake in China, and the influence of any company personnel associated with the Chinese Communist Party in corporate decision-making.
- II. Congress establish a risk matrix framework to evaluate the national security threat posed by electronic products imported from the People's Republic of China. To eliminate or mitigate risks identified in the threat matrix evaluation, Congress should consider the use of all trade tools, including tariffs.
- III. Congress direct the U.S. Department of Defense to work with European partners to protect the movement of U.S. military equipment, supplies, and personnel from Chinese surveillance via China's National Transportation and Logistics Public Information Platform (LOGINK) and any other logistics platform controlled by, affiliated with, or subject to the jurisdiction of the Chinese Communist Party or the Government of the People's Republic of China or any logistics platform that shares data with such a system. Coordination with European partners should include:
 - Identifying ports in NATO countries that currently utilize or intend to utilize LOGINK or similar systems from China or other countries of concern;
 - Assessing the U.S. military's current and past potential exposure to Chinese surveillance via LOGINK or similar systems and the risks to U.S. interests and national security resulting from such exposure;
 - Identifying and assessing the feasibility of adopting alternative shipping routes through ports that do not currently utilize or intend to utilize LOGINK or similar systems, including by identifying any risks to U.S. military programs, activities, and movements that would be created by attempting to avoid exposure to such systems; and
 - Implementing joint measures to mitigate the identified risks of exposure to LOGINK and similar systems in European ports.
- IV. Congress address China's state-sponsored influence and interference in the United States by amending the Higher Education Act of 1965 as follows:

- To require the U.S. Department of Education to share data on U.S. universities and colleges' foreign gifts and contract disclosures, required under section 117 of the act, with U.S. federal law enforcement, intelligence agencies, and other relevant agencies, including but not limited to the Federal Bureau of Investigation and the Office of the Director of National Intelligence (ODNI). Such information sharing should encompass gifts and contracts extending back at least ten years, or a period of time determined by Congress, as well as all future gifts and contracts as they are disclosed to the department.
 - To direct an interagency review, led by ODNI, to assess the section 117 data to identify risks posed by China- and Hong Kong-origin money received by U.S. universities and colleges. The interagency findings should be reported to Congress and inform steps, including potential suspension of federal funds, to mitigate risks associated with continued receipt of China-origin money by U.S. universities and colleges.
 - To require universities and colleges to include in their section 117 reporting when a foreign gift or contract disclosure has been added retroactively or when a past entry has been revised and to establish penalties for late reporting. Penalties may include loss of federal financial assistance within three consecutive or nonconsecutive years of failing to disclose gifts or contracts above the current threshold of \$250,000.
 - To direct the U.S. Department of Education to evaluate the adequacy of the current reporting threshold of \$250,000 by conducting a study on the average amount of foreign gifts and contracts received or signed by U.S. universities and colleges in a variety of academic disciplines and to determine whether the threshold needs to be adjusted for programs in disciplines that Congress deems critical to U.S. national security. The study should also include an analysis of the amount, focus, and potential impact of China- and Hong Kong-origin gifts and contracts received by U.S. universities and colleges over the last ten years.
- V. Congress enact legislation to address politically oppressive lawsuits initiated by the Chinese government or its proxies attempting to silence, intimidate, or impose significant litigation costs on parties for exercising protected rights through political engagement or other public participation. Such legislation would create a procedure providing for expedited consideration of efforts to dismiss such lawsuits and staying expensive discovery proceedings until the court has made a threshold determination on the merits of the lawsuit.
- VI. Congress request an evaluation, to be completed within 180 days by the General Accountability Office, of the effectiveness of recently imposed semiconductor export control regulations in preventing China from either acquiring or developing the capacity to manufacture certain advanced semiconductors.

The report should include an assessment of the extent of cooperation received from key allied governments, as well as both U.S. and foreign-based companies, and an evaluation of China's efforts to circumvent these controls or to negate their effectiveness by developing its own indigenous capabilities. This assessment should be prepared for public release but may include a classified annex. The report should be updated annually.

- VII. Congress provide the Committee on Foreign Investment in the United States (CFIUS) the authority to review investments in U.S. companies that could support foreign acquisition of capabilities to attain technological self-sufficiency or otherwise impair the economic competitiveness of the United States, including:
 - Investments in technology areas prioritized in potential adversaries' industrial policies, such as China's 14th Five-Year Plan, Made in China 2025, and other related initiatives;
 - Investments in U.S. firms that have received funding from the U.S. Departments of Defense, Commerce, Energy, and other U.S. government funding for projects critical to national security and competitiveness; and
 - Other investments that may provide privileged access to expertise, business networks, and production methods critical to maintaining U.S. economic and technological competitiveness.
- VIII. Congress establish an interagency group, led by the Office of the Director of National Intelligence, to create a public database to assist U.S. companies, universities, and individuals in conducting due diligence on potential business or academic partners in China. The database should enable users to identify how China's military, United Front Work Department, intelligence agencies, and security agencies may be linked to Chinese companies, investment firms and other financial institutions, research institutes, and universities.
- IX. Congress should direct the U.S. Department of Defense (DOD) to expand the training of Taiwan's military to locations in the United States for the purpose of conducting weapons familiarization with systems that have been ordered by but not yet delivered to Taiwan in order to speed Taiwan's adoption of those systems once delivered. Congress should authorize DOD to station standing observer teams from Taiwan at U.S. training installations and bases to observe and participate in such training.
- X. Congress direct the Administration to engage in discussion with European allies on plans and preparations to impose economic sanctions on China in the event of a confrontation over Taiwan, an escalation in China's support for Russia, or other contingencies. Congress also direct the Administration to consult with Congress on the progress of these discussions.

CHAPTER 1

YEAR IN REVIEW

SECTION 1: U.S.-CHINA BILATERAL AND CHINA'S EXTERNAL ECONOMIC AND TRADE RELATIONS

Abstract

In 2023, the United States pursued diplomatic engagement with Beijing while seeking to de-risk the economic and security relationship. De-risking has seen its most muscular expression in an unprecedented export control regime designed to stifle China's access to advanced semiconductor technologies. At the same time, bilateral trade reflects deep and continuing commercial ties between the United States and China. Beijing's increased control over corporate information flows has significantly complicated the ability of U.S. firms to assess risk in China. Meanwhile, China's role in global debt distress, attempts to internationalize the renminbi (RMB), economic sustainment of Russia and its war in Ukraine, and economic coercion in 2023 all highlight its opportunistic stance: Beijing seeks to reap benefits from the financial instability it sows while attempting to shield itself from effects of the same. China's willingness to help international rule-breakers like Russia sidestep U.S. sanctions is an example of how the Party-state seeks to bend the rules-based order in its favor.

Key Findings

- U.S. restrictions introduced in 2022 to curb China's ability to manufacture and develop advanced semiconductors have limited China's access to key segments of the chip industry that could advance its military. The controls prompted China to increase efforts to draw foreign talent to its chip industry, circumvent export controls, expand espionage activities, and promote indigenous innovation. In September 2023, Huawei began selling a smartphone that reportedly uses a Chinese-made chip capable of 5G performance despite U.S. restrictions, although China's capacity to domestically produce these chips at scale remains uncertain. The restrictions led to a drop in U.S. semiconductor exports of 50.7 percent in the first eight months of 2023 relative to the same period in 2022—down to \$3.1 billion from \$6.4 billion the year prior.
- Five years after the United States first imposed tariffs under the Trump Administration Section 301 investigations, the composition of bilateral trade has changed dramatically. Many of

the U.S. industries exposed to trade actions and geopolitical tensions are seeking to shift toward suppliers based outside of China; however, this may not substantially reduce U.S. reliance on Chinese producers. A growing portion of suppliers in overseas markets are owned by Chinese entities, who also seek to evade trade restrictions by setting up facilities overseas, particularly in other parts of Asia and Mexico. U.S. exposure to China also rose through transshipment of goods through third countries.

- U.S. businesses delayed or reconsidered investment in China amid a weak economic outlook there, contributing to a continued decline of foreign direct investment (FDI) flows into China in 2023 after record lows in 2022. Amid heightened geopolitical tensions, U.S. businesses frequently found their Chinese operations getting caught in the crosshairs of Chinese restrictions. While many U.S. firms continue to view access to China's market as crucial to growth, a growing number of firms are moving to limit exposure and identify alternative strategies.
- As part of China's far-reaching anti-espionage and national security campaign, restrictions on cross-border data flows have cut off offshore businesses and investors from real-time financial and economic data. Amendments to China's Counterespionage Law that went into effect in June broadened the definition of espionage activities to include any information gathering that involves material related to China's broad and ambiguous definition of national security, potentially subjecting any company that collects information to investigation for espionage.
- Developing countries that received loans financed through China's policy banks are facing widespread debt distress, but China is not providing sufficient relief. China's continued free-riding on multilateral relief efforts and persistent refusal to offer debt forgiveness to many distressed borrowers undermines U.S.-led efforts to assist developing countries through comprehensive debt relief and restructuring.
- China is attempting to expand international use of the RMB and encourage participation in its RMB-based cross-border payment system through bilateral currency agreements and swap lines. These steps could provide an alternative financial architecture for countries seeking to circumvent or insulate themselves from U.S. sanctions, but they have not meaningfully increased global settlement in RMB.

Introduction

Seeing declining foreign investment after three years of strict controls under the "Zero-COVID" policy, China sought to present itself as a market-driven, business-friendly economy in 2023, hoping to lure foreign capital and knowhow back to its market. While its external messaging may have changed, the Chinese Communist Party's (CCP) goals—to enhance the overall power of China and the CCP—have not. The CCP's approach to its external trade and financial relations is focused on promoting self-reliance while bolstering China's influence as an indispensable global sourcing hub. At the same time, CCP leaders are acutely aware of gaps in China's domestic produc-

tion capacity, where China views attracting foreign research and technology as critical to accelerating industrial advancement. China's continued need for foreign business and finance clashes with a state-centric and security-focused trajectory hastened by General Secretary of the CCP Xi Jinping over the previous decade. State planners continue to use requirements for market access—including requiring companies to form joint ventures with Chinese firms—to induce companies into relocating their operations within its borders, enabling the transfer of industry knowhow, trade secrets, and technology to Chinese firms.¹

China seeks to diversify and secure its access to critical technologies while striving in the long term to reduce reliance on foreign technology supply chains. China's vulnerabilities were exposed by U.S.-led actions at the end of 2022 to restrict China's access to advanced semiconductor technology. China's domestic semiconductor industry is struggling to develop alternative supplies of chips used in its military and artificial intelligence (AI) applications, though its capabilities continue to advance. Its dominance of the electric vehicle (EV) industry at all stages of the production chain stands out as a rare example of China achieving its self-reliance objectives.

Viewing the impact of U.S. and allied economic restrictions on Russia following its unprovoked invasion of Ukraine, Chinese leadership has been vocal about the need to weaken the sanctions power of the United States. As it seeks to reduce its reliance on U.S. dollars in bilateral trade and financial relations, this past year China finalized a range of trade and investment deals with countries, including Brazil and Saudi Arabia,* allowing for some settlement in RMB rather than the U.S. dollar, though none of the countries involved have yet reported concluding settlements under the respective arrangements.² China has also sought to deepen trade networks with countries beyond the sway of U.S.-led sanctions, including Iran.

This section examines key developments and trends in U.S.-China bilateral economic relations and China's other external economic relations. For analysis of the CCP's domestic economy in 2023 and its long-term fiscal and financial challenges, see Chapter 3, Section 2, "Fiscal, Financial, and Debt Problems Weigh Down Beijing's Ambitions."

The United States' Evolving Approach to Economic Competition with China

Diplomatic Thaw with China

The Biden Administration launched a series of high-level diplomatic engagements with China in 2023 as it messaged the possibility of continued cooperation despite bilateral tensions. After the United States downed a Chinese spy balloon

*Although Brazil and Saudi Arabia have announced their intent to conduct some bilateral trade in RMB, both countries continue to use the U.S. dollar to settle transactions for their most important exports. While China purchases 25 percent of Saudi Arabia's oil exports, the Kingdom trades oil exclusively in the U.S. dollar. Similarly, China purchased nearly 70 percent of Brazil's soybean exports in 2022, but there is currently no publicly available information regarding the existence or extent of potential soybean sales in RMB. Regardless, Brazil and Saudi Arabia's open support for RMB internationalization presents a subtle but noteworthy shift in international attitudes regarding the use of the U.S. dollar in global trade. Gillian Tett, "Prepare for a Multipolar Currency World," *Financial Times*, March 30, 2023; Summer Said and Stephen Kalin, "Saudi Arabia Considers Accepting Yuan Instead of Dollars for Chinese Oil Sales," *Wall Street Journal*, March 15, 2022.

that intruded into U.S. airspace in February 2023, China froze its diplomatic communications with the United States for several months. The Biden Administration's efforts to maintain open lines of communication with China resumed in May 2023, when U.S. Commerce Secretary Gina Raimondo met with her Chinese counterpart in Washington.³ Secretary Raimondo's meeting was followed by visits to Beijing by U.S. Secretary of State Antony Blinken in June 2023 and U.S. Treasury Secretary Janet Yellen and the president's special envoy for climate John Kerry, both in July 2023.⁴ Secretary Yellen emphasized that the Biden Administration believes it is possible to achieve a mutually beneficial, long-term economic relationship—"one that supports growth and innovation on both sides"—during her meeting with China's Premier Li Qiang in Beijing.⁵ Secretary Yellen also reiterated longstanding U.S. concerns about China's nonmarket policies.⁶ Secretary Yellen's messaging that cooperation can occur in spite of geopolitical tensions reinforces an approach to economic relations with China she laid out in an April 2023 speech.⁷ The strategy focuses on investing in U.S. domestic capabilities, increasing supply chain resiliency, and aligning strategies with U.S. allies and partners to shape the environment for sustained U.S.-China competition. Secretary Yellen emphasized that this strategy is narrowly focused on national security risks from China, stating, "Even as our targeted actions may have economic impacts, they are motivated solely by our concerns about our security and values. Our goal is not to use these tools to gain competitive economic advantage."⁸ Additional visits by U.S. Cabinet officials in 2023, including a trip to Beijing by Secretary Raimondo in August 2023, sought to further clarify the United States' intent to maintain stable commercial relations.⁹

The United States has maintained the tariffs imposed under the Trump Administration Section 301 investigation as the U.S. Trade Representative (USTR) conducts a review of their efficacy and impact. Under the Trade Act of 1974, USTR has a statutory requirement to conduct a four-year review of the tariff actions taken under the Section 301 authority, assessing the effectiveness of the action in achieving its objective and the impact on the U.S. economy.¹⁰ The USTR review began in September 2022 and could conclude by the end of 2023.¹¹ While the details of the review are not yet known, in July 2023 the USTR stated the review will consider "the existing tariffs structure and how to make the tariffs more strategic in light of impacts on sectors of the U.S. economy as well as the goal of increasing domestic manufacturing."¹² Secretary Yellen indicated that the tariffs are a point of leverage as the United States seeks to address China's unfair trade practices, stating that "it's premature to use this as an area for de-escalation, at least at this time."¹³

The United States Places "De-Risking" at the Center of Its Economic Approach

In 2023, the Biden Administration adopted the G7 concept of "de-risking" to frame its approach to the national security vulnerabilities stemming from the economic relationship with China. In a May 2023 statement, President Joe Biden and

the other G7 leaders committed to de-risking as the basis for their approach to economic resiliency and security (see textbox below). By emphasizing de-risking instead of decoupling, the Biden Administration sought to reduce tensions with China and signal its pursuit of objectives it says seek to avoid a broad severance of economic relations and unintended impacts on global commerce. President Biden stated that de-risking further aims to resist Chinese economic coercion, counter Chinese nonmarket trade practices, and place limits on China's access to a "narrow set of advanced technologies critical for our national security."¹⁴ However, the full scope of these technologies has yet to be specified.* Administration actions also continue to address forced labor concerns in Xinjiang.¹⁵ According to Secretary Raimondo in August 2023, the United States seeks to allow trade and investment in "un-risky" areas to thrive, protecting national security while minimizing damage to other commercial relations.¹⁶ (For more on European countries' approach to de-risking, see Chapter 5, Section 1, "Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation.")

De-Risking and Siloing Face Limits as China Seeks to Deepen Self-Reliance

De-risking is emerging as a shorthand for a transatlantic vision of reducing economic reliance on China without complete decoupling, though individual countries and companies have taken diverging approaches to defining and implementing de-risking. In March 2023, President of the European Commission Ursula von der Leyen introduced de-risking as the focus of EU policy toward China, stating that "it is neither viable—nor in Europe's interest—to decouple from China."¹⁷ She depicted the EU's economic de-risking strategy as resting on four pillars: (1) increasing European economic competitiveness and supply chain resiliency, (2) countering Chinese economic distortions, (3) controlling the flow of technologies that pose national security risks, and (4) aligning EU policy with its partners.¹⁸ The de-risking construct was subsequently adopted by the United States, when President Biden and the other G7 leaders released a communiqué on May 20, 2023, pledging to coordinate an approach to "economic resilience and economic security that is based on diversifying and deepening partnership and de-risking, not decoupling."¹⁹ In short, a de-risking strategy would aim to allow companies to continue profiting inside China and broadly protect firms from China's ongoing non-market policies.

The United States' developing de-risking approach aligns with calls from U.S. businesses operating in China to avoid escalating geopolitical tensions with China. In its annual American Business in China White Paper, released in March 2023, the American Chamber of Commerce in China (AmCham China) set one of its three policy priorities as maintaining "channels for commercial engagement and meaningful exchange while separately addressing national security concerns and values-based differences

*For more on the challenges facing the United States' export control regime, see Chapter 4, Section 2, "Weapons, Technology, and Export Controls."

De-Risking and Siloing Face Limits as China Seeks to Deepen Self-Reliance—*Continued*

where possible.”²⁰ Ten days prior to the G7 communiqué released in May, President and CEO of the U.S. Chamber of Commerce Suzanne P. Clark emphasized that the United States needs “to take the surgical approach of de-risking.”²¹ De-risking also dovetails with nascent efforts of U.S. and other foreign businesses to silo their operations in China, hiving off their China operations into localized business units and creating duplicate supply chains isolated to the Chinese market.²² For instance, the U.S. technology company Salesforce is shifting to provide its services inside China through a partnership with Alibaba Cloud.²³ Siloing aims to insulate multinational companies’ China operations from present and future disruptions stemming from policies enacted by Beijing and Washington, including measures to control technology flows.²⁴

Countries and firms attempting to employ a de-risking strategy run into an immediate challenge confronting China’s own dual circulation strategy. First articulated by the CCP in 2020, the strategy seeks to promote China’s self-reliance while bolstering its influence as an indispensable global sourcing hub.*²⁵ As Managing Director of U.S. think tank MacroPolo Damien Ma explains, by concentrating investments in technology projects and strengthening supply chains, “Beijing’s strategy appears to be precisely focused on entrenching China as the irreplaceable production node.”²⁶ A successfully realized dual circulation strategy would increase the difficulties facing U.S. and foreign companies in their efforts to reduce dependence on China and diversify supply chains.

Chinese officials attempted to strengthen ties with global businesses and thwart corporate support for U.S. and other governments’ attempts to reduce economic ties. In a concerted charm offensive, Chinese officials sought to reengage global businesses and reduce their concerns about operating risks inside China, hoping to slow corporate efforts to diversify away from China, revive companies’ direct investment into China, and potentially diminish business backing for future U.S. policy measures aimed at addressing national security risks. Premier Li vehemently criticized the U.S. de-risking strategy in public comments at the June 2023 World Economic Forum meeting in Tianjin, saying that governments should not “overstretch the concept of risk or turn it into an ideological tool” and instead should leave addressing risks to the business community.²⁷ Additionally, since China reopened to international travel at the start of 2023, senior Chinese officials have hosted and met with multiple executives of leading multinational firms who visited China, including CEOs of Airbus,† Apple, General Motors, Intel, JPMorgan, and Samsung.²⁸

*For more on China’s supply chain strategy, see U.S.-China Economic and Security Review Commission, Chapter 2, Section 4, “U.S. Supply Chain Vulnerabilities and Resilience,” in *2022 Annual Report to Congress*, November 2022, 296–305.

†For more on China’s charm offensive toward European companies, see Chapter 5, Section 1, “Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation.”

In June 2023, Microsoft cofounder Bill Gates met with General Secretary Xi in Beijing, where Xi expressed China's openness to cooperation and emphasized that China would not be a "strong country seeking hegemony."²⁹ Tesla CEO Elon Musk visited multiple officials during a May 2023 trip to China, including China's then Foreign Affairs Minister Qin Gang, the ministers of commerce and industry, and Vice Premier Ding Xuexiang.³⁰ Subsequently, in July, Tesla emerged as the only foreign automaker to sign on to a pledge by China's EV industry to avoid a price war and promote "core socialist values."³¹

The United States is continuing to pursue engagement in Asia through the Indo-Pacific Economic Framework (IPEF). The United States launched IPEF in 2022 with 13 other partner countries.* Biden Administration officials have stated that IPEF is not intended to be a "traditional trade agreement"† but rather aims to develop high standard rules on trade in the Indo-Pacific and further goals related to sustainability, labor, and supply chains. The initiative offers an alternative vision of economic engagement to Beijing's own efforts to enhance its regional economic leadership and deepen economic ties. IPEF consists of four key areas of cooperation, or pillars: (1) trade; (2) supply chains; (3) clean energy, decarbonization, and infrastructure; and (4) tax and anticorruption.‡ The initiative does not involve negotiations over market access or tariff liberalization, which critics say will limit its appeal and impact.³²

The IPEF Supply Chain Agreement, which was reached on May 27, 2023, marks the first concrete measure under the trade initiative since it was launched a year earlier.³³ IPEF partners announced an agreement on standards and mechanisms designed to bolster supply chain resilience, including by setting up three bodies to facilitate cooperation, information sharing, and efforts to coordinate supply chain diversification.§³⁴ The proposed supply chain agreement contains few binding commitments on the 14 IPEF partners, and it may initially spur few substantive initiatives to realign supply chains.³⁵ Nonetheless, the proposed coordination bodies may still play an important role in building capacity

*In addition to the United States, IPEF member countries include Australia, Brunei Darussalam, Fiji, India, Indonesia, Japan, Malaysia, New Zealand, Philippines, Singapore, South Korea, Thailand, and Vietnam.

†The Biden Administration may implement IPEF commitments through trade executive agreements that would not require congressional approval. Trade executive agreements, similar to the U.S.-Japan deal of 2019, must be limited in scope but can include binding commitments on certain rules. Their content may focus largely on establishing engagement among trade partners without precise market access agreements. Brock R. Williams, Rachel F. Fefer, and Mark E. Manyin, "Biden Administration Plans for an Indo-Pacific Economic Framework," *Congressional Research Service*, February 25, 2022; Kathleen Claussen, "Trade's Mini-Deals," *Virginia Journal of International Law* 62:2 (2022): 348–352.

‡For more on the United States' options for regional trade engagement in the Indo-Pacific, see U.S.-China Economic and Security Review Commission, Chapter 2, Section 2, "Challenging China's Trade Practices," in *2022 Annual Report to Congress*, November 2022, 210–216.

§The proposed agreement establishes a Supply Chain Council, a Supply Chain Crisis Network, and a Labor Rights Advisory Board. IPEF's Supply Chain Council is intended to allow countries to develop action plans to diversify and develop supply chains in critical sectors, while the Supply Chain Crisis Response Network will create an emergency communications channel to coordinate responses and disseminate information in the face of supply chain disruptions. The Labor Rights Advisory Board seeks to improve supply chain resilience by promoting higher labor standards in trade. U.S. Department of Commerce, *Indo-Pacific Economic Framework for Prosperity Agreement Relating to Supply Chain Resilience*, September 7, 2023.

in supply chain management among IPEF partners and businesses, which could help U.S. businesses identify alternative suppliers or production bases to China.³⁶

The Biden Administration seeks closer ties with IPEF members, including Vietnam, as a counterweight to China's growing influence in the Indo-Pacific region. In September 2023, President Biden met with Vietnam's General Secretary Nguyen Phu Trong in Hanoi to establish a comprehensive strategic partnership.³⁷ The Biden Administration seeks to develop trade partners outside of China by furthering U.S.-Vietnamese economic cooperation, including efforts to enhance semiconductor supply chain resilience by building capacity in both countries.³⁸ It is unclear, however, the extent to which developing trade relations with Vietnam will remove China from U.S. supply chains. Following the end of China's Zero-COVID policy, Chinese firms began moving production overseas to other countries in Southeast Asia and elsewhere. Vietnamese government data report Chinese firms invested in 45 new projects in the country in the first 50 days of 2023 alone.³⁹ In addition, nearly one-third of Vietnam's imports come from China.⁴⁰ China's deep trade and investment relations with Vietnam complicate U.S. de-risking efforts, as U.S. activities with Vietnamese partners may still ultimately depend upon Chinese firms and imports.

U.S. Targets China's Access to Advanced Technology

To curb China's advancements in critical technology, the United States began deploying a targeted strategy based on controlling supply chain chokepoints. In October 2022, National Security Advisor Jake Sullivan described the Biden Administration's approach to restricting technology transfer to China as keeping a "small yard, high fence."⁴¹ This approach entailed keeping the scope of technology controls limited (the "small yard"), while implementing robust measures to prevent circumvention or unauthorized transfers to China (the "high fence"). In late 2022 and into 2023, the United States coordinated with Japan and the Netherlands to implement an unprecedented export control regime designed to limit China's access to advanced semiconductor technologies.⁴² In August 2023, the Biden Administration also issued an executive order on outbound investment designed to limit U.S. companies' financial support for China's semiconductors and microelectronics, quantum information technology, and AI industries (for more on the scope, limitations, and potential impact of the executive order, see Chapter 4, Section 2, "Weapons, Technology, and Export Controls").⁴³

U.S. Severs China's Access to Advanced Semiconductors

The United States introduced restrictions in 2022 intended to curb China's ability to manufacture and develop advanced semiconductors that enhance its military capabilities, cutting China's economy off from key nodes of the chip industry. On October 7, 2022, the U.S. Department of Commerce Bureau of Industry and Security (BIS) implemented a package of

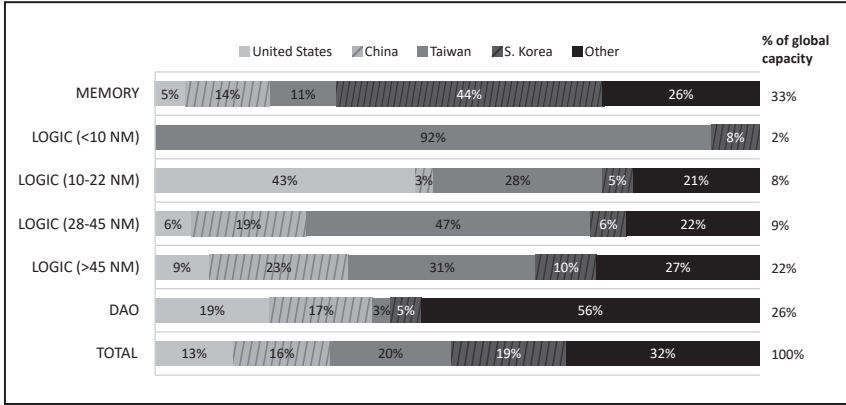
restrictions on U.S. exports of the most advanced computing chips,* particularly those relevant to the development of AI, and semiconductor manufacturing equipment to entities based in China.†⁴⁴ The controls do not apply to “legacy semiconductors” or less advanced chips used in home appliances, automobiles, and many connected devices. In these areas, China is likely to continue dominating production (see Figure 1). The consultancy Counterpoint estimated that the restrictions on advanced semiconductor products would only impact about 10 percent of China’s logic chip production through 2025.⁴⁵ The restrictions nonetheless led to a steep drop in U.S. semiconductor exports to China. U.S. semiconductor companies exported just \$3.1 billion worth of chips to China in the first eight months of 2023, a drop of 50.7 percent compared to the \$6.4 billion in exports over the same period in 2022 (see Table 1).⁴⁶ The United States is meanwhile seeking to increase its self-reliance in semiconductors through the implementation of the CHIPS and Science Act of 2022, and the Biden Administration is allocating billions in tax credits and funding to industry to incentivize domestic manufacturing. In March 2023, the Departments of Commerce and the Treasury released proposed rules that prohibit CHIPS funding recipients from expanding production capacity for leading-edge chips in foreign countries of concern and place limits on the construction of legacy facilities in those countries.‡⁴⁷

*For logic chips (semiconductor devices that perform computer calculations to power digital devices) and system memory chips (high-performance semiconductor devices that rapidly store data during computations), the degree of sophistication is measured in the width of transistors placed onto a silicon wafer, as more transistors in a smaller space can generally process more calculations. The most advanced logic chips, produced almost entirely in Taiwan, now have transistors 3 nanometers in width (see Figure 1). The sophistication of flash memory chips—semiconductor devices that store digital data long term, in contrast to the rapid memory operation undertaken by system memory—is measured in the number of layers. Roughly, BIS has set the threshold for advanced chip fabrication as follows: for logic chips, 16 nm or 14 nm or below; for DRAM memory chips, 18 nm; for NAND flash memory chips, 128 layers or more. For more on the scope of these controls, see Chapter 4, Section 2, “Weapons, Technology, and Export Controls.” U.S. Department of Commerce, Bureau of Industry and Security, *Commerce Implements New Export Controls on Advanced Computing and Semiconductor Manufacturing Items to the People’s Republic of China (PRC)*, October 7, 2022.

†The rules introduce five new license requirements: (1) to sell top-end chips necessary for training machine learning models and building supercomputers; (2) to sell certain advanced semiconductor manufacturing equipment; (3) expanding the scope of foreign direct product rules to cover advanced computing chips, supercomputers, and advanced semiconductors for high-performance applications in China or to 28 entities that aided China’s military in developing high-performance computing capabilities; (4) for all items subject to the Export Administration Regulations when there is “knowledge” that the item is destined for end use in the “development” or “production” of chips in China at facilities fabricating advanced chips; and (5) for U.S. persons, including U.S. citizens, passport holders, green card holders, juridical citizens, U.S. residents, and others, to “support” the “development” or “production” of advanced chips in China without a license from BIS. For more on the impact of the restrictions, see Chapter 4, Section 2, “Weapons, Technology, and Export Controls.” U.S. Department of Commerce, Bureau of Industry and Security, *Commerce Implements New Export Controls on Advanced Computing and Semiconductor Manufacturing Items to the People’s Republic of China (PRC)*, October 7, 2022.

‡In what the Commerce Department refers to as “guardrails,” the rules stipulate that the department will claw back any funding awards if a recipient engages in any transaction valued at over \$100,000 that expands semiconductor manufacturing capacity for leading-edge and advanced facilities by 5 percent in foreign countries of concern within ten years of receiving the award. It will also claw back the reward if recipients expand their existing mature-node production capacity in a foreign country of concern beyond 10 percent or if such expansion does not predominantly serve the domestic market of that country. U.S. Department of Commerce, *Commerce Department Outlines Proposed National Security Guardrails for CHIPS for America Incentives Program*, March 21, 2023.

Figure 1: Global Distribution of Semiconductor Manufacturing Capacity by Region, 2019



Note: DAO is an acronym for discrete, analog, and optoelectronics and sensors, which refers to a range of semiconductor parts and components, including diodes, transistors, radio frequency semiconductors, and optical sensors.

Source: Antonio Varas et al., “Strengthening the Global Semiconductor Supply Chain in an Uncertain Era,” *Boston Consulting Group and Semiconductor Industry Association*, April 2021, 35.

The October 7 restrictions additionally prohibit U.S. persons from helping develop China’s advanced semiconductor capacity without first applying for a license exemption, effectively blocking senior U.S. semiconductor engineers and scientists from working on covered technologies at Chinese companies.*⁴⁸ In response, hundreds of U.S. personnel, including engineers from U.S. semiconductor equipment manufacturers Applied Materials, KLA, and Lam Research who worked as support personnel inside Chinese chip companies, abruptly left core positions inside China’s semiconductor industry.⁴⁹ The restrictions prompted Chinese companies to intensify their efforts to attract semiconductor talent.⁵⁰ China lacks a robust domestic pipeline for training qualified semiconductor engineers and technicians, leaving Chinese chip companies heavily dependent on talent trained overseas (for more on the weakness in China’s training of technical talent, see Chapter 3, Section 1, “China Training and Educating Its Next Generation Workforce”).⁵¹ After U.S. chip company Marvell Technology laid off its entire research and development (R&D) workforce in China since late 2022,[†] former employees were quickly head-hunted by Chinese semiconductor firms.⁵² Similarly, Chinese companies are reportedly offering semiconductor talent in Taiwan five times what they could earn domestically.⁵³

*Aside from licensing requirements, the Export Administration Regulations prohibit U.S. persons from knowingly providing “support,” broadly defined, for the development or production of missiles, nuclear weapons, chemical, and biological weapons as well as foreign maritime nuclear projects. Additionally, BIS has the authority to inform U.S. persons that their activities could support these end uses and impose a licensing requirement on the activities. The October 7 restrictions use this authority to prevent U.S. persons from supporting advanced semiconductor development in China. Thomas J. McCarthy et al., “International Trade Alert: BIS Imposes New Controls to Limit the Development and Production of Advanced Computing and Semiconductor Capabilities in China,” *Akin Gump*, October 27, 2022, 4–5.

†Although Marvell did not announce how many individuals it laid off inside of China, its R&D workforce at one point in the past numbered over 800 workers. *iJiWei*, “Marvell, Once Full of Chinese DNA, Becomes Leader in Decoupling from China,” March 22, 2023.

Table 1: Top U.S. Exports of Advanced Semiconductors and Semiconductor Manufacturing Equipment to China, 2022 and 2023 (January through August)

Export Category	2022	2023	YoY Change
Processors and controllers	\$4,520 million	\$1,488 million	-67.1%
Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits	\$2,952 million	\$1,899 million	-35.7%
Other parts of electronic integrated circuits	\$1,460 million	\$1,355 million	-7.2%
Electronic integrated circuit amplifiers	\$285 million	\$225 million	-21.0%
Solid-state nonvolatile storage devices	\$281 million	\$101 million	-64.0%
Optical instruments and devices for inspecting semiconductor wafers or devices, etc.	\$254 million	\$193 million	-24.3%

Note: The trade data in this table reflect both semiconductor-related products that are subject to U.S. export restrictions and those that are not currently controlled.

Source: U.S. Census Bureau, *Advanced Technology Products*, October 6, 2023; U.S. Census Bureau, *Trade in Goods with China*, October 6, 2023.

As China’s semiconductor industry faced export restrictions from the Netherlands and Japan, Chinese firms rushed to build out capacity by stockpiling equipment from foreign companies. On January 28, 2023, the Netherlands and Japan agreed to align their export control policies with the U.S. restrictions on China’s chips sector, pledging to coordinate on controlling China’s access to chokepoint technologies like semiconductor design software and lithography, where its indigenously developed technology significantly lags behind the leading edge.⁵⁴ Both the Netherlands and Japan are home to the world’s leading manufacturers of photolithography machines capable of printing advanced integrated chip designs on semiconductor wafers.⁵⁵ Since 2019, the Netherlands has restricted sales to China of extreme ultraviolet photolithography machines,* which are solely produced by the Dutch firm ASML; however, neither Japan nor the Netherlands had previously controlled exports of deep ultraviolet (DUV) lithography machines used for mass-producing less advanced chips at the 14 nanometer (nm) node.⁵⁶ In July 2023, Japan added certain semiconductor manufacturing equipment, including DUV technology, to its export control list.⁵⁷ The Netherlands similarly started restricting exports in September 2023.⁵⁸ Prior to these restrictions coming into effect, Chinese companies surged their orders for foreign semiconductor manufacturing technology in 2023, capitalizing on the roughly eight-month lag between when the Dutch government announced its intent to place controls on exports to China and its implementation.⁵⁹ Between January and August 2023, China imported \$3.2 bil-

*These machines are capable of mass-producing the most advanced integrated circuits at the 3 nm node.

lion (RMB 23.5 billion)* worth of semiconductor manufacturing machines from the Netherlands, a 96.1 percent increase over the \$1.7 billion (RMB 12 billion) recorded over the same period in 2022.⁶⁰ China's imports of semiconductor equipment from all countries totaled \$13.8 billion (RMB 100 billion) over the first eight months of 2023 as Chinese companies built up stockpiles.⁶¹ China is on pace to more than double its imports of semiconductor equipment from 2019 levels, when the United States added the Chinese telecommunications giant Huawei to the Entity List and thereby restricted Huawei's access to semiconductor technologies, prompting Beijing to accelerate its push to expand domestic chip manufacturing capacity.⁶² Even though Chinese companies mainly acquired equipment capable only of manufacturing older generations of integrated circuits, these stockpiling activities could enable China to deepen its dominance of legacy semiconductors.

Chinese companies have demonstrated their ability to produce high-end chips, despite U.S. export controls. In September 2023, Huawei began selling the Mate 60 Pro smartphone, which reportedly uses a Chinese-made chip with features that closely approximate those of U.S.-controlled semiconductor technology.⁶³ The Kirin 9000s, produced by the Chinese state-owned Semiconductor Manufacturing International Company (SMIC) and designed by Huawei's subsidiary HiSilicon, is capable of connecting to 5G networks and has features consistent with a 7 nm chip, a technology that was previously limited to Samsung, Intel, and TSMC semiconductors.⁶⁴ An examination of the Huawei phone conducted by experts at TechInsights confirmed that the device's processor performance means SMIC is just two generations behind 3 nm technology, which is the most advanced chip currently in production.[†]⁶⁵

Experts largely assess Huawei and SMIC's newest production capabilities as a genuine breakthrough, though uncertainty regarding the extent of China's indigenization and production efficiency remains. Chris Miller, author of *Chip War*, argues that Huawei's Mate 60 Pro may be "the most 'Chinese' advanced smartphone ever made" given that "the phone's primary 7 nm processor [and] many of the phone's auxiliary chips are homegrown, including the Bluetooth, WiFi and power management chips."⁶⁶ These advances have exceeded expectations and also call into question the efficacy of current export control implementation that, as explained by National Security Advisor Jake Sullivan prior to implementation of the October 2022 controls, is intended not only to ensure the United States stays several generations ahead but also to "maintain as large of a lead as possible."⁶⁷ China's domestic advances in the critical domain of leading-edge semiconductor production raise national security challenges to the United States, given the dual-use nature of the technology and its military applications for AI computer vision, autonomous weapons systems, and other

*Unless noted otherwise, this section uses the following exchange rate throughout: \$1 = RMB 7.25.

†TSMC is currently constructing a plant to produce 2 nm chips in Kaohsiung, Taiwan. The intended start date of mass production of these chips has yet to be determined. Hideaki Ryugen, "TSMC to Make Cutting-Edge 2-nm Chips at New Plant in Southern Taiwan," *Nikkei Asia*, August 10, 2023.

uses (for more on this, see Chapter 4, Section 2, “Weapons, Technology, and Export Controls”). As semiconductor analyst Dylan Patel argues, SMIC’s advanced production process is still largely enabled by Western technology, such as immersion DUV lithography machines from ASML (which remain available for China to purchase until the end of 2023), but it is also likely facilitated by porousness in existing U.S. export controls on semiconductor manufacturing equipment.⁶⁸ In addition, the phone still appears to be made with several critical nondomestic components. For instance, the phone’s memory chips are believed to come from legacy technology produced by the South Korean firm SK Hynix, although the company has denied selling to Huawei since the export controls were introduced.⁶⁹ Even amid genuine advances, the continued use of Western semiconductor production equipment and the appearance of nondomestic hardware in the latest phone produced by China’s flagship telecommunications firm underscores the country’s continued reliance on external producers for advanced technology.

China’s retaliatory actions against the United States in response to the semiconductor controls were narrowly defined in scope. Beijing sought easy targets for punitive action that would grant leverage and deter further restrictions without incurring significant domestic costs. In 2023, China froze a handful of U.S. companies out of China’s market and restricted access to two minerals critical to U.S. advanced technology industries.

- On February 16, 2023, China launched the first salvo of its Unreliable Entity List* by blacklisting Lockheed Martin and Raytheon Missile and Defense Corp, a subsidiary of RTX (formerly Raytheon Technologies), imposing trade and investment restrictions and barring the defense firms from importing or exporting weapons systems in China.⁷⁰ As U.S. export controls prevent both companies from selling military equipment in China, the restrictions had little commercial impact.⁷¹
- On May 21, 2023, the Cyberspace Administration of China (CAC) determined that memory chips produced by Micron contained “significant security risks,” banning Chinese critical infrastructure operators from procuring Micron products.⁷² The ban, which followed an investigation launched in March 2023, was CAC’s first regulatory action targeting a foreign company.⁷³ Although Micron is a major producer of memory chips inside China, where it generated nearly 11 percent of its revenue in fiscal year 2022, CAC’s restriction will likely have little impact on Chinese companies, given that Samsung and SK Hynix are peer competitors to Micron and sell similar chips inside China.⁷⁴
- On August 1, 2023, China implemented export controls on gallium and germanium as well as dozens of related prod-

*China’s Ministry of Commerce introduced the Unreliable Entity List in 2019 as a tool to target foreign companies, groups, and individuals who harm the interests of Chinese companies. The list enables the Chinese government to blacklist any foreign entity found to be “endangering national sovereignty, security or development interests of China.” China Ministry of Commerce, *MOFCOM Order No. 4 of 2020 on Provisions on the Unreliable Entity List*, September 19, 2020.

ucts made with those metals,* causing shipments to halt as exporters waited to receive dual-use export licenses from China's Ministry of Commerce (MOFCOM).†⁷⁵ China exported zero gallium and germanium products in August 2023 to the United States and other countries.⁷⁶ On September 21, a spokesperson for MOFCOM stated that the ministry had since granted export licenses for the covered products to several companies, but it did not provide further detail on how many companies could resume exporting, which countries they could export to, or which products were approved. As a result, some exports may resume, but the full scope and long-term impact of these measures remain unclear as of October 6, 2023. China's restrictions could create acute supply shortages for the United States in key technologies. Both gallium and germanium are deemed critical minerals by the U.S. Geological Survey, and they have applications ranging from semiconductors to missile systems to solar panels.⁷⁷ China is the world's dominant source of both resources, accounting for 98 percent of the world's primary production of gallium ore and 60 percent of its germanium.⁷⁸ The United States has limited domestic production and stockpiles of both minerals.⁷⁹ The United States, Japan, and Germany may be able to develop alternative supply sources by retrofitting domestic refineries with the capabilities to extract the minerals, but these alternatives may not be operational in time to prevent significant shortages (see textbox below).⁸⁰

- On September 6, 2023, China banned central government officials and state-owned enterprise (SOE) employees from using Apple and other foreign-branded devices for work purposes and from bringing privately owned foreign devices into government facilities.⁸¹ Although the Chinese government has denied the existence of such a ban, those familiar with the matter report the government made the move in an effort to cut reliance on foreign technology and limit the flows of data outside of China's borders.⁸² In addition to ostensible security concerns, the new restrictions were announced within days of the release of Huawei's Mate 60 Pro smartphone, discussed above.⁸³ As a result of the ban, Apple shares lost \$200 billion in value just two days after the announcement, while state-sponsored Chinese media has reported the Pro Mate 60 is selling out across China.⁸⁴ The

*The covered gallium and germanium compounds include gallium nitride, gallium oxide, gallium phosphide, gallium arsenide, indium gallium nitride, gallium selenide, gallium antimonide, area melted germanium ingots, germanium dioxide, germanium tetrachloride, and compounds containing phosphorus, germanium, and zinc. The controls also cover major applications of these compounds, including gallium nitride and gallium arsenide wafers for integrated circuit production. China Ministry of Commerce, *Announcement No. 23 of 2023 of the Ministry of Commerce and the General Administration of Customs on the Implementation of Export Controls on Items Related to Gallium and Germanium* (商务部 海关总署公告2023年第23号 关于对镓、锗相关物项实施出口管制的公告), July 3, 2023.

†Exporters attempting to ship these newly controlled mineral products overseas must apply for approval through China's export licensing process. The exporter must submit information on the end user and end use when applying for the export license. China's Ministry of Commerce has not specified how it will evaluate applications nor how many licenses it will grant. *Reuters*, "China Gallium, Germanium Export Curbs Kick In; Wait for Permits Starts," August 1, 2023; China Ministry of Commerce, *Announcement No. 23 of 2023 of the Ministry of Commerce and the General Administration of Customs on the Implementation of Export Controls on Items Related to Gallium and Germanium* (商务部 海关总署公告2023年第23号 关于对镓、锗相关物项实施出口管制的公告), July 3, 2023.

prohibition on Apple is similar to China's 2021 restrictions on the use of Tesla by military, government, and SOE employees—including a ban on driving privately owned Tesla vehicles in certain government compounds. The Tesla ban was similarly implemented in a stated effort to reduce dependence on foreign technology and prevent data collected in China from moving overseas.⁸⁵

China's Critical Mineral Export Restrictions Target U.S. Supply Chain Vulnerabilities

China's controls on gallium and germanium threaten to disrupt the United States' supply chain for high-performance semiconductors. The United States is currently highly reliant on Chinese production of the minerals, both for sourcing directly from China and indirectly through the predominance of Chinese gallium and germanium in global supply chains. China accounts for 53 percent of the United States' supply of raw gallium metal and 54 percent of its germanium imports, although raw gallium and germanium make up only a small fraction of the U.S. economy's total consumption of the minerals.⁸⁶ Over 95 percent of the United States' gallium consumption is in the form of gallium arsenide wafers, a type of semiconductor that outperforms more prevalent silicon wafers for sensitive electronic equipment, such as radar systems.⁸⁷ The United States mainly sources these wafers from Germany, Japan, and Taiwan, but producers in these countries are highly dependent on China for low-purity gallium metal. It is not yet clear whether China will approve license applications for exporting gallium and germanium products to these countries, making the impact on supply chains dependent on minerals sourced from China uncertain.⁸⁸ Estimates vary on how long inventories and reserves could last if China completely cuts off supplies of gallium and germanium.⁸⁹ In such a scenario, global inventories of the materials may run out after a number of months. While the U.S. Department of Defense maintains a strategic stockpile of germanium, it does not have reserves of gallium.⁹⁰

The United States may be able to mitigate a long-term supply disruption to U.S. domestic technology production by restarting gallium and germanium refining at dormant facilities located in the United States and partner countries.⁹¹ Industry analysts expect a supply shortage induced by the export controls to drive up the price of the minerals, which may help make production profitable again outside of China and encourage refiners in Japan, the United States,[†] and other countries to resume production or

*Prior to 2000, the main producers of primary low-purity gallium—the raw feedstock for downstream refined gallium applications—were Germany, Japan, Kazakhstan, and Russia, ranking ahead of China's output. However, China's gallium production tracked the rapid, state-supported growth of China's aluminum industry, as the government required aluminum processors to install equipment to extract gallium. Matthew P. Funaiolo, Brian Hart, and Aidan Powers-Riggs, "Mineral Monopoly: China's Control over Gallium Is a National Security Threat," *Center for Strategic and International Studies*, July 18, 2023; U.S. Geological Survey, *Gallium Statistics and Information*, 2023.

†The United States has one operational refinery in Gramercy, Louisiana, that processes bauxite into alumina, but it does not currently extract gallium from the runoff of the refining process. The multinational mineral and metal processing company Nyrstar's zinc smelting plant in Clarksville, Tennessee, is considering adding enough gallium and germanium extraction capacity to meet up

China's Critical Mineral Export Restrictions Target U.S. Supply Chain Vulnerabilities—*Continued*

retrofit other facilities to refine the controlled minerals.⁹² A germanium shortage in the United States may be easier to overcome, as germanium is currently recovered from zinc mines located in Alaska and Tennessee.⁹³ Industry analysts differ on how long it would take to install gallium processing capacity, with some projecting a multi-year process.⁹⁴

The gallium and germanium export controls are likely intended to signal China's willingness to curtail U.S. access to other critical minerals monopolized by China. The U.S. Geological Survey estimates that in 2022, China was the world's leading producer in 30 out of the 50 critical minerals, and it was the United States' primary import source for rare earth elements along with ten other critical minerals (see Table 2). The United States faces particularly acute vulnerabilities to China's control over the rare earths* supply chain. According to a report by the RAND Corporation, "China could effectively cut off 40–50 percent of global rare earth oxide† supply, which would affect prime manufacturers and supplier of advanced components used in the U.S. Department of Defense's systems and platforms."⁹⁵ There is precedent for China utilizing its monopoly over rare earths as a tool of economic coercion. In 2010, China reportedly restricted exports of rare earth elements to Japan for two months following a territorial dispute over the Senkaku Islands, although the restrictions were never formally announced.⁹⁶ Subsequently, Japan reduced its reliance on Chinese rare earths by diversifying suppliers and investing in non-Chinese operations internationally.⁹⁷ In 2020, 25 percent of Japan's rare earths imports by value came from China, compared to 88 percent in 2010.⁹⁸

to 80 percent of domestic demand, a process it says will take two years. Natalie Liu, "Tennessee Refinery Could Break Chinese Chokehold on Two Critical Minerals," *Voice of America*, August 15, 2023; U.S. Geological Survey, *Mineral Commodity Summaries*, January 2023; Nyrstar, "Nyrstar Clarksville," 2023.

*Rare earths are a group of 17 metallic elements.

†Rare earth elements are commonly sold and transported as rare earth oxides, which are stable, refined compounds extracted from rare earth elements. Consequently, rare earth quantities are usually reported in their oxidized form.

Table 2: List of Critical Minerals* the United States Primarily Sourced from China, 2022

Critical Mineral	Primary Import Source	Total U.S. Imports for Consumption (metric tons)	China's Share of U.S. Imports	Major Uses
Antimony	China	25,590	63%	flame retardant; antimonial lead and ammunition
Arsenic	China	5,400	57%	herbicide and insecticide; wood pressure treatment; semiconductors for solar cells, space research, and telecommunications
Barite	China	2,300	38%	oil and natural gas drilling; radiation shields at nuclear plants and for x-rays
Bismuth	China	2,800	65%	metal additive for cast iron and pipe fittings; pharmaceuticals; semiconductor manufacturing
Gallium	China	12,000	53%	manufacturing of semiconductor wafers
Germanium	China	29,000	54%	semiconductor manufacturing; solar cells; fiberoptics; LED
Graphite (natural)	China	82,000	33%	batteries; brake linings; lubricants; steelmaking
Rare Earths (compounds and metals)	China	11,940	74%	magnets; catalysts; metallurgical; battery alloys
Tantalum	China	1,700	24%	alloys for gas turbines used in aerospace and oil and gas industries; automotive and consumer electronics
Tungsten	China	14,000	29%	cutting and wear-resistant applications in construction, metalwork, mining, and oil and gas drilling; specialty steel alloys; electrical components

*In 2022, the U.S. Geological Survey identified 50 minerals as critical minerals. The agency defines a critical mineral as “a non-fuel mineral or mineral material essential to the economic or national security of the U.S. and which has a supply chain vulnerable to disruption. Critical minerals are also characterized as serving an essential function in the manufacturing of a product, the absence of which would have significant consequences for the economy or national security.” U.S. Geological Survey, *U.S. Geological Survey Releases 2022 List of Critical Minerals*, February 22, 2022.

Table 2: List of Critical Minerals the United States Primarily Sourced from China, 2022—Continued

Critical Mineral	Primary Import Source	Total U.S. Imports for Consumption (metric tons)	China's Share of U.S. Imports	Major Uses
Yttrium	China	1,000	94%	catalysts, electronics, lasers, metallurgy; jet-engine coatings, sensors, bearings, and seals

Note: China's share of U.S. imports is based on average imports over 2018 to 2021.
Source: U.S. Geological Survey, *Mineral Commodity Summaries*, January 2023, 21.

De-Risking Accelerates

U.S. corporations are actively seeking strategies to mitigate risks in their supply chains, prompted by their demonstrated vulnerability to policy and market shifts in China. Although China dismantled the COVID-19 controls that had sent its economy into unpredictable lockdowns throughout 2022, U.S. businesses and investors are reassessing the stability of China's domestic policy environment. With Beijing exerting increasing control over the economy and more aggressively pursuing its national security goals, the business environment for U.S. companies has grown harsher. Amid geopolitical tensions, U.S. businesses frequently found their Chinese operations getting caught up in the crosshairs of Chinese restrictions. While many U.S. firms continue to view access to China's market as crucial to growth, a growing number of firms are moving to limit exposure and identify alternative strategies.

Bilateral Trade Reflects Deep and Continuing Commercial Ties

The U.S. goods trade deficit with China fell to its lowest reading since 2020, when the outbreak of COVID-19 rattled global supply chains. According to U.S. Census calculations, the U.S. trade deficit with China in the year through August 2023 shrank 33 percent compared to the same period in 2022, falling to \$181.8 billion (see Figure 2).⁹⁹ This is the lowest trade deficit since 2010.¹⁰⁰ The improvement in the trade deficit resulted from a softening of U.S. import demand that began in September 2022 as U.S. consumers shifted spending toward services. However, U.S. data on trade with China may currently overstate the improvement in the bilateral balance. Particularly, U.S. statistical authorities may not capture the full value of China's imports into the United States, partially due to a lack of data on the tens of billions of dollars' worth of low-price goods that enter duty-free under the de minimis exception* (for more on novel drivers of the discrepancy in U.S. and Chinese trade data, see the textbox "Incomplete U.S. Data on e-Commerce Trade with China").¹⁰¹ Data reported by China's customs authority show a larger surplus with the United States at \$206.4 billion (RMB 1.5 trillion) in the first eight months of the year, though Chinese

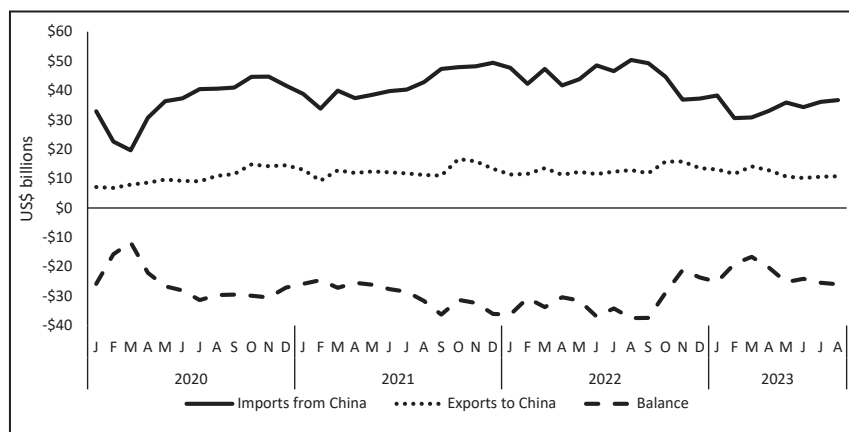
*A de minimis threshold demarcates the value below which goods are considered too small to be subject to tariffs or most inspections. In the United States, this threshold was raised from \$200 to \$800 in 2016.

statistics also show a substantial 17.4 percent decline relative to the same period in 2022.¹⁰²

U.S. goods imports from China totaled just \$276 billion in the first eight months of 2023, falling \$92.5 billion behind the pace of imports over the same period in 2022.¹⁰³

U.S. imports from China are on track to decline compared to 2022, when they reached \$536.3 billion, the highest level since the onset of the trade war in 2018.¹⁰⁴ Throughout the pandemic, Chinese factories were allowed to keep production lines open even as municipalities put stricter quarantine provisions in place in an attempt to slow the spread of COVID-19, enabling China's export sector to meet a surge in demand for goods as U.S. businesses and consumers reallocated spending from domestic service industries.¹⁰⁵ However, since the end of 2022 and in the first half of 2023, consumer spending on goods has slowed, causing trade flows to revert back to the mean.¹⁰⁶ The softening in U.S. demand for goods compounded the challenges already faced by China's economy amid a globally weak macroeconomic environment. Slowing economic growth and high inflation worldwide contributed to a slump in global demand for Chinese exports, sapping a key driver of China's economy as falling orders forced Chinese manufacturers to lower production.¹⁰⁷

Figure 2: U.S. Bilateral Goods Trade with China, January 2020–August 2023



Source: U.S. Census Bureau, *Trade in Goods with China*.

Despite new restrictions on U.S. technology exports to China, U.S. exports to China remained robust in 2023, driven by strong Chinese demand for U.S. oil, aircraft components, and biopharmaceuticals. Between January and August 2023, U.S. goods exports totaled \$94 billion, largely matching the record export amount of \$97.1 billion in the first eight months of 2022.¹⁰⁸ The strong export performance occurred despite a sharp decline in U.S. shipments of semiconductor products and manufacturing equipment resulting from U.S. export restrictions

implemented in October 2022. Instead, exports were buoyed by record values of shipments in three industries: oil, aircraft components, and biotechnology.

- The United States exported crude oil to China at a record rate in the first seven months of 2023, sending 103.4 million barrels across the Pacific, an increase of 179 percent relative to 2022.¹⁰⁹ In value terms, China-bound crude oil exports totaled \$7.9 billion in the first seven months of 2023, increasing \$4.7 billion over the 2022 figure.¹¹⁰ Rather than a surge in domestic demand for oil, which remained subdued as the recovery in China's economy slowed, the uptick was driven by China's smaller independent refiners taking advantage of low crude prices to export refined products or stock up inventories.¹¹¹
- After international air travel resumed in China following the end of its Zero-COVID measures, China's aviation industry faced shortages of maintenance parts, causing it to ramp up orders for parts and components from the United States.¹¹² U.S. exports of civilian aircraft, engines, equipment, and parts to China in the first eight months of the year increased 46 percent year-on-year to a total of \$4.7 billion, although this still lagged the pre-pandemic import level of \$7.5 billion between January and August 2019.*¹¹³
- In the first quarter of 2023, biotechnology exports also increased 28.4 percent year-on-year, totaling \$1.6 billion, although this surge tapered off by the middle of 2023.†¹¹⁴ This strong trade at the start of the year was driven by U.S. shipments of immunological products dosed and packaged for Chinese hospitals and consumers, including steroids used to treat asthma.¹¹⁵ U.S. biopharmaceutical and medicine sales in China have accelerated in recent years as China sped up the regulatory approval process for new drugs.‡¹¹⁶ Shortages of drugs inside China in the second half of 2022 likely also created an acute need to rebuild medical supplies after waves of COVID-19 cases flooded China's hospitals and medical centers and increased demand for medicines.¹¹⁷

*Part of the surge in aviation-related trade may be associated with increased demand for components and parts to service Boeing 737 Max 8 aircraft as Chinese carriers restarted commercial flights using the plane. The Max 8 was grounded worldwide in 2019 following two fatal crashes. Though the U.S. Federal Aviation Administration reapproved the aircraft for service at the end of 2020, Chinese carriers did not redeploy the plane on commercial routes until early 2023. Su Wu, "Boeing's 737 MAX Is Back In China: Here's Who's Flying It Now," *Simple Flying*, July 2, 2023.

†These exports did not include COVID-19 vaccines. China has only approved indigenously produced COVID-19 vaccines for wide use domestically. In December 2022, China allowed the German biopharma company BioNTech to administer a batch of the BioNTech-Pfizer mRNA COVID-19 vaccine to German expatriates located in China, but it has not extended the approval to Chinese citizens. Thomas Escritt and Alexander Ratz, "First Foreign COVID Vaccines Head to China from Germany," *Reuters*, December 21, 2022.

‡For more on how China controls market access for U.S. pharmaceutical companies, see U.S.-China Economic and Security Review Commission, Chapter 3, Section 3, "Growing U.S. Reliance on China's Biotech and Pharmaceutical Products," in *2019 Annual Report to Congress*, November 2019, 265–269.

Incomplete U.S. Data on e-Commerce Trade with China

U.S. data on the bilateral trade with China likely understates the goods trade deficit due to tariff evasion, with importers underreporting the import value to minimize their tariff payment.* Economists at the Federal Reserve estimate that import undervaluation led to \$10 billion in lost tariff revenue per year for the United States.[†]¹¹⁸ Since 2020, U.S. customs data on imports from China have fallen below China's estimates for the same flow of goods. According to Chinese data, the trade deficit reached \$404 billion at the end of 2022, more than \$20 billion larger than U.S. Census Bureau figures. Notably, China's General Administration of Customs historically understated the size of the U.S. goods trade deficit by around \$95 billion relative to U.S. data, a discrepancy partly driven by Chinese companies forging export invoices to obtain greater tax rebates.¹¹⁹

Additionally, U.S. Census Bureau trade data do not include imports that enter the United States under the de minimis threshold—in other words, goods shipments valued at less than \$800. This encompasses a significant proportion of e-commerce imports. In particular, Chinese e-commerce platforms Shein and Temu have developed expansive logistics operations based on using small parcel shipments that fall below the de minimis threshold to export consumer goods to the United States, including fast fashion apparel, leading to a rapid rise in de minimis shipments for which U.S. customs officials have limited data.[‡]¹²⁰ The two companies, whose average sales prices fall well short of the de minimis threshold,[§] are estimated to account for over half of all de minimis shipments from China.¹²¹ The volume of de minimis apparel imports is reflected in a growing disparity between U.S. import statistics, which do not include de minimis shipments, and Chinese customs data, which reflect all Chinese exports regardless of whether their value falls below the U.S. de minimis threshold.¹²² The U.S. Census Bureau estimates that the United States imported \$22.1 billion in clothing and apparel from China in 2022, nearly \$15 billion less than the \$36.5 billion in value Chinese exporters recorded with China's General Administration of Customs.¹²³ This gap has grown in recent years, likely as a result of an expansion in the number of parcels entering the United

* Customs fraud and false invoicing to evade sanctions are crimes under the False Claims Act. Giovanna M. Cinelli et al., "2023 Technology Marathon: Enforcement Update: False Claims Act and International Trade," *Morgan Lewis*, June 29, 2023.

† Chinese exporters likely also overstated the value of their exports to Chinese customs authority, which allowed them to benefit from a value-added tax rebate. China has lowered the gross value-added tax and raised the value-added tax rebate on exports since the beginning of the trade war to reduce the impact of higher U.S. tariffs on Chinese exporters. Hunter L. Clark and Anna Wong, "Did the U.S. Bilateral Goods Deficit with China Increase or Decrease during the U.S.-China Trade Conflict?" *Board of Governors of the Federal Reserve System*, June 21, 2021.

‡ For more on the risks and challenges posed to U.S. regulations and laws posed by Chinese e-commerce firms, see Nicholas Kaufman, "Shein, Temu, and Chinese e-Commerce: Data Risks, Sourcing Violations, and Trade Loopholes," *U.S.-China Economic and Security Review Commission*, April 14, 2023.

§ Shein clothing and accessories average about \$11 per item. Temu reports that no products offered on its website have a sales price over \$800. Select Committee on the Chinese Communist Party, *Fast Fashion and the Uyghur Genocide: Interim Findings*, 2023, 8; Lora Jones, "Shein: The Secretive Chinese Brand Dressing Gen Z," *BBC*, November 9, 2021.

Incomplete U.S. Data on e-Commerce Trade with China— *Continued*

States from China using the de minimis exception (see Figure 3).^{* 124}

The volume of de minimis imports challenges the capacity of U.S. customs authorities to detect products from Xinjiang potentially made with Uyghur forced labor, undermining the enforcement of the Uyghur Forced Labor Prevention Act. Because the de minimis exception incentivizes Chinese e-commerce companies like Shein and Temu to ship products to the United States in tens of millions of individual parcels, U.S. customs officials are only able to inspect a fraction of all de minimis shipments from China.¹²⁵ A Bloomberg investigation published in November 2022 cross-referenced climate and weather signatures on cotton fabrics used in clothing from Chinese fast fashion e-commerce firm Shein to determine that they originated in Xinjiang.^{† 126} In September, Reuters reported that ten of 37 garments collected by U.S. Customs and Border Patrol in May 2023 also showed links to Xinjiang.¹²⁷ The Uyghur Forced Labor Prevention Act bans the use of Xinjiang cotton in imported clothing unless the supplier can definitively prove that the cotton was not a product of forced labor, a level of scrutiny that Shein does not appear to be undertaking.¹²⁸

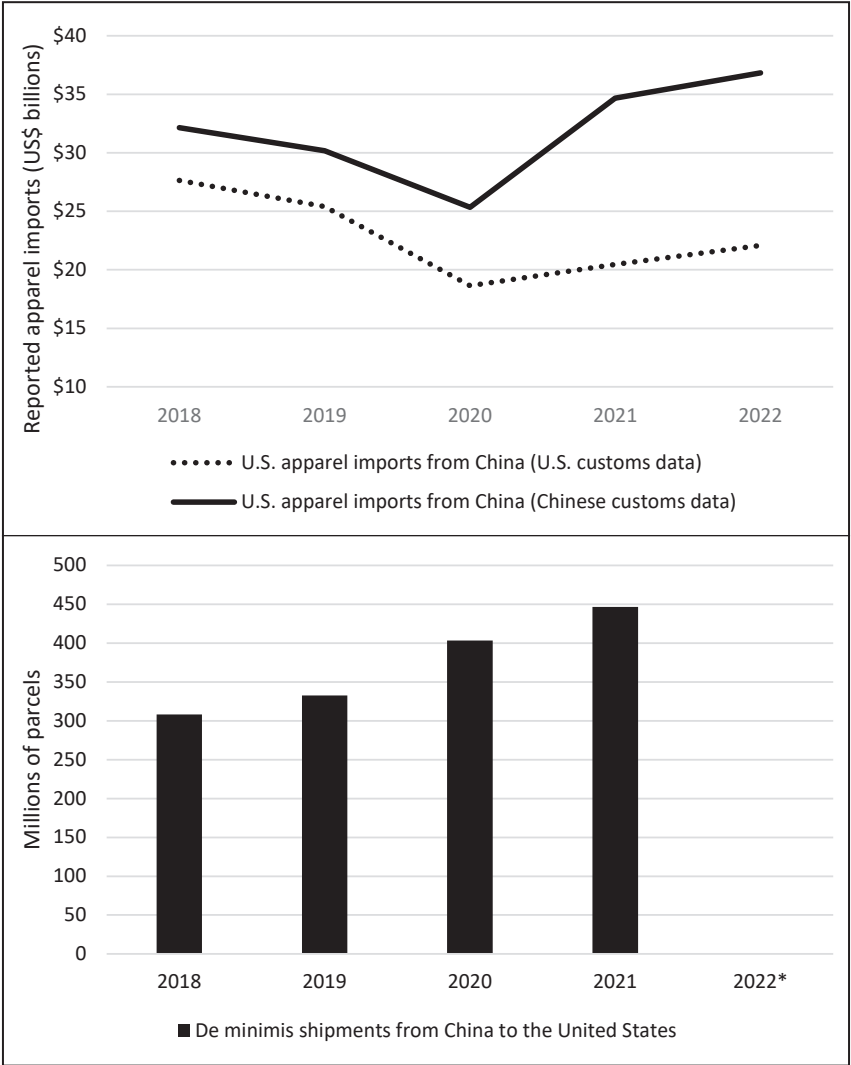
Trade War Diverted Tariffed Imports Away from China

The composition of bilateral trade has changed dramatically over the five years since the United States first imposed tariffs under the Trump Administration Section 301 investigations. U.S. industries most exposed to trade actions and geopolitical tensions have shifted toward suppliers based outside of China, a growing portion of which are Chinese companies with overseas operations. The U.S. International Trade Commission estimated that U.S. imports across all Chinese products fell 2 percent for every 1 percent increase in the tariff line on each product category.¹²⁹ According to analysis by Chad Bown, senior fellow at the Peterson Institute for International Economics, U.S. imports of Chinese products subject to tariff rate hikes were largely flat and remained below

^{*}U.S. Customs and Border Protection (CBP) produces estimates on the value of de minimis shipments; however, the consistency of these estimates is questionable. CBP reported that de minimis shipments from China declined from \$46.4 billion in fiscal year 2020 to \$10.4 billion in fiscal year 2021, which conflicts with the 10.8 percent year-on-year increase in the quantity of de minimis parcels received from China for those years. This may be caused by a lack of data on de minimis shipments. According to CBP, less than half of all importers using the Section 321 exemption submit the voluntary Entry Type 86 form into the CBP's commercial trade processing portal, Automated Commercial Environment. U.S. Customs and Border Protection, *E-Commerce*, August 29, 2023; U.S. Customs and Border Protection, *Section 321 De Minimis Shipments: Fiscal Year 2018 to 2021 Statistics*, October 2022; Josh Zumbrun, "The \$67 Billion Tariff Dodge That's Undermining U.S. Trade Policy," *Wall Street Journal*, April 25, 2022.

[†]Bloomberg contracted Agroisolab GmbH, a lab in Germany, to test the items using stable isotope analysis. This process measures variations in the isotopes of carbon, oxygen, and hydrogen in the cotton's fibers to determine the climate characteristics and altitude of the region where it was grown. Shein's cotton was compared with two fabric samples from Xinjiang. The first batch of Shein garments tested, which included pants and a blouse, matched the Xinjiang samples with only slight variations. Sheridan Prasso, "Shein's Cotton Tied to Chinese Region Accused of Forced Labor," *Bloomberg*, November 20, 2022.

Figure 3: U.S. and Chinese Data on Apparel Shipments to the United States, 2018-2022



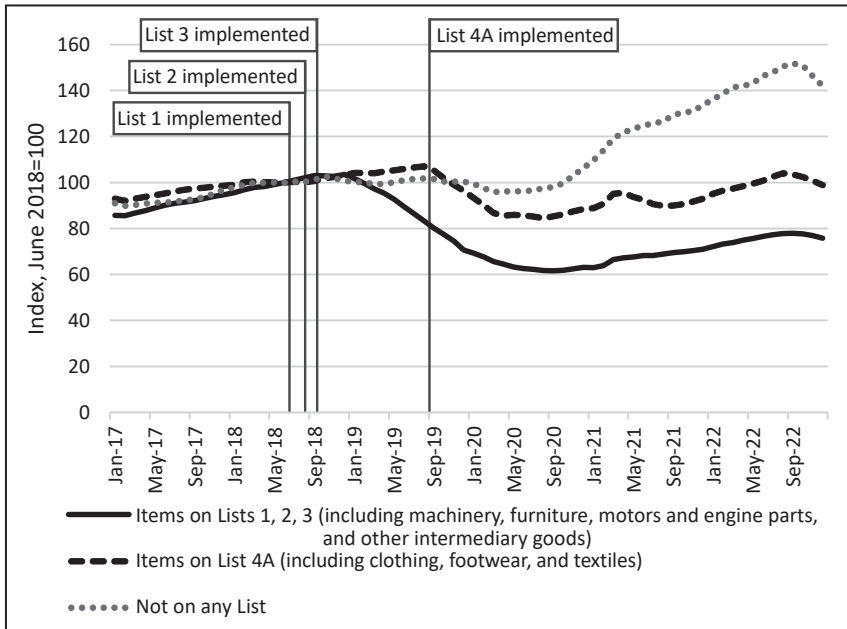
* Data on de minimis shipments from China for fiscal year 2022 were not available as of October 6, 2023.

Note: The de minimis shipments data presented in the graph refer to the quantity of packages entering the United States from China under Section 321, 19 USC 1321. The data reflect all product categories, including clothing and apparel.

Source: China General Administration of Customs, *Customs Statistics*; U.S. Census Bureau, *USA Trade Online*; U.S. Customs and Border Protection, *Section 321 De Minimis Shipments: Fiscal Year 2018 to 2021 Statistics*, October 2022.

2018 levels.¹³⁰ Figure 4 shows that after the USTR issued each of the four tariff lists as part of the Section 301 trade actions, U.S. imports of goods subject to tariffs declined. In contrast, Dr. Bown calculates that imports of Chinese goods not targeted by tariff actions were 42 percent higher in 2022 compared to the 12 months preceding the trade war.¹³¹ Consequently, goods affected by U.S. tariff actions accounted for a declining portion of U.S. goods imports from China, dropping from 67.4 percent in 2018 to 54 percent by the end of 2022.¹³²

Figure 4: Impact of Section 301 Tariffs on U.S. Imports of Chinese Goods, 2017–2022



Note: The tariffs imposed in response to the findings of the 2018 Section 301 investigation into China's nonmarket trade practices were issued on several lists of imported products between July 2018 and September 2019. Lists 1 and 2 include tariffs on about \$50 billion in imports (based on 2017 values) that were implemented on July 6, 2018, and August 23, 2018, respectively. List 3 includes tariffs on about \$200 billion in imports implemented on September 24, 2018. List 4 includes tariffs on about \$300 billion in imports, originally to be implemented in two phases: list 4A on September 1, 2019, and the remainder on December 15, 2019, although this final list was not implemented as negotiations on the January 2020 Phase One Trade Deal began.

Source: Adapted from Chad P. Bown, "U.S. Imports from China Are Both Decoupling and Reaching New Highs. Here's How," *Peterson Institute for International Economics*, March 31, 2023; Chad P. Bown, Euijin Jung, and Zhiyao (Lucy) Lu, "Trump and China Formalize Tariffs on \$260 Billion of Imports and Look Ahead to Next Phase," *Peterson Institute for International Economics*, September 20, 2018; Office of the U.S. Trade Representative, *China Section 301—Tariff Actions and Exclusion Process*.

U.S. industries ranging from clothing to electronics shifted away from China-based suppliers as they looked to avoid paying tariffs on Chinese imports. The Section 301 tariffs intensified pressure to seek alternative sourcing options outside of China, accelerating a preexisting trend driven by rising costs of production in China from increasing wages and a declining workforce, among other factors. U.S. importers increased imports from producers in

other parts of Asia as well as Mexico.¹³³ According to global management consultancy Kearney, China's share of U.S. manufactured imports sourced from all low cost countries in Asia fell to 50.7 in 2022, declining from 65.6 percent in 2013.¹³⁴ In contrast, Vietnam's share of U.S. imports from Asia nearly doubled from its 2018 level of 5.8 percent.¹³⁵

Chinese companies are expanding their presence in Southeast Asian supply chains, increasing U.S. exposure to Chinese content in goods imported from other countries. Even as a rising share of manufactured goods came from outside of China, the amount of Chinese content embedded in these imports rose as Chinese companies expanded their presence in Southeast Asian supply chains. Although the true magnitude of Chinese value-added content in U.S. imports is unknown due to limited efforts to fully map U.S. supply chains, trade and national production data indicate that the manufacturing sectors of ASEAN economies source a substantial share of their intermediate inputs from China. In Cambodia and Vietnam, products and services originating from China and Hong Kong accounted, respectively, for 20.2 percent and 15.8 percent of all value added in the production of exports in 2020.*¹³⁶ The electronics manufacturing sectors of these countries have become significantly dependent on Chinese inputs, particularly since 2017. In Cambodia's electronics export sector, 50.5 percent of all inputs originated in China in 2020, rising from 40.1 percent in 2017, while the share in Vietnam rose to 19.7 percent in 2020, up from 13.7 percent in 2017.¹³⁷ While these data do not break out these countries' exports just to the United States and therefore cannot reveal the full extent of Chinese products in U.S. supply chains, U.S. imports from these countries have accelerated over the past six years.† The United States' imports from Cambodia rose from \$3.1 billion in 2017 to \$12.2 billion in 2022, while imports from Vietnam increased from \$46.5 billion to \$127.5 billion over the same period.¹³⁸

The shift in trade was also driven by Chinese suppliers physically relocating to other countries.‡ Chinese FDI in countries including Vietnam, Thailand, and Mexico increased as Chinese

*Across all ASEAN economies, 8.4 percent of value added to exports originated from China in 2020, up from 6.7 percent in 2017. Organization for Economic Cooperation and Development, "Trade in Value Added Database."

†A team of economists led by Caroline Freund, dean of the University of California San Diego's Global Policy and Strategy School, found that between 2017 and 2022, the United States increased trade with countries whose industries are highly integrated with China. U.S. importers were more likely to source from suppliers in other Asian economies that themselves relied on inputs from China. The authors of the study used a country's imports of products within a specific industry to measure the extent of trade linkages between China and the third country market. For a particular product, if a country's industry imported extensively from China—not just the product itself but also related and intermediate goods—the United States was more inclined to import that product from that country. Caroline Freund et al., "Is U.S. Trade Policy Reshaping Global Supply Chains?" *IMF Conference on Geoeconomic Fragmentation*, May 25, 2023.

‡Chinese companies have also used third countries as platforms to illegally transship goods to the United States, wherein Chinese exporters evade U.S. tariffs by briefly rerouting products through another country without making substantial transformations or modifications to the good. In December 2022, the U.S. Department of Commerce International Trade Administration determined that four Southeast Asian countries—Malaysia, Thailand, Vietnam, and Cambodia—were being used by Chinese companies to circumvent U.S. antidumping and countervailing duty orders on solar products from China. Combined, these four countries accounted for the majority of the United States' imports of solar products. Margaret Spiegelman, "Commerce Issues Preliminary Affirmative Rules in Solar Probes," *Inside Trade*, December 2, 2022; U.S. Department of Commerce, *Preliminary Determination of Circumvention Inquiries of Solar Cells and Modules Produced in China*, December 2, 2022.

exporters sought to move production to low-cost destinations,* avoiding the Section 301 tariffs and limiting exposure to future U.S. trade restrictions by setting up manufacturing bases outside of China.¹³⁹ The investment activities of Chinese multinational enterprises in Southeast Asia are likely to increase as China seeks to deepen its economic integration in the region, including through the Regional Comprehensive Economic Partnership—the China-initiated trade agreement that came into effect in January 2022.[†]¹⁴⁰

China Imposes New Restrictions on Access to Business-Essential Information

Access to reliable market intelligence deteriorated under a far-reaching anti-espionage campaign designed to assert greater Party-state control over corporate information flows. Chinese security officials raided three multinational corporate advisory firms in 2023, including the U.S. due diligence firm Mintz Group in March and U.S. consulting group Bain & Co in April. Although Chinese officials did not provide an explanation for the investigations, Chinese state-owned television broadcaster CCTV produced a report on Capvision, a consultancy whose offices were raided by police in May 2023, that alleged Capvision coordinated a network of experts and insiders to sell sensitive information and state secrets.¹⁴¹ The raids reportedly form part of a campaign to extend the reach of China’s national security apparatus and cut off foreign companies’ access to information deemed sensitive by the Party-state.¹⁴² The antispionage campaign follows March 2023 amendments to the Counterespionage Law that went into effect in July. These revisions broaden the definition of espionage activities to include any information gathering that involves material related to China’s national security, expanding the remit beyond dealing in state secrets (see textbox “The CCP Considers Economic Data and Public Perception of the Economy Matters of National Security”).¹⁴³

As restrictions on cross-border data flows went into effect, offshore businesses and investors were cut off from real-time financial and economic data providers and corporate registries. Since 2022, overseas corporations reported that the widely used data provider Wind Information started restricting access to certain data services, including real-time insights into sectors of China’s economy ranging from housing to retail sales.¹⁴⁴ Companies also lost access to databases on corporate data registries, including the business databases Qichacha and Tianyancha as well as Wind’s corporate data services, preventing individuals outside of China from easily retrieving information such as the shareholders in a given Chinese company, its affiliated entities, or involvement in legal disputes.¹⁴⁵ The restrictions come as China implements its data governance regime‡ wherein the Party-state views cyberspace, data,

*Between 2018 and 2023, FDI by Chinese entities totaled \$4.6 billion in Vietnam, \$3.1 billion in Thailand, and \$2.1 billion in Mexico. Derek Scissors, “China Global Investment Tracker,” *American Enterprise Institute*, 2023.

†The Regional Comprehensive Economic Partnership encompasses 15 economies: the ten members of ASEAN (Brunei, Burma [Myanmar], Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, Vietnam), Australia, China, Japan, New Zealand, and South Korea.

‡The legal framework governing cross-border data transfers includes China’s Cybersecurity Law enacted in 2017, the 2021 enactment of the Data Security Law, and the Personal Information Protection Law. Major rules to implement the laws came into effect in 2022 and 2023. They

and networks as sovereign territory and subject to local laws and restrictions.¹⁴⁶ The expansive authority of the data security laws is compelling Chinese companies to restrict overseas access to avoid crossing vaguely defined lines. As a result, firms and analysts face worsening information quality on China's business climate, and China's official data releases are curated and manipulated to present a more positive view of the economy (for more on China's increasingly unreliable statistics releases, see Chapter 3, Section 2, "Fiscal, Financial, and Debt Problems Weigh Down Beijing's Ambitions"). The access restrictions may also complicate foreign companies' ability to comply with home-market regulations, particularly sanctions and export restrictions targeting Chinese entities. As a result of the restrictions and the raids, U.S. businesses face greater difficulty in ensuring counterparties in China are not subject to restrictions on exports of controlled technology, U.S. investment restrictions, the Uyghur Forced Labor Prevention Act, and other requirements under U.S. law.¹⁴⁷

Limits on accessing corporate registry data and the series of raids on foreign due diligence and consulting firms mark an acceleration of a long trend of censoring economic information. China's government has repeatedly imposed restrictions on access to economic data and its collection, censored domestic economic information and news, and punished foreign outlets for coverage of sensitive economic topics. In 2021, for instance, China's government censored independent indicators of inflation to control news about sharp price increases, and in 2023 it suspended a government dataset on youth unemployment after the rate for urban 16- to 24-year-olds climbed to an all-time high of 21.3 percent in June 2023.¹⁴⁸ In 2012, China's government also blocked Bloomberg and Businessweek's websites after they published a story on then Vice President Xi Jinping's family wealth.¹⁴⁹

The CCP Considers Economic Data and Public Perception of the Economy Matters of National Security

In 2014, General Secretary Xi introduced the "Comprehensive National Security Concept," a broad-ranging framework that argues threats to the CCP regime may originate from any field in the domestic or international arena, including "economic security" and "cultural security." Under Xi, the concept has become a core tenet of decision-making, expanded to all policy areas, and permeated from the Politburo down to the grassroots governance level.*¹⁵⁰ It emphasizes the importance of not only averting threats but also proactively identifying and neutralizing emerg-

establish procedures for conducting a security assessment before transferring data and personal information overseas (effective September 2022), a third-party certification process for conducting cross-border data transfers (effective November 2022), and a standard contract for facilitating the data transfers overseas (effective June 2023). Qiang Tong and Wang Xintong, "How China Is Tightening Controls over Cross-Border Data Transfers," *Caixin Global*, June 14, 2023; Womble Bond Dickinson, "Cross-Border Data Transfers under China's Personal Information Protection Law," May 31, 2023; Todd Liao, "China's Cross-Border Data Transfer Security Assessment Measures Take Effect September 1," *Morgan Lewis*, August 1, 2022.

*For more, see U.S.-China Economic and Security Review Commission, Chapter 1, "CCP Decision-Making and Xi Jinping's Centralization of Authority," in *2022 Annual Report to Congress*, November 2022, 25–120.

The CCP Considers Economic Data and Public Perception of the Economy Matters of National Security—Continued

ing threats before they cause lasting damage.¹⁵¹ The framework further regards economic security as the foundation upon which “security of the people” can be achieved, placing it second only to the “bedrock” of political security in a hierarchy of security domains.*¹⁵² With economic security underpinning societal stability, Chinese leaders are sensitive to public opinion on the economy, regarding unfavorable economic data and phenomena that indicate discontent, such as a trend of Chinese youth “lying flat,”† as fundamental threats to national security.¹⁵³

The revision of China’s Counterespionage Law furthers a trend of state oversight of economic data and financial news, providing a national security justification for data censorship. The revisions expanded the scope of information the government may consider a threat to national security to encompass all “documents, data, materials, or items related to national security,” whereas the prior version of the law had only concerned “state secrets and intelligence.”¹⁵⁴ This codifies the Party-state’s broad discretion to conduct investigations under a flexible, expansive national security definition, potentially subjecting any company that collects information to investigation for espionage.‡¹⁵⁵ Commenting on the revisions, the U.S. Chamber of Commerce stated in April 2023 that the “additional scrutiny of firms providing essential business services dramatically increases the uncertainties and risks of doing business in the People’s Republic.”¹⁵⁶

U.S. Direct Investment in China Slows amid Rising Risks

Many U.S. businesses delayed or reconsidered investment in China amid a weak economic outlook, causing FDI in China to tumble in 2022. Just 45 percent of U.S. companies surveyed by AmCham China in its 2023 Business Climate Survey planned to increase their investment plans in China, the lowest proportion in the business survey’s history (see Figure 5).¹⁵⁷ Among those companies expanding investment, most planned only small increases. The drop in planned investment contributed to FDI flows into

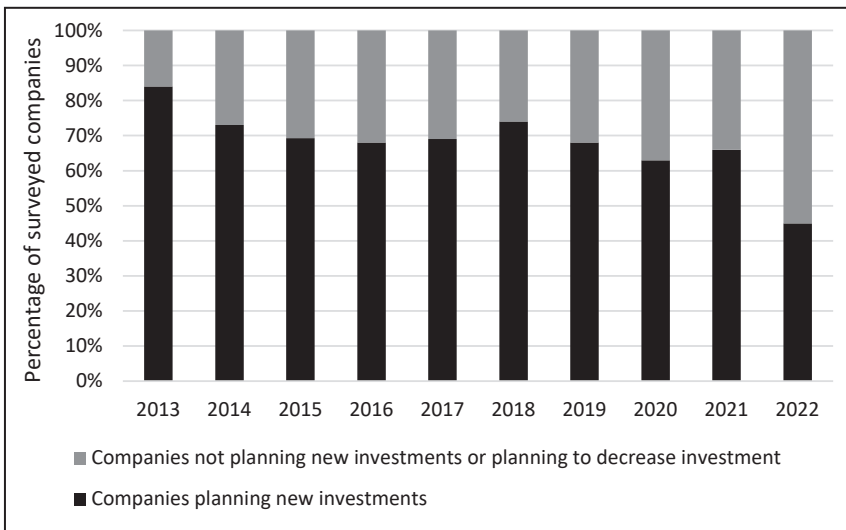
*According to Party sources, the structure of the “Comprehensive National Security Concept” comprises five elements and five relationships. The five elements are: “security of the people as the aim, political security as the fundamental principle, economic security as the foundation, military, cultural, and societal security as the guarantees, and the promotion of international security as the source of support.” Tang Aijun, “Ideological Security in the Framework of the Overall National Security Outlook” (总体国家安全观视域中的意识形态安全), *Socialism Studies*, December 12, 2019. *CSIS Interpret Translation*.

†“Lying Flat” is an online meme that gained prominence in 2021 and is used to describe rejection of societal pressure. It comes as China’s economy has slowed, youth unemployment has surged, and opportunities for graduates have declined despite increasingly rigorous demands of education. David Bandurski, “Lying Flat,” *China Media Project*, July 17, 2023.

‡While these revisions more concretely define a broader set of conduct as espionage activity, Senior Fellow at Yale Law School’s Paul Tsai China Center Jeremy Daum notes much of the enforcement and enactment authorities already existed under previously issued rules, including the 2017 *Provisions on Efforts on Counter-Espionage Security Precautions* and the 2021 *Detailed Implementation Rules for the Counter-Espionage Law*. In his assessment, the practical implications of the 2023 Counterespionage Law may be negligible, as it merely defines the existing scope of counterintelligence powers. Jeremy Daum, “Bad as It Ever Was: Notes on the Espionage Law,” *China Law Translate*, May 2, 2023.

China falling to a record low, extending a multiyear slowdown in direct investment. Across U.S. and other foreign companies, greenfield FDI flows—including investments in new factories and facilities—dropped to \$17 billion in 2022, 43.3 percent below the flows in 2021.¹⁵⁸ FDI in 2023 has proven equally dismal, with just \$3.2 billion in new greenfield investment transactions in the first quarter of 2023, declining 34 percent year-on-year from the first quarter of 2022 and down 75 percent relative to 2021.¹⁵⁹ Total direct investment inside China, including both mergers and acquisitions and greenfield FDI by all foreign companies, fell to its lowest recorded level of \$41 billion in 2022.¹⁶⁰

Figure 5: Surveyed Investment Plans of U.S. Multinational Enterprises in China, 2017–2022



Note: Each year, AmCham China surveyed leaders of U.S. businesses operating in China about their investment plans for the following year.

Source: American Chamber of Commerce in China, “2023 China Business Climate Survey Report,” March 2023, 48; American Chamber of Commerce in China, “2020 China Business Climate Survey Report,” March 2020, 33.

Beijing’s prioritization of national security undercut the Party-state’s message of openness to foreign investment and led U.S. businesses to consider reducing or isolating their operations in China. In March 2023, China’s newly appointed Premier Li tried in his first major public remarks to reassure global businesses, saying that China strives to create a “first-class business environment that is market-oriented, rule-of-law-based and internationalized.”¹⁶¹ China’s government carried out a series of initiatives in 2023 to attract foreign investment, hoping that foreign capital inflows will help revive the stagnant economy. China’s MOFCOM even launched a “Invest in China Year” campaign in 2023, organizing a series of events to attract foreign businesses.¹⁶² Provincial and local governments also rolled out tax incentives for foreign investors.¹⁶³ Despite this overture to international business, a rising number of U.S. companies have indicated that they plan to reduce their pres-

ence inside China. According to AmCham China’s April 2023 flash survey of U.S. businesses in China, 23 percent of surveyed businesses are relocating parts of their operations or assessing their options to do so.¹⁶⁴ Businesses cited tensions in the U.S.-China relationship and geopolitical risks as the number one and two challenges to their operations inside China (see Table 3). In contrast to surveys in previous years, survey respondents elevated their concerns about exposure to policy volatility and the Party-state’s national security economic narrative. Concerns about the “Chinese policy environment” and “increasing Chinese protectionism and/or economic nationalism” also rose to U.S. firms’ third- and fourth-largest challenges.¹⁶⁵

Table 3: Top Five Challenges Facing U.S. Businesses in China, AmCham China 2023 April Flash Survey on China Business Climate Sentiment

Rank	2023 Flash Survey on China Business Climate	2022 Business Climate Survey
1	Rising tensions in U.S.-China relations	Rising tensions in U.S.-China relations
2	Geopolitical risks	Inconsistent/unclear laws and/or regulations and enforcement
3	Chinese policy environment	Rising labor costs
4	Increasing Chinese protectionism and/or economic nationalism	Regulatory compliance risks
5	Inconsistent/unclear laws and/or regulations and enforcement	Concerns about data security

Source: American Chamber of Commerce in China, “Flash Survey on China Business Climate Sentiment Updates,” April 2023, 15; American Chamber of Commerce in China, “China Business Climate Survey Report,” March 2023, 35.

Emerging Supply Chain Vulnerabilities in the Electric Vehicle Industry

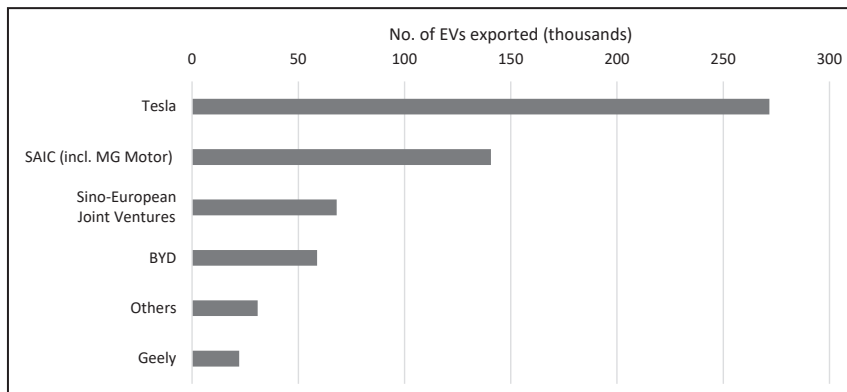
A decade of government support has made China’s EV market into the world’s largest and led to a surge in Chinese exports across the broader category of new energy vehicles (NEVs).^{*} In the first seven months of 2023, China’s EV exports alone increased 119 percent over the previous year.¹⁶⁶ China is now the world’s largest EV exporter. In 2022, Chinese EV exports accounted for 35 percent of global EV trade, although a majority of China’s EV exports were produced by foreign automakers manufacturing inside China, either through wholly-owned foreign enterprises or via joint ventures with Chinese automakers (see Figure 6).¹⁶⁷ Tesla alone made up 40 percent of China’s total EV exports.¹⁶⁸ Western multinational EV manufacturers have established export hubs inside China, aiming to lower production costs by operating within China’s dynamic EV ecosystem.[†]¹⁶⁹ In contrast to overseas sales, foreign brands make up only a small portion of China’s own

^{*} New energy vehicles (NEVs) include EVs, plug-in hybrids, and hydrogen fuel cell EVs.

[†] Auto parts supplier Forvia’s CEO Patrick Koller estimated that Chinese automakers can manufacture EVs for over \$10,000 less than European carmakers. The cost advantage of producing in China has enabled Chinese automakers to outpace competitors while also expanding into the budget vehicle segment. Over 20 percent of vehicles for sale in China were priced under \$15,000 in 2022. No vehicles are for sale at that price point in either the United States or Europe. Colin

EV market, where domestic manufacturers are driving the rapid expansion of Chinese EV sales.¹⁷⁰ In 2022, sales of EVs and other NEVs inside China totaled 6.9 million vehicles, nearly double the sales in 2021.¹⁷¹ Despite the slowing economy, NEV purchases between January and August 2023 continued to rise 40 percent year-on-year as the government stepped in to boost auto purchases using tax exemptions.¹⁷² Currently, one in four passenger vehicles sold in China is a NEV, up from one in 20 in 2019.*¹⁷³

Figure 6: China's Exports of Electric Vehicles by Brand, 2022



Note: Sino-European joint ventures include ventures established between Chinese automakers and major European automakers, including BMW, Mercedes-Benz, Renault, and Volkswagen. SAIC, BYD, and Geely are Chinese automakers.

Source: Ilaria Mazzocco and Gregor Sebastian, "Electric Shock: Interpreting China's Electric Vehicle Export Boom," *Center for Strategic and International Studies*, September 14, 2023.

Made-in-China EV exports to the EU have boomed over the past two years, prompting the European Commission to launch an antisubsidy investigation into China's EV industry. On September 13, 2023, European Commission President von der Leyen announced that the EU is launching an antisubsidy investigation into EVs exported by China, stating that China is distorting the EU market by keeping prices "artificially low by huge state subsidies."¹⁷⁴ The investigation formally launched on October 4, 2023.¹⁷⁵ The EU's review of China's nonmarket EV practices is in the context of deepening ties between European and Chinese automotive sectors.¹⁷⁶ Europe has absorbed most of the surge in China's exports of EVs.[†]¹⁷⁷ The EU is on track to more than double its imports of EVs from China in 2023 relative to 2022 as China's shipments of vehicles continue to accelerate (see Figure 7). The EU

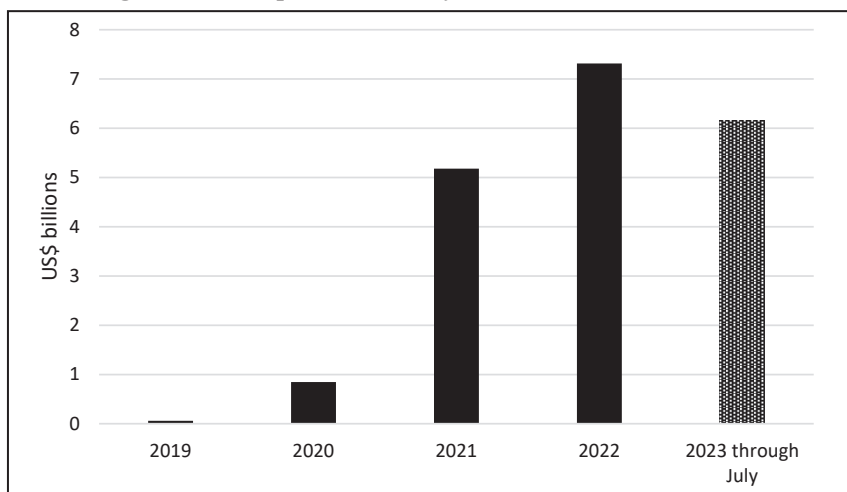
McKerracher, "Electric Vehicles Have China's Massive Middle Market Surrounded," *Bloomberg*, August 30, 2023; Ilaria Mazzocco, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China's Current Economy: Implications for Investors and Supply Chains*, August 21, 2023, 4; Joseph White, "China Has a 10,000 Euro Cost Advantage in Small EVs, Auto Supplier Says," *Reuters*, January 5, 2023.

* In 2020, China's government set a goal for NEVs to constitute 20 percent of total auto sales by 2025, a target the EV industry has now surpassed. Daniel Ren, "China Keeps 20 Percent Sales Target for Home-Grown Electric Cars by 2025, Calling Controversial Industrial Plan by Another Name," *South China Morning Post*, November 3, 2020.

† Over 70 percent of China's \$3.2 billion in EV shipments were destined for Europe and the UK in 2022. Myungshin Cho, "China's Electric Car Exports Surge to Record on European Demand," *Bloomberg*, December 27, 2022.

imported \$6.2 billion (€5.8 billion) in EVs from China in the first seven months of 2023, a 125.8 percent increase over the same period in 2022.¹⁷⁸ Made-in-China EVs make up a growing fraction of EU sales: imported EVs from China accounted for 11.2 of all EVs sold in Germany in the first half of 2023.¹⁷⁹ European automakers are simultaneously expanding production into China. Because the EU maintains low tariffs on EVs and European purchases subsidies are available regardless of the vehicles' country of origin, European automakers, including BMW, Mercedes, and Renault, are offshoring production to China, including through joint ventures with Chinese automakers, as they aim to lower the costs of producing cars bound for both the Chinese and European markets.¹⁸⁰ For instance, BMW has produced and exported its iX3 battery EV through a China-based joint venture with Brilliance since 2020.¹⁸¹ The EU's most senior trade official, Valdis Dombrovskis, stated that the EU's antisubsidy probe may extend to foreign automakers' China operations if "they are receiving production-side subsidies" from China.¹⁸² Should China escalate trade tensions in response to the EU's anti-subsidy review, Europe's auto sector may also be exposed to trade costs or retaliatory measures.¹⁸³

Figure 7: EU Imports of Battery EVs from China, 2019–2023



Note: This figure uses the following exchange rate: \$1 = €0.94.

Source: Eurostat, *International Trade in Goods*.

Chinese automakers currently hold only a small share of the EV market outside of China, but they are investing heavily in expanding their overseas footprint. China's most popular domestic EV brand, BYD,* is now the world's largest EV producer and is rapidly expanding overseas. Between January and August 2023, BYD reported 117,500 in overseas NEV sales, making up 16 percent of China's total NEV exports over the same period.¹⁸⁴ BYD

*BYD is short for Build Your Dreams. Berkshire Hathaway was an early investor in BYD, buying \$225 million in the company's Hong Kong-listed stock in 2008. In July 2022, Berkshire's stake was worth \$9.5 billion, although it has since started selling its positions. Josh Funk, "Warren Buffett's Company Keeps Selling Carmaker BYD's Stock," *Associated Press*, May 8, 2023.

has already doubled the 56,000 in overseas vehicle sales it recorded for all of 2022, which were primarily exported to India, Thailand, and Brazil.¹⁸⁵ It expects to ramp up sales to 400,000 vehicles in 2024, aiming to leverage its low-cost EVs to enter not only developing economy markets and also increase sales to markets such as Japan and Europe.¹⁸⁶ It aims to send 30,000 vehicles to Mexico by 2024.¹⁸⁷ China's automakers are also seeking to move production closer to overseas markets.¹⁸⁸ Since 2016, BYD and Geely, the Chinese owner of Volvo and Polestar, have announced 14 and 15 green-field projects outside of China, respectively.*¹⁸⁹

Chinese EV manufacturers have made limited entries into the U.S. market. Aside from BYD's success in manufacturing and selling electric buses in the United States,† Chinese automakers have largely avoided the U.S. market due to high tariffs on imported passenger vehicles from China and the smaller size of the U.S. EV market relative to that of Europe.¹⁹⁰ A handful of exceptions exist. The premium EV manufacturer Polestar plans to start production in the United States at a new facility in South Carolina in 2024, which will be the Chinese-owned automaker's first production facility located outside of China.¹⁹¹ U.S. automaker General Motors plans to introduce its Buick Electra EV model—which it currently produces for sale in China—to the U.S. market in the next two years.‡¹⁹² Ford also has a partnership with Contemporary Amperex Technology (CATL), the world's largest battery supplier, to invest \$3.5 billion into a lithium-iron-phosphate battery factory in Michigan.¹⁹³ CATL is also expanding its operations in other markets, including in Europe, where it is projected to be the region's largest battery maker once its factories in Germany and Hungary come online, potentially as early as 2025.¹⁹⁴

EV Subsidies: A Replicable Success for Chinese Industrial Policy?

China's EV subsidy programs played a key role in creating an integrated supply chain for EVs over the past decade, although it came at immense cost and inefficiency.¹⁹⁵ Local governments, rather than central ministries, played the leading role in deploying consumer subsidies for EV purchases.§¹⁹⁶ While government

*BYD has invested at least \$1.3 billion in overseas facilities in Vietnam, Thailand, and Chile since 2022. Derek Scissors, "China Global Investment Tracker," *American Enterprise Institute*, 2023.

†In 2021, transit authorities across the United States operated 245 BYD buses out of a total fleet of 975 electric buses. The National Defense Authorization Act for Fiscal Year 2020 prohibited the Federal Transit Authority from awarding grants and funding for purchasing buses from manufacturers owned or controlled by corporations based in China and other nonmarket economies, effective December 2021. Some municipalities have continued to place orders for BYD buses, mainly due to the costs of switching to another supplier. U.S. Federal Transit Administration, *2021 Annual Database Revenue Vehicle Inventory*; Ian Duncan, "U.S. Funding Ban for Chinese Buses Arrives, Disrupting Transition to Electric," *Washington Post*, December 17, 2021.

‡General Motors has not announced where it will produce the Electra if it proceeds with plans to sell it in the United States. General Motors has a history of producing Buicks in China for export to the United States; it has shipped its internal combustion engine Envision SUV from factories in China to the United States since 2016. Drew Dorian, "2025 Buick Electra E5," *Car and Driver*, 2023; Daniell Paquette, "A Slap in the Face to U.S. Taxpayers: Most Vehicles Imported from China Are Made by an American Company," *Washington Post*, March 20, 2017.

§While nominally called consumer subsidies, these were paid out to manufacturers rather than consumers, with the intent that producers would pass on the support to consumers through lower vehicle prices. Gerard DiPippo, Ilaria Mazzocco, and Scott Kennedy, "Red Ink: Estimating Chinese

EV Subsidies: A Replicable Success for Chinese Industrial Policy?—*Continued*

financial assistance fostered the growth of now-leading EV companies, including Shenzhen's support for BYD, the policies also led to adverse incentives for automakers. As Center for Strategic and International Studies fellow Ilaria Mazzocco observes, "Industrial policy-induced business cycles have generated strong and rapid growth, but they also tend to produce irrational exuberance, policy abuse, and market fragmentation."¹⁹⁷ Local governments denied subsidies for EVs made in other provinces, and public officials supported local firms by procuring solely from manufacturers located in the same city. This created a highly fragmented market with hundreds of EV manufacturers, many of which failed to bring a car into production.*¹⁹⁸ Fraud was also rampant, with companies fabricating sales in order to pocket the subsidies.¹⁹⁹ Further, the costs of the subsidies program were immense. Between 2009 and 2017, consumer subsidies amounted to \$33.8 billion (RMB 245 billion), meaning that the government fronted nearly a quarter of all EV sales.†²⁰⁰ Partially due to the spiraling costs, Beijing centralized control over the subsidies after 2016 and began to phase out consumer subsidies. Beijing terminated local consumer subsidies by June 2019, and it phased out central subsidies entirely at the end of 2022.²⁰¹

China's control over critical mineral supplies and dominance in battery production accelerated the expansion of Chinese automakers into downstream production of EVs.²⁰² Because batteries are the most important and often most expensive component of EVs, Chinese EV makers benefited from China's established control over the battery supply chain.²⁰³ In 2022, Chinese companies made up over 75 percent of global battery cell manufacturing capacity and 90 percent of all anode and electrolyte production.²⁰⁴ China's CATL currently accounts for 37 percent of global market share for EV batteries.²⁰⁵ BYD ranked in second place with 13.6 percent, ahead of South Korea's LG Energy Solution, which accounts for 12.3 percent.²⁰⁶

China's economic planners may struggle to replicate the success of its EV industrial policy in other industries where China lacks substantial preexisting capabilities. University of California San Diego researchers Barry Naughton, Siwen Xiao, and Yaosheng Xu argue that EVs are an example of a "long-board" industrial policy success, referring to technology areas where China already possesses competitive advantages.²⁰⁷ The authors distinguish this technology from "short-board" technologies, where Chi-

Industrial Policy Spending in Comparative Perspective," *Center for Strategic and International Studies*, May 23, 2022, 55.

*In 2018, roughly 15 percent of over 400 EV manufacturers had actually brought cars to market. Analysts project that 80 percent of new NEV startups founded since China introduced its subsidy programs for EVs have exited or are exiting the market. *Bloomberg*, "China's Cutthroat EV Market Is Squeezing Out Smaller Players," June 26, 2023; Ilaria Mazzocco, "Electrifying: How China Built an EV Industry in a Decade," *MacroPolo*, July 8, 2020.

†For example, consumer subsidies for BYD's e6 model car from the municipal and national government amounted to \$9,756 (RMB 60,000) each in 2014, equivalent to one-third of the factory cost of the vehicle. Ilaria Mazzocco, "Electrifying: How China Built an EV Industry in a Decade," *MacroPolo*, July 8, 2020; Dazhong Kanche, "How Far Are Electric Cars from Us? In-Depth Experience with the BYD e6" [电动车离我们多远? 深度体验比亚迪e6], July 10, 2014.

EV Subsidies: A Replicable Success for Chinese Industrial Policy?—*Continued*

na lacks the capabilities to achieve import substitution. In this latter category, China faces both high costs in growing new industries and lower benefits to the economy should they succeed. The troubled 14-year-long development of the COMAC C919, China's first domestically produced narrow-body aircraft, underscores the difficulties China faces in catching up in technologies dominated by Western producers.*²⁰⁸

Foreign Portfolio Investment in China

U.S. Financial Services Companies Reassess Their Strategies in China

Some foreign banks and investment firms have started reducing their footprint as their ventures struggle to gain ground in China's state-owned-bank-dominated financial system. As China took significant steps since 2018 to open its financial services market to foreign investment, including reforms it committed to implement nearly 20 years earlier when negotiating its entry into the WTO, U.S. financial institutions made ambitious investments to expand their China operations.²⁰⁹ Foreign fund managers, banks, and insurers that entered under newly available channels encountered financial markets that were saturated by Chinese state-owned financial services companies, many of which leveraged joint ventures with foreign firms to bolster internal expertise and financial acumen, leaving global funds with just a margin of the market.²¹⁰ At the end of 2022, U.S. holdings of Chinese stocks and bonds totaled \$247.2 billion, a small fraction compared to the \$29.3 trillion (RMB 212.3 trillion) in total market capitalization on the Shanghai and Shenzhen Stock Exchanges alone.²¹¹ While some foreign fund managers like Blackrock and Fidelity remain committed to competing for market share in China despite declining profitability, other U.S. financial firms are drawing back from China.²¹² Vanguard is reportedly preparing to exit its financial advisory joint venture with Ant Group and close its office in Shanghai, four years after launching the venture in 2019.²¹³ In April 2023, the U.S. mutual fund Van Eck abandoned its plan to set up a unit in China's mutual fund market.²¹⁴ Of the total U.S. holdings, four of the largest U.S. banks operating in China—JPMorgan, Citigroup, Bank of America, and Morgan Stanley—cut their combined China exposure by 16 percent in 2022, holding just \$48 billion inside China.²¹⁵

*Analysts at the Center for Strategic and International Studies (CSIS) estimate that COMAC received between \$49 billion and \$72 billion in state support to develop the C919 as of 2020. However, as the CSIS Trustee Chair in Chinese Business and Economics Scott Kennedy notes, "It is misleading to call the C919 a Chinese plane because almost all of its components, including everything that keeps the plane aloft, are imported." China Eastern Airlines completed the first commercial C919 flight in May 2023, but COMAC has yet to find a market for the aircraft outside of China. *Reuters*, "China's Home-Grown C919 Completes First Commercial Flight," May 28, 2023; Scott Kennedy, "China's COMAC: An Aerospace Minor Leaguer," *Center for Strategic and International Studies*, December 7, 2020.

Even as some foreign financial institutions withdraw from or reduce their footprint in China's market, Chinese regulators are greenlighting more foreign-owned fund managers. Since late 2022, the China Securities Regulatory Commission (CSRC) accelerated approvals for wholly foreign-owned mutual fund and wealth management businesses in China, potentially increasing foreign firms' ability to seek profits in China's still-developing financial system. In November 2022, the Canadian asset management firm Manulife received approval to buy out its Chinese partner's stake in a joint venture fund, becoming the first financial institution to convert a joint venture into a wholly foreign-owned entity since China removed the cap on foreign ownership in the sector in 2020.²¹⁶ The CSRC subsequently approved JPMorgan's bid to take over its mutual fund joint venture in January 2023 at the same time it granted the United Kingdom (UK)-based bank Standard Chartered approval to set up a fully foreign-owned securities brokerage.²¹⁷ In February, Morgan Stanley received approval to take full control over its asset management joint venture.²¹⁸ Prior to the recent string of approvals, four other U.S. firms received approval to establish wealth management and/or mutual fund businesses: BlackRock and Goldman Sachs for majority-owned wealth management joint ventures in May 2021; and Neuberger Berman Group, Fidelity, and BlackRock for wholly owned mutual fund businesses in September 2021, August 2021, and August 2020, respectively.²¹⁹

While gaining full control over a fund may grant foreign financial institutions greater flexibility, they will still face a Chinese financial market landscape dominated by state-backed players with deep capital pockets. Chinese regulators remain apprehensive about foreign financial services companies gaining too much influence, especially as China creates new markets for financial services.²²⁰ Regulations on entry to China's emerging private pension market favor domestic firms, creating a barrier to nearly all foreign companies entering without a Chinese partner's support (see textbox below).

Foreign Financial Institutions Locked Out of Early Access to China's Pension Market

China launched a pilot marketplace for private pension plans in 2022 that allows individuals to contribute up to \$1,791 (RMB 12,000) annually in tax-deferred plans, a system analogous to the Investment Retirement Accounts prevalent in the United States.²²¹ China's private pension system is projected to grow from \$300 billion in 2022 to \$1.7 trillion by 2025 as China's population rapidly ages, presenting a lucrative opportunity for funds that launch products on the marketplace.²²² However, most wholly foreign-owned asset managers lack the requisite domestic assets to meet the threshold for participation in pilots of the program. To start selling individual pension fund products, financial institutions must have at least \$2.8 billion (RMB 20 billion) in assets in a mutual fund business, and Morgan Stanley, Manulife, and JPMorgan are currently the only wholly foreign-owned fund

Foreign Financial Institutions Locked Out of Early Access to China's Pension Market—*Continued*

managers large enough to participate.²²³ Instead, large Chinese financial institutions are already moving to capture a significant portion of the nascent pension marketplace, potentially limiting the scope for the entry of foreign pension products.²²⁴ These restrictions largely mirror a pattern of limiting foreign competition to financial markets until domestic firms have sufficient time to establish market dominance.

U.S. asset managers are also creating distance from their China-based operations as U.S. regulators increase their scrutiny of investments in China. Sequoia Capital, whose China venture capital unit has backed many of China's major tech startups, announced in June that it will split its China operations into an independent company alongside a planned restructuring that carves out its operations in India and Southeast Asia.²²⁵ Sequoia's \$56 billion in assets under management in China will be placed in a new entity called HongShan.*²²⁶ This exceeds the \$53 billion in Sequoia Capital's assets under management in the United States and Europe, combined.²²⁷ HongShan may still be able to raise funds from U.S. investors following the completion of the business separation.²²⁸ U.S. government restrictions on investing in Chinese companies tied to China's military-civil fusion strategy, as well as the potential implementation of Washington's outbound investment review mechanism, may reduce the opportunities for investing in China's technology sector. U.S. investment managers are also increasing scrutiny of investments that could be seen as bankrolling China's military.²²⁹

China's Securities Regulator Formalizes an Approval Process for Overseas Listings in the United States

At the end of 2022, China permitted U.S. regulatory inspections of China and Hong Kong-based auditors for the first time, a step that brought over 100 U.S.-listed Chinese companies into compliance with U.S. securities law and removed the possibility of a mass delisting. Prior to these investigations, the Chinese government had prevented the Public Company Accounting Oversight Board (PCAOB), a nonprofit corporation established by Congress to oversee the audits of publicly traded companies listed on U.S. exchanges, from conducting inspections of auditors based in mainland China and Hong Kong as mandated under the Sarbanes-Oxley Act of 2002.† Under a process established in the Holding Foreign Companies Accountable Act of 2018 (HFCAA), issuers that retained auditors from such noncompliant jurisdictions for several consecutive years would face a trading prohibition on

*HongShan is Mandarin for sequoia or redwood.

†Prior to the PCAOB's 2022 determination, China and Hong Kong were the only jurisdictions with PCAOB-registered auditors where the PCAOB was prevented from carrying out its oversight responsibilities. Until 2021, the PCAOB was unable to conduct inspections of firms located in Belgium as well, but the board reached an agreement with the Belgian Audit Oversight College in April 2021. U.S. Public Company Accounting Oversight Board, *PCAOB Enters into Cooperative Agreement with Belgian Audit Regulator*, April 20, 2021.

U.S. securities markets.* The Securities and Exchange Commission identified 174 issuers—including Alibaba, the largest Chinese company on U.S. exchanges by market capitalization—that were non-compliant with the provisions of the HFCAA in fiscal year 2021.²³⁰ However, after successfully completing a round of regulatory inspections of two audit firms in mainland China and Hong Kong in late 2022,[†] the PCAOB retracted its determination of China and Hong Kong as noncompliant jurisdictions on December 15, 2022.²³¹ This reconsideration by the PCAOB means that Chinese companies do not currently face the risk of a trading ban under the HFCAA.[‡]²³² It further cleared the way for new listings by companies that retain China and Hong Kong-based auditors, leading to a brief revival of listing activity in the first quarter of 2023. In the first three months of 2023, 13 Chinese companies listed on major U.S. exchanges and raised a combined total of \$376 million through initial product offerings (IPOs).²³³

Although Chinese overseas IPOs rebounded at the start of 2023, listing activity stalled as the CSRC formalized oversight and regulatory control over Chinese companies going public on foreign stock exchanges. Chinese overseas IPOs ground to a near halt after March 31, 2023, when China's securities regulator revised its approval process for companies going public overseas.[§]²³⁴ Under the new review mechanism, all companies are required to register their listing with the CSRC, enabling regulators to block any proposed listing that violates China's laws and regulations or poses risks to national security and the CCP.²³⁵ Though the CSRC touted the measures as necessary for enforcing regulatory compliance and preventing fraud, its review process is wide-ranging, including an evaluation of the company's safeguards against disclosing what the Party-state views as state secrets.²³⁶ The new approval process forms the latest element of Beijing's evolving regulatory

*The HFCAA was signed into law on December 18, 2020. The law requires certain issuers of securities to establish that they are not owned or controlled by a foreign government. Issuers must make this certification if the PCAOB is unable to inspect an issuer's audit work papers. Securities from issuers whose audit work papers cannot be inspected by the PCAOB for three consecutive years are then prohibited from being traded on U.S. exchanges. On December 2, 2021, the Securities and Exchange Commission finalized rules to implement the HFCAA. After noncompliant companies are designated "Commission-Identified Issuers," they are required to disclose the percentage of their shares owned by a government entity, whether a government entity has a controlling financial interest in the company, the name of each CCP official who is a member of the company's board of directors, and whether the company's articles of incorporation contain any charter of the CCP. If a company is designated as a Commission-Identified Issuer for three consecutive years, trading of its securities on U.S. exchanges becomes prohibited—a timeline that was shortened to two years in the Consolidated Appropriations Act, 2023. Consolidated Appropriation Act, 2023, Pub. L. No. 117–328, 2022; U.S. Securities and Exchange Commission, *Holding Foreign Companies Accountable Act Disclosure*, December 2, 2021.

[†]PCAOB investigators selected eight audit engagements conducted by KPMG Huazhen LLP in mainland China and PricewaterhouseCoopers Hong Kong for inspection. U.S. Public Company Accounting Oversight Board, *PCAOB Secures Complete Access to Inspect, Investigate Chinese Firms for First Time in History*, September 15, 2022.

[‡]With the PCAOB vacating its HFCAA determination on mainland China and Hong Kong, these issuers will regain compliance with the HFCAA after filing their fiscal year 2022 annual reports, although this is conditional on the continued compliance of Chinese regulators with the PCAOB's oversight investigations. Should the PCAOB discover that Chinese regulators are granting it less-than-complete access to auditors of U.S.-listed issuers, whether in investigations in 2023 or beyond, it can immediately reinstate the negative determination under HFCAA. This would restart the clock under HFCAA, wherein U.S.-listed Chinese companies will have at most two years to retain an auditor from a compliant jurisdiction before they are subjected to a trading prohibition.

[§]Five issuers headquartered in China debuted their shares on the Nasdaq in April 2023; however, these companies had registered their listing with the U.S. exchange prior to March 31, 2023.

regime for overseas listings, which expanded rapidly since 2021 as the Party-state increased oversight of cross-border data flows. After ride-hailing app DiDi Chuxing proceeded with its blockbuster \$4.4 billion IPO in June 2021 despite objections from CAC,* China clamped down on new listings as it deployed new review mechanisms for overseas IPOs, including a mandatory data review process introduced by CAC in February 2022.†²³⁷ Overseas listings by Chinese companies in all sectors had slowed to a drip in late 2021 and 2022.²³⁸ The CSRC's introduction of an approval process for all overseas listings in 2023 is likely intended to reopen a pathway for companies that align with Beijing's economic priorities to raise capital on foreign markets. Consequently, Chinese IPOs may increase on U.S. exchanges as the CSRC completes its approval process, which is reportedly taking upward of six months.²³⁹ Firms operating in industries deemed sensitive by the CCP are likely to face increased scrutiny when applying to list overseas.

Listings of Chinese companies utilizing variable interest entity structures (VIEs) may accelerate under the CSRC's revised overseas IPO approval process, potentially magnifying the risks to U.S. investors. Since the early 2000s, hundreds of Chinese companies, particularly those in the internet sector,‡ have listed in the United States using VIEs—complex corporate structures that grant shareholders contractual claims to control via an offshore shell company without transferring actual ownership in the company—to circumvent China's restrictions on foreign ownership in industries the CCP deems sensitive.§ Prior to 2023, Chinese companies that list overseas using a VIE were not required to register their listings with the CSRC, as the VIE is not considered a Chinese company under China's law.²⁴⁰ In its March 2023 implementation of an overseas IPO approval mechanism, the CSRC established a requirement for companies to register and receive permission before

* In May 2022, DiDi announced it would delist from the New York Stock Exchange and finally exited on June 2022. DiDi is still listed on U.S. over-the-counter markets with a market capitalization over \$14 billion, making it by far the largest company whose shares are primarily listed on OTC markets in the United States. Yiqin Shen, Henry Ren, and Filipe Pacheco, "Chinese Ride-Hailing Giant Didi Boasts \$14 Billion Value, One Year after NYSE Delisting," *Bloomberg*, June 14, 2023.

† The General Offices of the CCP Central Committee and State Council jointly issued the *Opinions on Strictly Cracking Down on Illegal Securities Activity in Accordance with Law* in July 2021. The opinions pledged to strengthen supervision of Chinese companies issuing securities overseas and enhance oversight of cross-border data flows, the latter of which was reflected in a data security review mechanism for certain companies seeking to list overseas introduced in February 2022 by CAC. The CAC review is mandatory for Chinese companies that collect personal information on more than one million users. Cyberspace Administration of China, *Cybersecurity Review Measures* (网络安全审查办法), December 28, 2021. Translation; State Council of the People's Republic of China, *The General Office of the Central Committee of the Chinese Communist Party and the General Office of the State Council of the People's Republic of China Jointly Issued the "Opinions on Strictly Cracking Down on Illegal Securities Activity in Accordance with Law"* (中共中央办公厅 国务院办公厅印发《关于依法从严打击证券违法活动的意见》), July 6, 2021. Translation.

‡ Eight of the Chinese companies to newly list on U.S. exchanges in the first half of 2023 did so using a VIE, bringing the total number of Chinese issuers using VIEs on the Nasdaq and New York Stock Exchange to 169 as of June 30, 2023, with a combined market capitalization of \$823 billion, or 88.3 percent of the total market cap of all 267 U.S.-listed Chinese companies. U.S.-China Economic and Security Review Commission, *Chinese Companies Listed on Major U.S. Stock Exchanges*, January 9, 2023.

§ Chinese companies are not unique in using VIEs as part of their corporate structures. VIE structures are defined in the standards for consolidating subsidiaries on corporate balance sheets under the Generally Accepted Accounting Principles, the set of accounting rules followed by most U.S. firms. Chinese companies are unique, however, in placing their core businesses inside of VIEs, which enables many Chinese companies to circumvent China's sector-level restrictions on foreign ownership (including in the internet sector) and list overseas.

going public overseas through VIE structures.*²⁴¹ On September 14, 2023, the Chinese auto insurance platform CheChe Technology became the first company formally approved by the CSRC to list using a VIE arrangement on the Nasdaq, potentially signaling Chinese regulators' intent to accelerate such listings.²⁴² Although the VIEs received recognition from China's security regulator in its March 2023 rules, these corporate structures still hold only dubious legal status under China's laws, and the enforceability of a VIE's contractual arrangements is unproven in Chinese courts. Foreign investors may have little recourse to enforcement in the Chinese legal system if VIE-listed companies take the company private at lower valuation or if businesses fail.²⁴³

China Leverages Bilateral Debt to Promote Its National Interests Externally

In the wake of a global economic downturn and following ten years of extensive and predatory lending under the Belt and Road Initiative (BRI), 2022 and 2023 saw a mounting wave of sovereign financial distress among developing countries holding debt from China's policy banks.† China has been and continues to be a primary contributor to this nascent crisis through its extensive and poorly regulated bilateral lending relationships with risky borrowers. In many ways, rising debt distress across developing countries represents the culmination of China's longstanding, irresponsible lending practices. In response to this crisis of its own creation, China seeks to leverage debt troubles and international events to expand the use and reach of the RMB through currency swap lines. In addition, China is expanding its energy partnerships with countries across Central Asia and the Middle East to increase its energy access and security while insulating itself from U.S. economic statecraft. In the long run, developing debt troubles, de-dollarization, and China's expanding partnerships with Russia and energy-producing states will reduce China's sensitivity to U.S. sanctions, grow developing and resource-rich states' ties to and dependency on China, and increase international competition for energy resources.

Rising Distress among Countries Holding Loans from China

A record number of countries that borrowed from China are in debt distress due to high interest rates, heavy loan burdens, and worsening global economic conditions. Nearly 60 percent of China's debtor nations were in financial distress in 2022, up from just 5 percent in 2010.²⁴⁴ Borrowers with adjustable interest rates have been particularly vulnerable due to inflation. For instance, Argentina's semiannual payments on a \$4.7 billion loan from China increased from \$87 million in

*The CSRC's regulations issued in March 2023 mandate any company seeking to list outside of China to file for approval if the majority of its operations and revenue-generating activities took place in China or if the majority of its senior management are Chinese citizens. These conditions apply regardless of whether the China-based operating entity is consolidated through direct ownership or a VIE structure. China Securities Regulatory Commission, *Trial Administrative Measures of Overseas Securities Offering and Listing by Domestic Companies*, February 17, 2023, 8.

†The UN Global Crisis Response Group estimates that 3.3 billion people, or approximately 42 percent of global population, live in countries that spend more on interest payments than education or health. United Nations Global Crisis Response Group, "A World of Debt: A Growing Burden to Global Prosperity," July 2023, 14.

January to \$137 million in July 2022.²⁴⁵ Many borrowers with low interest rates are also facing distress as their gross domestic product (GDP) falters and the burden of external debt payments becomes unmanageable. In 2021, Zambia's external public and publicly guaranteed debt-to-GDP ratio was 133 percent, and of the \$20 billion in external public debt, an estimated one-third was owed to China alone.²⁴⁶

BRI Implementation after Ten Years

Announced in 2013, General Secretary Xi's hallmark BRI is a China-led global investment and development program that seeks to fuel China's domestic growth, expand trade linkages, export excess productive capacity, and advance geopolitical influence by moving China to the center of the global order.²⁴⁷ Cumulative BRI funding is estimated to have reached nearly one trillion dollars,* with \$67.8 billion allocated to over 200 new engagements within BRI countries in 2022.[†]²⁴⁸ Although the Chinese government touts the initiative as an opportunity for "win-win" cooperation with participants, China has been BRI's primary beneficiary. In the ten years since its inception, BRI has generated some successes for China, many failures for participants, and significant controversy.

Much of BRI's infrastructure building efforts have failed to deliver. Many projects either stalled or never started. Many of those completed have significant quality concerns.[‡]²⁴⁹ For instance, in January 2023, the Ugandan government had to begin repaying the \$1.44 billion it borrowed from China to fund the 600 megawatt Karuma Hydro Power Project despite the dam being three years behind schedule and inoperable as of January 2023.[§]²⁵⁰ While Ecuador's Coca Coda Sin-

*Cumulative BRI funding includes approximately \$573 billion in construction contracts and \$389 billion in nonfinancial investments. Christoph Nedopil Wang, "China Belt and Road Initiative (BRI) Investment Report 2022," *Green Financing & Development Center*, February 3, 2023.

†Due to opacity in Chinese government reporting, there is debate regarding the total number of projects financed through BRI. Christopher Nedopil Wang of the Green Finance and Development Center (GFDC) affiliated with Fudan University in Shanghai uses data from the American Enterprise Institute's China Global Investment Tracker and the GFDC to estimate that 147 BRI participant countries received \$67.8 billion for over 200 BRI-related engagements in 2022. In contrast, Nadia Clark, a research associate for the Council on Foreign Relations, uses a more expansive definition and counts any foreign contract signed by a Chinese enterprise with a BRI participant as a single BRI project. Using data from the Chinese Ministry of Commerce, Ms. Clark reports that Chinese enterprises signed 5,514 new contracts valued at \$130 billion in 2022. Nadia Clark, "The Rise and Fall of the BRI," *Council on Foreign Relations*, April 6, 2023; Christoph Nedopil Wang, "China Belt and Road Initiative (BRI) Investment Report 2022," *Green Financing and Development Center*, February 3, 2023.

‡Although the Chinese government does not publish official statistics on the status of BRI projects, AidData estimates that of 13,427 recorded development projects funded by China between 2000 and 2017, 2,577 have been either canceled, suspended, or stalled in implementation. Ammar A. Malik et al., "Banking on the Belt and Road: Insights from a New Global Dataset of 13,427 Chinese Development Projects," *AidData*, September 29, 2021, 7.

§The current operational status of the dam in Uganda cannot be determined due to conflicting media accounts. According to a report published by the *Wall Street Journal*, the Karuma plant "remains inoperational" as of January 2023. An April news brief by China's Assets Supervision and Administration Commission of the State Council as well as an article published by the Ugandan state-owned media outlet *New Vision* reported that at least a portion of the plant went online in March 2023. The privately owned Ugandan media publisher *Monitor*, however, shared a video of Ugandan Prime Minister Robhina Nabbania where she indicated that the dam was still not operational as of July 2023. *Monitor*, "Power from Karuma Dam to Cost More," July 16, 2023; John Odyek, "Karuma Dam High Voltage Transmission Lines Commissioned," *New Vision*, March 27, 2023; Xie Yuanxiao, "Uganda's Largest Hydropower Plant Starts Operation," *State-Owned Assets Supervision and Administration Commission of the State Council*, April 7, 2023. <http://webcache>.

BRI Implementation after Ten Years—Continued

claire hydroelectric plant was completed in 2016 and is currently operational, dam operators recorded over 7,600 visible cracks in the structure's machinery as well as missing bolts on valves controlling water flow, leading to safety and structural integrity concerns.²⁵¹ The project was funded by the China Development Bank through a \$1.7 billion loan with a 6.9 percent interest rate and is in repayment.²⁵²

BRI has been a success for China, which has used the initiative to develop a network of politically aligned and economically entangled countries—many with substantial resource reserves—across the developing world. China's exports to BRI countries have nearly doubled from \$872 billion in 2014 to \$1.5 trillion at the end of 2022, and it is currently the top trading partner to more than 120 countries.²⁵³ Its outbound foreign investment to BRI countries has increased substantially as well, rising from \$9.9 billion (or 13 percent of China's total outward FDI) in 2013 to \$23.8 billion (81 percent) between January and June of 2023.^{*}²⁵⁴ In addition to economic gains, BRI provides China leverage to push its political agenda. In the past three years, two countries have received BRI funding after they switched recognition from Taiwan to China, including Nicaragua in 2021 and Honduras in 2023.[†]²⁵⁵ Moreover, recent research shows that Chinese developmental lending has an “amplification effect” on recipient countries' existing political institutions—whereby loans from China make autocratic borrowers more autocratic—thus strengthening China's economic ties to and leverage over increasingly illiberal countries.[‡]²⁵⁶

For many participants, BRI has resulted in mounting debt and financial distress. Of BRI's 148 members, 66 countries—or 45 percent of the total—qualify for the International Development Association (IDA), a group of 75 low-income countries that are eligible for special financing through the World Bank.²⁵⁷ Among joint BRI-IDA members, there is an overrepresentation

[googleusercontent.com/search?q=cache:yLjhpWr27nUJ:en.sasac.gov.cn/2023/04/07/c_15087.htm&cd=18&hl=en&ct=clnk&gl=us&client=firefox-b-l-d](https://www.googleusercontent.com/search?q=cache:yLjhpWr27nUJ:en.sasac.gov.cn/2023/04/07/c_15087.htm&cd=18&hl=en&ct=clnk&gl=us&client=firefox-b-l-d); Ryan Dube and Gabriele Steinhäuser, “China's Global Mega-Projects Are Falling Apart,” *Wall Street Journal*, January 20, 2023.

^{*}According to data compiled by the American Enterprise Institute and the Heritage Foundation, China's total outward FDI in 2013 was \$29.5 billion. By the end of June 2023, its total outward FDI had risen to \$74.4 billion. American Enterprise Institute, “China Global Investment Tracker,” June 2023.

[†]In March 2023, Honduras switched recognition from Taiwan to China. Taiwan's Foreign Minister Joseph Wu stated that Honduran President Xiomara Castro made the switch after her government requested \$2.5 billion in financing from Taipei but received a more palatable offer from Beijing, a claim the Honduran government denies. Honduras is currently in negotiations with China for \$20 billion in financing for a new rail line. Kylie Madry, “Honduras Probes Chinese Interest in Investing in \$20 Billion Rail Line,” *Reuters*, July 7, 2023; *Associated Press*, “Honduras Establishes Ties with China after Break from Taiwan,” *National Public Radio*, March 27, 2023; Ben Blanchard and Gustavo Palencia, “Honduras Denies Demanding \$2.5 bln in Taiwan Aid before China Announcement,” *Reuters*, March 22, 2023.

[‡]The study uses an ordinary least-squares regression model to measure the impact of Chinese development lending on a recipient's level of democracy or autocracy over time, given the fact that these institutions begin as either an autocracy or democracy. The study uses AidData's Chinese official finance dataset to construct a panel of 104 Chinese aid recipients from 2002 to 2017. These data are paired with information on a recipient's level of autocracy or democracy as measured by Polity IV. Gregory W. Caskey, “Chinese Development Lending & the Amplification Effect,” *Stanford Center on China's Economy and Institutions*, June 2022.

BRI Implementation after Ten Years—Continued

of countries in debt trouble. Of the ten IDA countries currently in debt distress, nine are BRI participants.*²⁵⁸ Moreover, in the past three years, several BRI participants—including Sri Lanka and Zambia—have defaulted on their debt, while others—like Pakistan and Argentina—languish in prolonged economic crises.†²⁵⁹ To address rising financial issues among members, between 2000 and 2021, China extended \$240 billion in rescue financing to 22 countries—all of which are BRI participants—with 77 percent of this funding being extended after 2016.‡²⁶⁰ This relief, however, has had little impact on BRI countries' rising loan burdens due to the scale of the issue. It is estimated that for every \$1 of aid China provided, it created an additional \$9 in debt.²⁶¹

China is not providing sufficient debt relief to distressed borrowers. Despite repeated requests by the United States, World Bank, International Monetary Fund (IMF), and other democratic and developed partners, China refuses to offer broad and substantial debt relief or restructuring to developing countries in distress.§²⁶² In August 2022, China canceled 23 loans to African countries in an attempt to address rising financial distress and narratives surrounding China's "debt-trap diplomacy."¶²⁶³ These cancellations accounted for less than 1 percent of the debt African countries owe to China, and most of this forgiveness went to 20-year-old defaults, loans that were long since unlikely to be repaid.²⁶⁴ Moreover, of the 54 countries in Africa, China is known to have lent to 51 of these countries in the past two decades. Among these borrowers, 18 are at a moderate risk of external debt distress, 12 are at a high risk

*The BRI countries in debt distress are the Republic of the Congo, Ghana, Grenada, Laos, Malawi, Somalia, Sudan, Zambia, and Zimbabwe. São Tomé and Príncipe is the only country in debt distress that is not recognized as a BRI participant. World Bank, "Debt Sustainability Analysis," May 2023; Christoph Nedopil Wang, "China Belt and Road Initiative (BRI) Investment Report 2022," *Green Financing & Development Center*, February 3, 2023.

†There are several ways to define when a country enters a debt crisis, but in general a debt crisis occurs when a government becomes unable to pay back its loans or when it defaults on its loans. For more on Sri Lanka's and Pakistan's respective debt challenges, see U.S.-China Economic and Security Review Commission, Chapter 3, Section 3, "China's Activities and Influence in South and Central Asia," in *2022 Annual Report to Congress*, November 2022, 519–587.

‡Sebastian Horn et al. report that of the \$240 billion in rescue funding offered by China, \$172 billion was offered through swap lines. When calculating swap line totals, the authors treated rollovers and renewals of lines as an expansion of financing, identical to the creation of a new swap line. According to Matthew Mingey and Logan Wright, this treatment has led to significant overcounting of swap line totals. Mr. Mingey and Mr. Wright recalculate total swap lines counting rollovers and renewals based on net expansion and report that China's total swap line offers from 2000 to 2021 come to \$38.5 billion, which would bring China's total estimated rescue financing to \$106.5 billion. Matthew Mingey and Logan Wright, "China's External Debt Renegotiations after Zambia," *Rhodium Group*, June 29, 2023; Sebastian Horn et al., "China as an International Lender of Last Resort," *National Bureau of Economic Research*, April 2023.

§Although it is the largest bilateral creditor to the developing world, China is not a member of the Paris Club, a group of 22 creditor countries that aim to develop workable solutions to mounting debt problems among borrower countries. The 22 permanent members of the group are Australia, Austria, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Ireland, Israel, Italy, Japan, Korea, Netherlands, Norway, Russia, Spain, Sweden, Switzerland, the UK, and the United States. Shawn Donnan and Tom Hancock, "China Lent Heavily to Developing Nations. Now It's Helping Them Manage Their Debt," *Bloomberg*, March 27, 2023. Adam Hayes, "Paris Club," *Investopedia*, May 5, 2022; Paris Club, "Permanent Members."

¶"Debt-trap diplomacy" is the act of deliberately providing loans to countries the lender knows are unable to pay in an effort to gain economic and political leverage over the debtor state. Kate Bartlett, "China Cancels 23 Loans to Africa amid 'Debt Trap' Debate," *Voice of America*, August 25, 2022.

of distress, and seven are currently in distress.*²⁶⁵ China's primary strategy for dealing with distressed borrowers has been to extend loan maturity, as it did with a \$2 billion loan to Pakistan in March 2023 and as it offered for an undisclosed amount of debt owed by Sri Lanka in February 2023.†²⁶⁶ Rolling over loans gives borrowers more time to repay but may also prolong and increase the borrowers' debt burden.²⁶⁷ More recently, China has extended emergency loans to distressed countries. Between 2018 and 2021, China offered Pakistan and Sri Lanka, two major BRI partners in significant distress, more than \$26 billion in emergency loan funding.²⁶⁸ Emergency loans offer a way for countries to continue funding productive ventures that may facilitate future loan repayment, but they also grow the debt these countries already hold.

In addition to not providing sufficient relief to most borrowers bilaterally, China sometimes impedes multilateral efforts to restructure financially distressed countries' debts, as it did in Zambia. In 2020, Zambia's external public debt stood at \$18.7 billion and central government debt was 103 percent of GDP.²⁶⁹ As its foreign reserves were rapidly eaten by loan payments, Zambia requested relief through debt restructuring. While most creditors, including the United States, were willing to coordinate relief, China—which held one-third of Zambia's debt—refused to participate.²⁷⁰ China instead insisted on confidential bilateral debt negotiations that would bar Zambia from discussing the terms of the deal. Without China's participation, creditors were unable to develop a comprehensive relief plan; Zambia depleted its foreign reserves and defaulted on its debt in November 2020.²⁷¹ China did finally agree to debt restructuring in 2022, but only after it became a co-chair of Zambia's creditors committee with France.²⁷² In June 2023, Zambia secured a multilateral agreement to restructure \$6.3 billion in debts owed to foreign governments, including China. The country's debt will be rescheduled over more than 20 years with a three-year grace period during which time only interest must be paid.‡²⁷³ Although a deal was eventually secured, China's initial refusal to participate in multilateral negotiations prolonged and potentially worsened Zambia's financial situation.

*According to loan data compiled by AidData and Boston University's Global Development Policy Center, Eswatini, São Tomé and Príncipe, and Somalia have no recorded instances of borrowing from China for the period of 2000 to 2020. Of those three, Somalia and São Tomé and Príncipe are in debt distress. Eswatini's risk of distress was not evaluated by the World Bank. Although these countries have not recently borrowed from China, São Tomé and Príncipe and Somalia have received developmental assistance from China in the past 20 years, including \$210 million and \$52 million in allocated and pledged grant funding, respectively. World Bank, "Debt Sustainability Analysis," March 2023; Boston University Global Development Policy Center, "Chinese Loans to Africa Database," 2023; AidData, "AidData's Global Chinese Development Finance Dataset, Version 2.0."

†In January 2023, the Export Import Bank of China signaled intent to extend maturity on an undisclosed amount of debt held by Sri Lanka through suspended debt repayments, although Sri Lanka appears to be moving toward a bailout package offered by the IMF. Bharatha Mallawarachchi, "Sri Lanka's Parliament Approves a Debt Restructuring Plan in an Attempt to Overcome Economic Crisis," *Associated Press News*, July 1, 2023; Devjyot Ghoshal and Uditha Jayasinghe, "China Offers Sri Lanka Debt Moratorium, IMF Help Still in Doubt," *Reuters*, January 24, 2023.

‡A French official speaking on condition of anonymity reported to Reuters that French President Emmanuel Macron's talks with Xi Jinping in Beijing in April 2023 helped in facilitating the deal. For more information on President Macron's trip and Europe's relations with China, see Chapter 5, Section 1, "Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation." Leigh Thomas, Jorgelina Do Rosario and Chris Mfula, "Zambia Seals \$6.3 Billion Restructuring in Breakthrough for Indebted Nations," *Reuters*, June 23, 2023.

China continues to free-ride on international efforts to alleviate distressed countries' financial burdens by continuing unsustainable lending in the wake of multilateral debt relief efforts. For instance, China has continued to lend to Honduras, which has received substantial debt relief through several multilateral programs. In 2003, Honduras had \$556 million in debt forgiven as part of the IMF and World Bank's Heavily Indebted Poor Countries' Initiative, representing a 17.8 percent reduction in the Honduran government's total debt.²⁷⁴ This relief was followed by an additional \$141 million in IMF debt forgiveness under the Multilateral Debt Relief Initiative in 2005 and \$1.4 billion provided by the Inter-American Development Bank in 2007.²⁷⁵ As a result of these efforts, Honduras' external debt stocks as a percentage of gross national income fell from 81 percent in 2000 to 27 percent in 2010.²⁷⁶ In taking advantage of Honduras' new fiscal health, Chinese lenders began increasing loans to the country. From 2010 to 2021, China's share of Honduras' external bilateral debt increased from 2 percent to 16 percent.*²⁷⁷ In addition, many of the loans China provided came with interest rates well above the IMF's concessional rates. In 2014, while the IMF was offering around 1 percent interest on loans to low-income countries, China extended a \$298 million loan to Honduras at 4.1 percent interest.²⁷⁸ Honduras' debt-to-gross national income (GNI) percentage has increased steadily with Chinese lending, reaching 45 percent by 2021.²⁷⁹ In 2023, even as Honduras finalized an agreement with the IMF for a 36-month credit facility for \$830 million to support economic reforms, the Latin American country also entered into negotiations with China for financing for a new \$20 billion rail line.²⁸⁰

Often, this lending also comes with political benefits for China. Negotiations on rail line financing for Honduras were initiated shortly after the country switched diplomatic recognition from Taiwan to Beijing earlier in 2023.²⁸¹ China has an established pattern of lending to Heavily Indebted Poor Countries (HIPC) participants following their initial participation, with the majority of Chinese loans to Comoros, the Republic of the Congo, Côte d'Ivoire, Guinea, Liberia, and Togo occurring after these countries completed the program in the early 2010s.† With the notable exception of Côte d'Ivoire, all of these countries have publicly supported China's conduct in the South China Sea and most have supported China's policies in Hong Kong and Xinjiang (for more information on China's lending to HIPCs and political benefits for China, see Appendix).

China primarily accounts for borrower risk by offering high and adjustable interest rates on loans, which tend to exceed rates provided by Western governments and multilateral institutions.²⁸² In addition, China typically does not disclose the

*In 2010, Honduras' external bilateral debt was \$796 million, with China holding \$18.3 million. By 2021, Honduran debt increased to \$935 million, with \$153 million being held by China. By comparison, the United States held only \$2 million in Honduran debt in 2010 and \$1.4 million in 2021. World Bank, "International Debt Statistics."

†Data on Chinese lending to these countries cover the period from 2000 to 2017. Of the 39 HIPC participants, 26 completed the program before 2010, ten completed the program after 2010, and three are currently applying for or in the program. Among countries that completed the program after 2010, just under 64 percent of lending from China occurred within seven years of finishing the HIPC. AidData, "AidData's Global Chinese Development Finance Dataset, Version 2.0."

terms of its loans, which makes it difficult for developing borrowers to directly compare interest rates across lenders.* A recent working paper by AidData, Harvard, the Kiel Institute, and the World Bank estimates interest rates on China's emergency loans are two and a half times above the IMF's rates.²⁸³ Moreover, China often provides high-interest loans despite a borrower's preexisting debt burden.† In February 2023, China extended a \$700 million loan—with an undisclosed interest rate—to Pakistan to float the country's economy as it navigates a debt crisis exacerbated by rising inflation and a series of floods.‡²⁸⁴ This funding is in addition to the estimated \$100 billion Pakistan owes to international creditors and \$30 billion it owes China specifically.²⁸⁵

China's ability to provide comprehensive debt relief to distressed overseas borrowers is significantly limited by mounting domestic economic challenges. Forgiving loans requires lenders to accept heavy losses, but banks in China are already under pressure due to the country's slowing economy, declining home prices, and stalled real estate market.²⁸⁶ In addition, the government of China itself faces a debt crisis. The IMF estimates China's total government debt stands at 121 percent of GDP in 2023, a figure that includes hidden borrowing done through financing companies set up by Chinese municipalities and provinces.²⁸⁷ Moreover, China's long-awaited post-COVID-19 recovery has been slow in coming; deflationary pressures are mounting amid weak demand, pushing China's central bank to ease policy.²⁸⁸ While reduced lending rates can spur consumption and economic growth, they will add further pressure to China's banks, which are already struggling to maintain profitability. (For more on China's domestic debt challenges, see Chapter 3, Section 2, "Fiscal, Financial, and Debt Problems Weigh Down Beijing's Ambitions.")

Despite a recent decline in new overseas lending, China remains a key financier for many developing borrowers. According to the Inter-American Dialogue's China-Latin America Finance Database, Chinese policy banks lent \$813 million to Latin America and the Caribbean in 2022 after extending a single new loan valued at \$204 million to Trinidad and Tobago for the purchase of vaccines and medical equipment in 2021.²⁸⁹ This financing includes \$500 million to Brazil from the China Development Bank and \$192 million and \$121 million to Guyana and Barbados, respectively, from the Export-Import Bank of China.²⁹⁰ In addition to in-

*In a review of 100 loan contracts signed between 2000 and 2020, researchers at AidData housed within the College of William and Mary found that the Export-Import Bank of China has increased its use of confidentiality clauses in contracts, with every loan in the sample having such a clause since 2015. Anna Gelpert et al., "How China Lends: A Rare Look into 100 Debt Contracts with Foreign Governments," *AidData*, March 2021.

†While the Chinese government does not publish comprehensive data on its lending terms and practices, there are a number of organizations that track and compile what information China and its lending partners do publicly disclose. For example, AidData compiles detailed information on loans from China, including those issued by government agencies, state-owned enterprises, and private and policy banks. Of the 3,103 loans, buyer's credits, and seller's credits extended between 2000 and 2017, there are 1,659 transactions with a known interest rate, 1,940 with a known maturity length, and 1,285 with a known grace period. Samantha Custer et al., "Tracking Chinese Development Finance: An Application of AidData's TUFF 2.0 Methodology," *AidData at William & Mary*, September 29, 2021, 7.

‡China's approach to lending tends to be more transactional and less transparent than lending through Western countries or multilateral organizations like the IMF. Adam Behsudi, "The 'Rift Is There': China vs. the World on Global Debt," *Politico*, April 11, 2023.

creasing its volume of debt holdings, China remains a creditor for its current outstanding loans, which tie borrowers to China for the duration of repayment. For example, loans on two China-funded infrastructure projects in Bangladesh—the Karnaphuli river tunnel and the Padma bridge rail link—will enter into repayment in November and December of 2023.²⁹¹ Due to the terms of these loans, many of which carry maturities of at least 20 years, China will maintain its position as lender to Bangladesh for at least another two decades.²⁹²

The Global Development Initiative Inserts Chinese Interests into the UN Agenda

In September 2021, during his address to the UN General Assembly, General Secretary Xi unveiled China's newest plan to forge itself into a leader in international development through the Global Development Initiative (GDI). The GDI is explicitly tied to the UN's 2030 Agenda for Sustainable Development* and aims to make China a leader in public health, poverty alleviation, and environmentally responsible economic growth.²⁹³ China has not clarified how exactly it intends to contribute to these goals.²⁹⁴ Much like BRI, the GDI arrived as a blank slate with little initial policy vision attached, giving China space to adapt the initiative and revise its purported vision to meet evolving foreign policy objectives.

Whereas BRI sought to extend China's influence through bilateral linkages, the GDI seeks to operate multilaterally through the UN. Within a year of its launch, more than 55 countries stated their support for the initiative, calling themselves the "Group of Friends" of the GDI and hosting working sessions at the UN.²⁹⁵ Co-opting UN platforms benefits China by reducing the costs of coordination, lending legitimacy to its objectives, and amplifying its influence globally.† In addition, BRI has focused on funding infrastructure projects through some development aid but mostly loans. By contrast, in his address to the UN, Xi stated that the GDI would revitalize the economy by providing debt suspension and aid to developing countries, particularly those facing "exceptional difficulties."²⁹⁶ This suggests that debt relief may become a component of the GDI, perhaps even to large BRI partners, even as China has yet to provide bilateral forgiveness to many of its own borrowers. Any potential multilateral UN-sponsored effort to reduce the debt burdens of countries weighted down by BRI loans would benefit China by sharing the costs of its irresponsible lending while burdening the United States with providing relief for Chinese loans.

*The UN's Sustainable Development Goals are a set of 17 global objectives adopted by all member states in 2015 that "provides a shared blueprint for peace and prosperity for people and the planet, now and into the future." The objectives primarily seek to reduce poverty while improving health and education, reducing inequality, and spurring environmentally sustainable economic growth. United Nations, "Department of Economic and Social Affairs—Sustainable Development."

†For more on China's co-option of UN agencies, see U.S.-China Economic and Security Review Commission, *PRC in International Organizations*, December 3, 2022; U.S.-China Economic and Security Review Commission, Chapter 1, Section 2, "The China Model: Return of the Middle Kingdom," in *2020 Annual Report to Congress*, December 2020, 80–135.

China's Deepening Economic Relationship with Russia

China has tossed an economic lifeline to a strategic partner, buffering Russia's economy from international sanctions and enabling its unprovoked war in Ukraine to continue. Trade between China and Russia reached a record high of \$179 billion (1.3 trillion RMB) in 2022, rising 30 percent year-over-year; trade further accelerated from January to September of 2023, rising 32 percent over the same period in 2022.²⁹⁷ Though China has been Russia's largest trade partner for 12 years, bilateral trade expanded significantly in the six months following the invasion. China accounted for 35 percent of Russian imports between March and September 2022, up from 20 percent over the same period in 2021. Similarly, 20 percent of total Russian exports went to China between March and September 2022, up from 15 percent in 2021.²⁹⁸ Since the implementation of sanctions on Russia from the United States and its allies, China has seized on the short-term opportunity to purchase cheap commodities from its isolated, resource-rich neighbor, especially oil and gas.²⁹⁹ China more than doubled its imports of Russian liquified petroleum gas (LPG) in 2022, and China's oil imports from Russia reached a record-level 1.66 million barrels per day in January 2023.*³⁰⁰ Russian imports of Chinese semiconductors, a critical dual-use technology, jumped from \$200 million in 2021 to more than \$500 million in 2022 (though Beijing has reportedly refrained from selling Russia its most advanced chips—those deemed strategically important—such as the Loongson processors).³⁰¹ Agricultural trade also expanded, with total Russian exports of agricultural products to China worth \$7 billion in 2022, up 41 percent year-on-year.†³⁰²

In a demonstration of long-term strategic ambitions that build on the recent acceleration of trade, Russian President Vladimir Putin and Xi Jinping met for a two-day bilateral summit in Moscow in March. In the past, Xi has referred to Putin as his “best and bosom friend,” and the two leaders of the nominally non-allied countries with a “no limits” friendship reaffirmed their commitment to deepen relations under the Comprehensive Strategic Partnership of Coordination for the New Era.³⁰³ The framework seeks to move forward development goals and insulate the economies of both nations from further economic restrictions imposed by the United States and its allies and partners, as well as “advance the multi-polarization of the world.”³⁰⁴

Chinese companies have moved to capture market share in Russia in the wake of multinational corporations' exodus.³⁰⁵ Although over 1,000 multinational firms have exited Russia since

*The previous record was 1.60 million barrels a day in April 2020, driven by China seizing an opportunity to buy cheap oil for its strategic reserves as global demand collapsed at the onset of the pandemic. Olga Yagova and Gleb Gorodnyankin, “China Buys Record Volume of Russian Oil as European Demand Dives: Traders,” *Reuters*, March 25, 2020.

†Agricultural products from Russia are not targeted by sanctions in order to mitigate food insecurity from supply shortages. Ukraine claims Russia has been stealing grain from occupied territories to sell on the world market since the war began, and this summer it said Russia intends to mask sales of stolen grain to China with software and automation tools. The G7 initiated a plan to track stolen grain from Ukraine in June 2023. Maytaal Angel, “G7 Working on Scheme to Combat Theft of Ukraine Grain, UK Says,” *Reuters*, June 12, 2023; Arvin Donley, “Ukraine Claims Russia Preparing to Ship Stolen Grain to China,” *World-Grain.com*, July 10, 2023; Alexander Khrebet, “National Resistance Center: Russia Preparing to Export Stolen Grain from Occupied Ukraine to China,” *Kyiv Independent*, July 9, 2023.

February 2022, many Chinese companies have stayed and expanded operations while being cautious not to run afoul of international sanctions.³⁰⁶ Chinese car companies and consumer electronics companies have significantly expanded their market share in Russia, with automakers Chery, Great Wall Motor, and Geely claiming 16.5 percent of passenger car and small commercial vehicle sales in Russia during 2022, up from just 6.3 percent the year before.³⁰⁷ Other foreign automakers pulled out of the country and several domestic firms had to suspend production after being unable to acquire parts due to economic restrictions.*³⁰⁸ Chery alone increased its sales in Russia by 31 percent in 2022, even though total new car sales in Russia dropped by 59 percent for the year.³⁰⁹ Similarly, Chinese smartphone maker Xiaomi increased its market share from 45 percent in 2021 to 80 percent in 2022, and Huawei displaced HP to become the second-largest seller of notebook computers in Russia.³¹⁰ In April, the U.S. Commerce Department added 12 Chinese companies to the Entity List for supplying dual-use technology to Russia, including 3HC Semiconductors Co. Ltd., Wynn Electronics Co. Ltd., and Yongli Electronic Components Co. Ltd.³¹¹ In June, the EU followed suit by adding three Chinese companies to an entities list included in its 11th sanctions package against Russia.³¹² Then in late September, the Commerce Department sanctioned nine Chinese entities for supplying parts and aerospace components to Russian and Iranian suppliers of unmanned aerial vehicles used by Russia's military, followed by 42 additional Chinese entities on October 6 for supporting Russian military production, including through the sale of U.S.-origin microelectronics used in Russian precision-guided missiles.³¹³

Beijing is leveraging its advantageous negotiating position with Russia to lock in favorable terms on long-term sources of energy, agricultural products, and raw metal inputs for its industries.³¹⁴ At the Xi-Putin summit in March, Russia committed to deliver at least 98 billion cubic meters (bcm) of gas a year to China by 2030, a more than six-fold increase of what Russia sold to China in 2022.³¹⁵ President Putin publicly stated that all parties had concluded “all agreements” on finishing Power-of-Siberia 2, an approximately 1,600 mile pipeline from the Yamal Peninsula that would reroute gas traditionally bound for Europe across Mongolia to China and add 50 bcm of annual gas transport capacity, slightly less than the now defunct Nord Stream 1 pipeline that linked Russia to Germany.³¹⁶ In a sign that China is holding out for a better deal on Power-of-Siberia 2, subsequent official statements from Xi made no mention of agreements on the pipeline.³¹⁷ Russia appeared to quickly walk back its stance, issuing a revised statement saying that pipeline details still need to be resolved.³¹⁸ In May 2023, Russia announced it would vastly increase grain exports to China via the New Land Grain Corridor, a transportation and storage network first proposed by Beijing in 2012.³¹⁹ Despite the fact that Russia was the largest exporter of wheat in 2021 and China was the larg-

*In June 2022, CNBC reported that Russian automaker AvtoVAZ had resumed production of its Lada Granta sedan without numerous safety features it could not install due to sanctions, including airbags, antilock braking systems, and emergency retraction locks on seatbelts. Phil McCausland, “Sanctions Force Russia to Produce Popular Car without Air Bags, Other Safety Features,” *CNBC*, June 14, 2022.

est importer, China imported only 12,274 metric tons of 26 million metric tons Russia exported that year, or roughly 0.05 percent of Russia's total.³²⁰ Russia has committed to increase that number to 8 million metric tons, or near one-third of total Russian exports, once the New Land Grain Corridor comes online.*³²¹ Xi has recently emphasized the need for China to diversify its food supply amid domestic climate shocks and rising trade tensions with the United States, calling agriculture a "foundation of national security."³²²

The RMB's Incremental Advance in Global Finance

Though the RMB is far from displacing the U.S. dollar as the global reserve currency, mechanisms that enable increasing use of RMB in certain payments help to shield countries targeted by U.S. sanctions while providing other countries the ability to circumvent sanctions. According to 2023 second quarter data from the IMF, the U.S. dollar comprises 59 percent of all allocated foreign exchange reserves, while the RMB comprises just 2.5 percent.³²³ This puts the RMB well behind the euro at 20 percent, the yen at 5.4 percent, and the pound at 4.9 percent, and roughly equivalent to the Canadian dollar at 2.5 percent.³²⁴ Although small in scale, the presence of the RMB in international reserves challenges the United States by offering an alternative currency to countries seeking to circumvent U.S. and allied-imposed sanctions. This includes direct targets of sanctions, such as Russia and North Korea, as well as third parties looking to continue limited exchange with targeted states. For instance, in the past year, India† and Pakistan have both used RMB to pay for some imports of Russian oil, while Bangladesh agreed to use RMB to settle payment for a nuclear power plant being built by the Russian state-owned Rosatom.³²⁵ Small-scale transactions like these have little impact on RMB internationalization in the aggregate, but they do impact the economic and strategic calculations countries make when assessing if and how to respond to U.S. sanctions. Despite this limited usage, China is nevertheless opportunistic and quick to leverage geopolitical events and economic trends to further RMB internationalization.

China's Incremental Approach to RMB Internationalization

Despite efforts by China to promote its currency, international adoption of the RMB remains limited. It has not attained status as a significant reserve currency, and its share of global payments has not meaningfully increased over the last seven years: in April 2023, the RMB represented 2.29 percent of global reserves, up less than half a percentage point since its share of 1.82 percent in April 2016.³²⁶ Export invoicing across North America and Asia continues to be dominated by the U.S. dollar. By contrast, only 23

*For more on China's food security challenges and policies to address them, see Lauren Greenwood, "China's Interests in U.S. Agriculture: Augmenting Food Security through Investment Abroad," *U.S.-China Economic and Security Review Commission*, May 26, 2022.

†In addition to purchasing some oil in RMB, India and Russia were in talks to establish a rupee-ruble trade system in early 2023. Talks ended without establishing any exchange mechanism due to Indian banks' concerns over expanding engagement with Russia while it was under sanctions, among other issues. K. A. Dhananjay, "End of the Road for India and Russia's Rupee-Ruble Trade?" *Diplomat*, May 22, 2023.

China's Incremental Approach to RMB Internationalization—*Continued*

percent of China's goods trade was denominated in RMB in 2023, well below the peak of 29 percent in 2015.³²⁷ In addition, the RMB has not attained widespread use in international exchange outside of China's bilateral transactions; even within China's own trade, the majority of its transactions are not denominated in RMB.³²⁸ Crucially, China's banking system relies heavily on the dollar for overseas borrowing and lending. According to Bank for International Settlements data, banks in China had cross-border liabilities amounting to \$1.6 trillion, with \$586 billion (37 percent) being dollar-denominated by Q3 of 2021.³²⁹ Chinese nonfinancial firms issued 36 percent of dollar-denominated bonds issued by emerging market economies as of 2019.³³⁰

The RMB's lack of progress in gaining international adoption is driven in part by China's own monetary policy. China maintains a mostly closed capital account, meaning that the People's Bank of China tightly controls foreign exchange entering the country and the amount of RMB exiting the country and in circulation internationally. This allows it to manipulate the exchange rate by managing the supply of RMB relative to demand, but limiting the amount of RMB in circulation outside of China comes at the cost of hurting attempts to promote its use internationally.³³¹ While hindering widespread RMB adoption, these controls prevent capital from exiting the country, forcing businesses and households inside of China to reinvest in the Chinese economy instead of foreign enterprise, thus fueling China's domestic economic development.

Constrained by its domestic priorities, China has pursued an incremental approach to RMB internationalization alongside its more ambitious goal of establishing the RMB as a primary reserve currency.³³² This lower-intensity approach strives to boost the RMB's limited use in mostly bilateral settings, particularly through trade settlement.³³³ Although nearly imperceptible in aggregated statistics, this approach has been effective in providing an alternative financial architecture for limited circumvention of some elements of U.S. economic statecraft.

Following the imposition of Western sanctions in response to the invasion of Ukraine, Russia has become increasingly reliant on China as an import source and export destination, a fact China has capitalized on by increasing the use of RMB in its trade with Russia.³³⁴ The RMB's share in Russian import settlements rose from 4 percent to 23 percent in 2022, and now nearly all Chinese purchases of Russian commodities—including oil, coal, and some metals—are settled in RMB.³³⁵ To accommodate this growing trade, China's commercial and policy banks have begun building out their capacity to facilitate RMB-based cross-border transactions with Russia, including by promoting the adoption of China's Cross-Border Interbank Payment System (CIPS).³³⁶ Russia also appears to be embracing the RMB. At the start of 2023, the Russian Finance Ministry began selling RMB instead of U.S. dollars

and what it deems other “unfriendly” Western currencies.³³⁷ The ministry also developed a new structure for the country’s sovereign wealth fund to hold 60 percent of its assets in RMB, including proceeds from oil and gas.³³⁸ As a result, the Chinese RMB effectively replaced the U.S. dollar as the most traded currency in Russia in February of 2023—but only in Russia, thus effecting only a minimal fraction of global U.S. dollar transactions.³³⁹ China’s willingness to help international rulebreakers like Russia sidestep U.S. sanctions decreases the efficacy and deterring power of this key tool in U.S. economic statecraft.

In addition to Russian gas, the RMB is now being used to settle some oil trades between China and countries across the Middle East at an increasing, albeit limited, rate. During his December visit to Riyadh, Xi told Gulf Cooperation Council leaders that China would work toward buying energy commodities in RMB instead of the dollar, seeking to “make full use of the Shanghai Petroleum and National Gas Exchange as a platform to carry out RMB settlement of oil and gas trade.”³⁴⁰ To that end, in 2023, China settled its first liquified natural gas (LNG) purchase in RMB, with the state-owned China National Offshore Oil Corporation (CNOOC) purchasing 65,000 tons of LNG from the United Arab Emirates through the French firm TotalEnergies.³⁴¹ While Iraq still settles its oil deals in U.S. dollars, in February 2023, the Iraqi central bank stated it would allow non-oil trade with China to be settled using the RMB.³⁴² Despite these developments, the U.S. dollar is still used in 80 percent of global oil sales, and Saudi Arabia—which sells more than 25 percent of its total oil exports to China—trades exclusively in U.S. dollars.*³⁴³ Although it is unlikely that any oil-producing country will shift any large portion of settlement from the dollar to RMB in the near term, the growing presence of the RMB in economic exchanges could lay the foundation for a potential transition. (See Chapter 1, Section 2, “U.S.-China Security and Foreign Affairs” for more on China’s pursuit of a greater diplomatic role in the Middle East.)

China is using finance instruments like currency swap lines as an opportunity to incrementally expand the RMB’s use and centrality among China’s trading partners and financially distressed countries. A currency swap line is an arrangement between two central banks to exchange currency in order to provide foreign currency liquidity to domestic banks without dipping into foreign reserves. Through a swap line, a central bank can borrow RMB from the People’s Bank of China and lend these funds to local banks that in turn lend to firms engaged in commercial relations with China (with funds typically used for goods trade, Chinese construction contracts, or investment into Chinese government bonds).³⁴⁴ Drawing funds through a swap also bolsters foreign exchange reserves, which may help prevent a balance of pay-

*Neither China nor Saudi Arabia provide comprehensive statistics on RMB settlement in cross-border transactions; however, it is unlikely the RMB comprises a significant portion of bilateral exchange. In December 2022, China highlighted its first-ever RMB transaction with Saudi Arabia for products from China’s Yiwu City, suggesting there is trade currently occurring in RMB. Ministry of Foreign Affairs of the People’s Republic of China, *Foreign Ministry Spokesperson Mao Ning’s Regular Press Conference on December 9, 2022*, December 9, 2022.

ment crisis wherein a country is unable to pay for essential imported goods and services due to a lack of foreign currency liquidity.³⁴⁵ Such swaps can thus be an attractive option for indebted countries with substantial engagement with China. As of 2021, China has established swap lines with at least 38 countries,* amounting to \$544 million outstanding, with a preference for countries that have significant export exposure to Chinese goods.³⁴⁶ These swap lines tend to be infrequently used, particularly in comparison with U.S. swap lines.³⁴⁷ Nonetheless, the swaps speak to China's evolving efforts to more thoroughly interconnect countries around the globe to its own sphere of influence.

The incremental advance of the RMB may further the development of alternative financial payment infrastructure, increasing China's ability to mitigate financial sanctions. At the same time that marginal RMB use allows China to exert more influence over its trading partners and debt-distressed countries, it also creates impetus for these countries to participate in alternative financial infrastructure that specializes in RMB settlements, namely China's CIPS. Cambodia provides an example of how incremental RMB internationalization may promote the use of CIPS. China has long been one of Cambodia's largest financial contributors, but the country's economic reliance on China intensified after the two signed a free trade agreement in 2020.³⁴⁸ According to figures provided by China's General Administration of Customs, Cambodia's trade deficit with China nearly doubled from \$6.6 billion in 2020 to \$12.4 billion in 2022.³⁴⁹ In addition, China is Cambodia's largest trading partner overall, producing one-third of all the country's imports.³⁵⁰ Cambodia's rising purchases of Chinese imports intensified its demand for RMB, likely motivating the central bank's decision to join CIPS, which was announced in February 2023.³⁵¹ By using CIPS, China's trade settlements with Cambodia will fall outside of payments systems controlled by the United States and its allies, thus insulating these transactions from U.S. and partnered sanctions. Despite rising use of the RMB, China still faces limitations when it comes to effectively mitigating the impact of U.S. and multilateral financial sanctions, most obviously the trillions of dollars' worth of assets it holds in U.S. and allied markets.³⁵²

China is moving to increase Argentina's use of the RMB as that country experiences severe and prolonged economic challenges with few viable alternatives. China and Argentina have participated in currency swap line agreements every year from 2008 to 2021.³⁵³ The frequency and value of these swaps along with the use of RMB in external transactions have increased as Argentina's debt and domestic economic turmoil have intensified in the past five years. Argentina's external public debt reached \$394 billion by February of 2023, with at least \$17 billion in loans being funded by Chinese banks between 2005 and 2019.³⁵⁴ A drought earlier this year caused a sharp drop in

*China has swap lines with 38 countries but 39 central banks, including Hong Kong. China's largest swap line is with Hong Kong and valued at \$69 billion. Hector Perez-Saiz and Longmei Zhang, "Renminbi Usage in Cross-Border Payments: Regional Patterns and the Role of Swaps Lines and Offshore Clearing Banks," *IMF Work Paper*, March 31, 2023, 9.

Argentina's agricultural export revenue, and a survey of analysts conducted in May by Argentina's central bank forecasts an annual inflation rate of 149 percent for 2023.³⁵⁵ These factors—coupled with Argentina's unsustainable debt burden, series of defaults on its sovereign bonds, and high global interest rates—have exacerbated devaluation pressure on the Argentine peso and limited the country's ability to build up its foreign reserves.³⁵⁶ In need of substantial and sustained liquidity injections to alleviate some of this pressure and with few options available, in April 2023, Argentina announced it would start purchasing \$1 billion worth of Chinese imports in RMB as a measure to relieve the country's dwindling dollar reserves.³⁵⁷ Argentina also renewed and extended its swap line agreement with China in June 2023, doubling the amount of funds accessible to nearly \$10 billion.³⁵⁸

China plays on the desire of third countries for strategic nonalignment in the mounting U.S.-China geostrategic competition, offering the RMB as a competitive alternative to the U.S. dollar. Brazil offers an example.³⁵⁹ In 2018, Brazil held no RMB in its foreign reserves. By the end of 2022, however, the RMB accounted for 5.4 percent of central bank holdings, making it Brazil's second-largest currency reserve behind the dollar.*³⁶⁰ China is Brazil's largest source of imports and largest destination for exports, with bilateral trade between the two valued at \$157 billion in 2022.†³⁶¹ Agricultural exports from Brazil play a particularly important role in bilateral trade, with China purchasing \$48 billion in agricultural products in 2022, including nearly 70 percent of Brazil's total soybean exports.³⁶² In March 2023, Brazil and China reached an agreement to conduct bilateral trade and financial transactions in their own currencies, the RMB and the real.³⁶³ Although Brazil and China have not yet publicly settled any bilateral trade using either currency, the scale of the two countries' agricultural trade lays the foundation for a substantial shift away from the U.S. dollar and toward the RMB if they were to begin settling transactions with the RMB or the real. Moreover, during his visit to Beijing in April, Brazilian President Luiz Inácio Lula da Silva called on other developing countries to replace the dollar with domestic currency in trade.³⁶⁴ At the BRICS (Brazil, Russia, India, China, South Africa) summit in August 2023, Brazil's Finance Minister Fernando Haddad suggested that Brazil and Argentina could settle bilateral trade using RMB, although no actions have yet been taken in this direction.³⁶⁵ A member of BRICS and one of the largest developing countries in terms of GDP and population, Brazil's limited but growing interest in de-dollarization highlights the potential long-term impact gradual RMB internationalization may have on the United States' ability to coordinate sanctions across third countries.

*The U.S. dollar currently comprises 80 percent of Brazil's foreign exchange reserves. *Reuters*, "Yuan Tops Euro as Brazil's Second Currency in Foreign Reserves," March 31, 2023.

†Brazil is one of 58 countries the government of China identified as having a trade surplus with China in 2022. General Administrations of Customs of China, *December 2022 Import and Export Commodity by Main Country (Region) Gross Table (USD Value)* (2022年12月进出口商品主要国别(地区)总值表(美元值)).

China's Expanding Energy Partnerships

China's import demand for energy commodities, including gas and oil, has increased as its economy marginally rebounds relative to its performance during COVID-19.* China's oil demand topped 16 million barrels per day in April 2023, up from 12.7 million barrels in April 2022, as cheap Russian crude feedstock bolstered Chinese refiners' production.³⁶⁶ China further benefited from international limits on Russian crude imports by selling a portion of the newly refined oil to countries that imposed the ban, including Australia, Canada, the EU, Japan, the UK, and the United States.[†]³⁶⁷ Similarly, China's imports of natural gas rose to a five-month high in June 2023, and the International Energy Agency forecasts China's gas consumption in 2023 to increase by more than 6 percent relative to 2022.³⁶⁸ To spur growth, meet demand, and fortify energy security against potential sanctions, China has sought to expand its trade relations with existing oil and gas suppliers in Central Asia as well as establish new relations with resource-rich actors across South Asia and the Middle East, including Qatar and the Taliban in Afghanistan. China's preference for partnering with high-risk and autocratic countries helps to sustain and stabilize these governments while offering a viable path to circumvent U.S. leadership and U.S. economic statecraft.

China seeks to finalize long-stalled negotiations on an expansion to the Central Asia gas pipeline to insulate itself from U.S. sanctions while bolstering energy security and supply. Turkmenistan is currently China's largest overland supplier of natural gas, able to provide 55 billion cubic meters (bcm) of energy annually through Lines A, B, and C of the Central Asia-China gas pipeline.[‡]³⁶⁹ China has sought to expand this supply through BRI funding for a fourth (Line D), which would provide an additional 30 bcm of gas annually to China.[§]³⁷⁰ In the decade since an agreement was reached on the expansion, the pipeline—like so many BRI projects—remains incomplete.³⁷¹ This year, China renewed its efforts to complete the project by prioritizing construction on Line D as a way to secure gas inflows from its long-term overland partners, although it remains to be seen if any substantial progress is made.³⁷² In addition to greater supply, the pipeline's overland delivery system and location increases China's energy security, since Turkmenistan is unlikely to participate in U.S.-led sanctions given the economic significance of gas exports to China for its economy.³⁷³

*China's apparent rebound in demand for energy commodities is driven primarily by revived travel following the lifting of the Zero-COVID policy rather than significantly boosted industrial activity.

†As outlined in the Center for Research on Energy and Clean Air's analysis, China's resale of refined Russian crude not only undermines the impact of sanctions on Russia but also increases U.S. and its partners' dependence on China. Hubert Thieriot et al., "The Laundromat: How the Price Cap Coalition Whitewashes Russian Oil in Third Countries," *Center for Research on Energy and Clean Air*, April 19, 2023.

‡Quantities of 55 bcm represent the upper limit of transportation capacity. In 2021, Turkmenistan exported only 31 bcm of gas to China. Enerdata, "Turkmenistan Plans to More than Double Gas Exports to China to 65 bcm/year," October 20, 2022.

§China consumed approximately 378.7 bcm of natural gas in 2021. China currently sources approximately 12 percent of its natural gas from Turkmenistan. Jessica Aizarani, "Natural Gas Consumption in China from 1998 to 2021," *Statista*, March 2, 2023; Enerdata, "Turkmenistan Plans to More than Double Gas Exports to China to 65 bcm/year," October 20, 2022.

China is also developing new energy partnerships with Gulf States and South Asia, including entering into a drilling contract with the Taliban. In November 2022, China and Qatar agreed to a \$60 billion 27-year contract for LNG.³⁷⁴ The deal would export 4 million tons of additional LNG to China annually.³⁷⁵ In terms of access to oil, China has renewed overtures to access Afghanistan's natural resources, particularly in the energy and mineral sectors, following the United States' withdrawal from Afghanistan.³⁷⁶ In January 2023, China's state-owned Xinjiang Central Asia Petroleum and Gas Company signed an agreement with Taliban leadership to drill for oil in Afghanistan in January 2023.³⁷⁷

China Eases Overt Coercion as It Increases Overtures to Europe

After years of mounting aggression in its external economic relations, in 2023 China moderated its use of overt coercion against developed countries. Beginning in 2016 and reaching a peak in 2020, economic coercion has been an oft-used tool of Beijing's foreign policy, applied against both developed and underdeveloped nations alike.* Although China's use of overt coercive tactics has moderated in the past three years, between 2020 and 2022, the Australian Strategic Policy Institute recorded 73 instances of attempted coercion by China.³⁷⁸ Notably, China's recent application of coercive tactics tends to focus on wealthier countries, with two attempts on Eswatini and one on Brazil and Bangladesh standing out as exceptions.†³⁷⁹

Complications in Tracking China's Economic Coercion

In an effort to address China's use of economic coercion, the United States and its partners and allies are developing policies to counteract China's intimidation tactics. In March 2023, the EU reached an agreement on a market-wide anticoercion instrument following China's attempted economic manipulation of Lithuania.‡³⁸⁰ In May 2023, the G7 announced their intent to address "a disturbing rise in incidents of economic coercion" by sharing information through the newly created Coordination Platform on Economic Coercion.³⁸¹ The following month, Australia, Canada,

*Over this period, China's use of coercion increased in frequency, rising from just under ten cases in 2016 to a height of 38 cases in 2020. In addition, China is increasingly using coercion to pursue policy goals outside of its typical "red line" concerns, such as the recognition of Taiwan, to respond to rising issues, such as restrictions on the use of Huawei equipment in telecommunications infrastructure. Aya Adachi, Alexander Brown, and Max J. Zenglein, "Fasten Your Seatbelts: How to Manage China's Economic Coercion," *Mercator Institute for China Studies*, August 25, 2022; Fergus Hunter et al., "Countering China's Coercive Diplomacy," *Australian Strategic Policy Institute*, February 22, 2023.

†In the case of Eswatini, China sought to force the country to end its relations with Taiwan and recognize the One China policy, traditional "red line" issues for the Chinese government. In February 2020, China threatened to "isolate" Eswatini from the international community and prohibited its citizens from entering any Chinese embassy (with the exclusion of the consulate in Johannesburg). In the case of Brazil and Bangladesh, China sought to punish the countries for behaviors outside of its typical "red line" issues, including in response to the Brazilian president's criticism of China's response to COVID-19 and Bangladesh's interest in participating in the Quadrilateral Security Dialogue. Fergus Hunter et al., "Countering China's Coercive Diplomacy," *Australian Strategic Policy Institute*, February 22, 2023.

‡For more information on China's attempted economic coercion of Lithuania and the EU's anticoercion instrument, see Chapter 5, Section 1, "Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation."

Complications in Tracking China's Economic Coercion— *Continued*

Japan, New Zealand, the UK, and the United States endorsed a joint declaration against trade-related economic coercion and nonmarket practices.³⁸² While neither the G7 statement nor the joint declaration mention China, officials from both the British government and the USTR point to China's exertion of economic pressure on Australia and Lithuania in political disputes as an impetus for multilateral cooperation to address economic coercion.³⁸³

Key to developing an effective anticoercion policy is establishing a clear and comprehensive definition of economic coercion that covers all cases and provides the basis for a unified approach. Defining and measuring China's use of economic intimidation, however, is difficult, and multiple definitions exist. In general, coercion is defined as an effort to punish or influence a foreign entity's behavior through the use of economic and noneconomic sanctions.³⁸⁴ Economic sanctions typically include trade and investment restrictions, tourism bans, and popular boycotts, while noneconomic sanctions may include arbitrary detention or execution, cyberattacks, and state-issued threats.³⁸⁵

Where definitions of coercion tend to diverge is in identifying the intended targets of intimidation. For example, the Australian Strategic Policy Institute and the Mercator Institute for China Studies (MERICS) both provide effective and informative data on China's economic intimidation while focusing on different aspects of coercion; the Australian Strategic Policy Institute focuses on China's coercive actions against foreign governments, while MERICS focuses on China's coercion of foreign firms.³⁸⁶ In addition, given its focus on firms, MERICS includes administrative discrimination as a form of coercion but does not count arbitrary detention or cyberattacks.³⁸⁷ These differences in definition lead to different counts regarding the number of coercive actions China took in a given year; for instance, the Australian Strategic Policy Institute found 16 instances of coercion in 2021, while MERICS found 13.³⁸⁸ Both approaches provide compelling insights into different aspects of China's intimidation tactics, and differences in data highlight the importance of developing a broad and comprehensive understanding of China's coercive actions against diverse targets for policy purposes.

In addition to definitional differences, assessments of China's coercion tend to focus on overt intimidation and do not include subtler and more difficult-to-detect pressure applied in private settings due to a lack of publicly available information.³⁸⁹ The underreporting of private coercion has likely led to a significant undercounting of China's coercive actions. MERICS asserts that the "majority of cases [of coercion] remains invisible" due to the informal nature of China's tactics and targeted entities' fear of reprisal.³⁹⁰ Based on this analysis, MERICS concludes that "China's most effective form of economic coercion might therefore be covert pressure on companies."³⁹¹

China's declining use of overt coercion is likely driven by several factors. First, there are increasing multilateral efforts to counteract China's economic intimidation, including the G7's Coordination Platform on Economic Coercion and the EU's anticoercion instrument. Second, China is attempting to improve its international image following years of aggressive diplomacy and its poor handling of the COVID-19 pandemic.³⁹² In the past year, Xi has attempted to charm the heads of foreign states, notably European leaders, in an attempt to win international supporters while dividing potential coalitions of opposition (for more information on the EU's anticoercion instrument and China's charm offensive in Europe, see Chapter 5, Section 1, "Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation"). Finally, China's economic coercion has also backfired at times, causing significant consequences for China. For instance, its informal ban on Australian coal in response to Australia's call for an investigation into the origins of COVID-19 may have partially contributed to a coal shortage and subsequent series of blackouts across China in the summer of 2021, while Australia was able to sell the coal to other buyers.*³⁹³ Continued trade restrictions against imports from Taiwan in the leadup to Taiwan's 2024 elections constitute a notable exception to China's otherwise moderated approach to coercion. (For more on China's coercion of Taiwan, see Chapter 5, Section 2, "Taiwan.")

China has hosted leaders from developed countries in an attempt to revitalize economic ties, but Beijing's refusal to offer substantive concessions—including taking steps to foster a level economic playing field and market reciprocity and to provide decisive statements condemning Russia's unprovoked war in Ukraine—has undermined the campaign's effectiveness. Between November 2022 and April 2023, Xi hosted leaders from Germany, Spain, France, and the EU in an effort to smooth over relations following Russia's unprovoked invasion of Ukraine and potentially restart the currently stalled Comprehensive Agreement on Investment.†³⁹⁴ Xi did not make any substantial concessions following these meetings, however, beyond a brief call to Ukraine's President Volodymyr Zelenskyy in late April 2023 following the repeated requests of European leaders.³⁹⁵ In December 2022, Australian Foreign Affairs Minister Penny Wong visited Beijing, marking the first time an Australian minister had done so in three years.³⁹⁶ In discussions with her counterpart from China, Minister Wong raised issues of human rights and "trade blockages" as well as the need to manage tensions between the United States and China.³⁹⁷ In February 2023, Australia's and China's trade ministers held talks to ensure "the timely and full resumption of trade" following China's imposition of sanctions in 2020 on a range of Australian goods, including coal and wine, in response to calls by then Prime Minister Scott Morrison for an investigation into the origins of COVID.³⁹⁸ China partially reversed course on coal by allowing

* For more on China's coercive response to Australia, see U.S.-China Economic and Security Review Commission, Chapter 2, Section 1, "Year in Review: Economics and Trade," in *2021 Annual Report to Congress*, November 2021, 150–152.

† For more information on the Comprehensive Agreement on Investment and Europe's relations with China, see Chapter 5, Section 1, "Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation."

Australian imports back into the country in January 2023, although significant sanctions remain on a variety of goods.³⁹⁹

Despite its softening approach in 2023, China continues to strengthen formal legal channels through which to implement coercive tactics. In July 2023, China implemented a new and sweeping Foreign Relations Law aimed at countering trade sanctions by the United States and its partners and allies.* The law builds on China's 2021 Anti-Foreign Sanction Law, which prohibits companies operating in China from complying with foreign sanctions.⁴⁰⁰ China specifically takes issue with U.S.-led export controls on semiconductors and U.S. efforts to reduce reliance on Chinese suppliers in critical sectors.⁴⁰¹ In the new legislation, China made several thinly veiled references to coercion and sanctions, reiterating its intent "to take corresponding countermeasures" against actions that it perceived as "endanger[ing] China's sovereignty, security, and development interests."⁴⁰² In an effort to communicate U.S. policy on export controls and deepen discussion on persistent economic issues between the United States and China, U.S. Commerce Secretary Raimondo recently announced the creation of an export control enforcement information exchange platform with China. The platform aims to reduce misunderstanding of U.S. national security policies by China, with the first meeting held in August 2023.⁴⁰³

*For more on China's Foreign Relations Law, see Chapter 1, Section 2, "U.S.-China Security and Foreign Affairs."

Appendix: Highly Indebted Poor Countries’ Diplomatic Support for China’s Controversial International Positions

Country	Year of HIPC Initiative Comple- tion	Total Loans Provided by China Following HIPC Initiative Completion	Total of All Chinese Loans	Publicly Supported China’s Xinjiang Policy*	Publicly Supported China’s Conduct in the South China Sea†	Publicly Supported China’s Positions on Hong Kong‡
Afghanistan §	2010					
Benin	2003	\$1.0 Billion	\$1.1 Billion		X	
Bolivia	2001	\$4.1 Billion	\$4.1 Billion			
Burkina Faso	2002	\$0	\$0	X		
Burundi	2009	\$159 Million	\$182 Million	X	X	X
Cameroon	2006	\$1.8 Billion	\$1.8 Billion	X	X	X
Central African Republic	2009	\$89 Million	\$136 Million		X	X
Chad	2015	\$41 Million	\$3.2 Billion			
Comoros	2012	\$146 Million	\$185 Million	X	X	
Republic of the Congo	2010	\$6.6 Billion	\$11.4 Billion	X	X	X
Democratic Republic of the Congo	2010	\$2.6 Billion	\$12.1 Billion	X	X	
Côte d’Ivoire	2012	\$549 Million	\$960 Million			
Eritrea	Pre- Decision	\$0	\$636 Billion	X	X	X
Ethiopia	2004	\$14.8 Billion	\$14.8 Billion		X	
The Gambia	2007	\$367 Million	\$367 Million		X	
Ghana	2004	\$31.1 Billion	\$31.1 Billion			
Guinea	2012	\$21.8 Billion	\$21.9 Billion		X	X

*“Publicly Supported China’s Xinjiang Policy” refers to countries that signed a letter in July 2019 publicly declaring their support for China’s Xinjiang policies, as well as subsequent signers and other public statements.

†“Publicly Supported China’s Conduct in the South China Sea” refers to countries that declared their support for China’s conduct in the South China Sea via official statements and declarations.

‡“Publicly Supported China’s Positions on Hong Kong” refers to countries that supported Beijing’s suppression of the 2019 Hong Kong prodemocracy protests as well as states that declared their support for China’s 2020 Hong Kong National Security Law.

§Afghanistan received two loans of unspecified amounts from the People’s Bank of China in 2008. Both loans went to finance a joint Afghan-Chinese venture in copper mining.

Country	Year of HIPC Initiative Completion	Total Loans Provided by China Following HIPC Initiative Completion	Total of All Chinese Loans	Publicly Supported China's Xinjiang Policy	Publicly Supported China's Conduct in the South China Sea	Publicly Supported China's Positions on Hong Kong
Guinea-Bissau	2010	\$19.3 Million	\$123 Million		X	X
Guyana	2003	\$878 Million	\$878 Million			
Haiti	2009	\$0	\$0			
Honduras	2005	\$297 Million	\$297 Million			
Liberia	2010	\$540 Million	\$549 Million		X	
Madagascar	2004	\$250 Million	\$250 Million		X	
Malawi	2006	\$916 Million	\$916 Million		X	
Mali	2003	\$2.5 Billion	\$2.6 Billion		X	
Mauritania	2002	\$1.7 Billion	\$1.7 Billion		X	X
Mozambique	2001	\$7.9 Billion	\$7.9 Billion	X	X	X
Nicaragua	2004	\$4.9 Million	\$4.9 Million			
Niger	2003	\$2.7 Billion	\$2.7 Billion		X	X
Rwanda	2005	\$376 Million	\$384 Million			
São Tomé and Príncipe	2007					
Senegal	2004	\$3.1 Billion	\$3.1 Billion		X	
Sierra Leone	2006	\$1.6 Billion	\$1.6 Billion		X	X
Somalia	Completing Program		\$0	X	X	X
Sudan	Completing Program		\$6.7 Billion	X	X	X
Tanzania	2001	\$12.6 Billion	\$12.6 Billion		X	X
Togo	2010	\$601 Million	\$786 Million	X	X	X
Uganda	2000	\$975 Million	\$975 Million	X	X	X
Zambia	2005	\$4.5 Billion	\$4.6 Billion	X	X	X

Source: Various.⁴⁰⁴

ENDNOTES FOR SECTION 1

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SECTION 2: U.S.-CHINA SECURITY AND FOREIGN AFFAIRS

Abstract

Throughout 2023, the Chinese Communist Party (CCP) recalibrated its foreign policy to counteract increasingly negative international perceptions of China over its support for Russia's unprovoked war in Ukraine and Beijing's aggression toward neighbors in the Indo-Pacific region. Emerging from Zero-COVID lockdowns in 2022, Chinese diplomats engaged in a flurry of activity in an attempt to assuage key global partners and cast China as a contributor to the global good. These engagements have demonstrated a change in tone but not substance, aimed primarily at preserving Beijing's access to foreign markets, technology, and foreign direct investment, as well as its global influence. Beijing has sought to cultivate support from governments across Latin America and the Caribbean, Africa, and Europe in order to facilitate these objectives. In practice, Beijing continues efforts to shield Russia diplomatically and provide material support for its war in Ukraine. The CCP has sought to undermine the transatlantic unity that has emerged vis-à-vis China as a response to Beijing's foreign policy choices. The CCP has also continued to engage selectively with the United States while preparing Chinese society for protracted strategic competition, up to and including the possibility of war.

Key Findings

- In 2023, top CCP leaders portrayed their country as facing “extreme scenarios” and called on Chinese society to steel itself against the alleged efforts of the United States and its allies to blackmail, contain, and pressure China. General Secretary of the CCP Xi Jinping has called repeatedly on the People's Liberation Army (PLA) to prepare for war. This rhetoric has been coupled with a number of war-readiness measures, including new legislation focused on reenlistment and the revision of China's conscription law, a 7.2 percent increase to the official defense budget, and the establishment of new “National Defense Mobilization” offices around the country.
- China continued to support Russia amid its ongoing war in Ukraine, apparently judging that Russia's value as a partner in opposition to the United States outweighed the mounting reputational costs of taking sides with the aggressor. Beijing's diplomatic, technological, and economic assistance provided vital lifelines that kept the Russian government afloat as its military foundered on the battlefield. Farther afield, China and Russia continued to conduct military exercises and scientific missions in the Pacific and polar regions, respectively.

- China's leadership has selectively responded to U.S. efforts to reduce tensions for the purposes of preserving Chinese access to U.S. markets, technology, and foreign direct investment. At the same time, China continued to blame the United States for the worsening bilateral relationship and refused to cooperate on key issues, such as reestablishing crisis communications channels and stemming the flow of fentanyl into the United States. China has also selectively engaged with U.S. allies and partners to try to drive a wedge between them and the United States.
- China promoted its new trifecta of foreign policy initiatives known as the Global Security, Development, and Civilization Initiatives to reshape the international system in its favor. At the same time, Beijing sought to burnish its image as a force for world peace by offering to mediate high-profile conflicts and continuing vigorous diplomatic outreach to countries in Africa as well as Latin America and the Caribbean, all of whom it views as important potential allies in its attempts to transform the world order. These activities are part of Beijing's ongoing work to court countries in the Global South.
- In the Indo-Pacific region, China continued to adopt a heavy-handed and at times confrontational approach to its neighbors. In the South China Sea, China acted aggressively toward claimant states and transiting military forces alike. In East Asia, China sought to drive a wedge between the United States, Japan, and South Korea. Meanwhile, tensions continued to simmer on the border with India, and suspicions toward China's efforts to gain strategic influence in the Pacific Islands grew.
- The PLA honed its expeditionary capabilities through new base construction in Cambodia and a much-publicized mission to evacuate Chinese and foreign nationals from the ongoing conflict in Sudan. At the same time, Beijing continued attempts to enhance its military presence in Cuba through a reported joint military facility that is under negotiation, and it conducted a host of aggressive cyberespionage campaigns against the United States and foreign governments as well as numerous private organizations.

Introduction

China began 2023 determined to recalibrate its relations with the world following a period of intense inward focus on the leadership transitions of the 20th Party Congress and the abrupt dismantlement of its draconian Zero-COVID regime in the last quarter of 2022.¹ Taking stock of recent measures by the United States and other countries to bolster security partnerships and restrict the export of advanced technologies, China's leaders decried these measures as instances of geopolitical "containment" and redoubled their efforts to prepare their government, economy, and society for future hardships in anticipation of prolonged strategic competition with the United States.² In the foreign policy realm, Chinese leaders continued to stand by Russia amid its faltering war in Ukraine, even as they sought to limit harm to their international image by emphasizing China's contributions to global governance, conflict me-

diation efforts, and engagement with developing countries. China's aggressive rhetoric and behaviors toward Indo-Pacific countries undermined its efforts to improve ties closer to home, while its global military activities and intelligence collection continued apace.

This section assesses key developments in China's politics, foreign relations, and military power projection in 2023. It begins by examining Chinese leaders' view of their position in the international system before surveying China's global diplomacy and activities toward regional neighbors. The section concludes with an examination of China's military operations and espionage activities abroad, both of which contribute to its growing comprehensive national power.* The section's findings are based on Commission hearings, discussions with outside experts, and open source research and analysis throughout the year.

20th Party Congress Consolidates Xi's Control, but Turbulence Roils Party's Upper Ranks

General Secretary Xi emerged from the CCP's 20th Party Congress as the undisputed leader of the Party, contravening multiple Party norms by attaining a third term as CCP general secretary and remaining in office beyond the prevailing age limit of 68.³ Xi also stacked the seven-man Politburo Standing Committee with individuals who have strong ties to him, and he increased the number of individuals on the now 24-man Politburo with whom he had long-term personal or professional ties from 15 to 19 members.⁴ At the same time, many prominent officials affiliated with Xi's predecessor Hu Jintao and his Communist Youth League faction were demoted.⁵ Jude Blanchette, Freeman Chair in China Studies at the Center for Strategic and International Studies (CSIS), assessed that the clean sweep of top positions indicated Xi's lack of desire to show "even a modicum of compromise" to any other stakeholder or faction.⁶ Dylan Loh, an assistant professor at Nanyang Technological University, assessed that with these loyalists in place, Xi "has a much freer rein and mandate in pursuing his domestic and foreign policies" than before.⁷

In recent months, however, several high-profile officials selected by Xi for key positions have been removed due to security concerns or are under investigation for alleged corruption.⁸ Dennis Wilder, former deputy assistant director for East Asia and the Pacific at the Central Intelligence Agency, observed that if the corruption allegations are true, "it indicates that Xi's vetting process for selecting top officials is deeply flawed and suggests corruption is commonplace within the system despite Xi's decade-long campaign against it."⁹ Top officials who appear to have been purged include:

- *Minister of Foreign Affairs Qin Gang:* In July 2023, the Standing Committee of the 14th National People's Congress (NPC) voted to remove Qin from his post as Minister of Foreign

* China's concept of comprehensive national power encompasses the combination of a country's material strength to include military, economic, and technological ability as well as soft power. For more analysis on the origins of the concept, see U.S.-China Economic and Security Review Commission, Chapter 1, Section 1, "A Global Contest for Power and Influence: China's View of Strategic Competition with the United States," in *2020 Annual Report to Congress*, December 2020, 35–36.

20th Party Congress Consolidates Xi's Control, but Turbulence Roils Party's Upper Ranks—*Continued*

Affairs without additional explanation, and reappointed Director of the Office of the Central Foreign Affairs Commission Wang Yi as the Minister of Foreign Affairs.¹⁰ In September, the *Wall Street Journal* reported that senior Chinese officials were told “an internal Communist Party investigation found former Foreign Minister Qin Gang to have engaged in an extramarital affair that lasted through his tenure as Beijing’s top envoy to Washington,” and led to the birth of a child in the United States, indiscretions the leadership felt potentially compromised China’s national security.*¹¹

- *The Commander and Deputy Commander of the PLA Rocket Force and Deputy Chief of the Joint Staff Department of the Central Military Commission:* In late July and early August 2023, it was reported that the PLA Rocket Force commander, General Li Yuchao, deputy commander, General Liu Guangbin, and a former deputy commander, Lieutenant General Zhang Zhenzhong† were believed to have been taken away by investigators as part of a larger anticorruption drive in the military.¹² Then commander of the PLA Rocket Force General Li Yuchao was replaced by General Wang Houbin, who had previously served as deputy commander of the PLA Navy.‡¹³
- *Minister of Defense General Li Shangfu:* In September, the *Wall Street Journal* reported that General Li was under investigation, citing U.S. officials’ assessment that he is likely to be relieved of his duties.¹⁴ The *Washington Post* reported that two people involved in China’s defense industry said that there is “broad consensus that Li’s absence is related to corruption charges relating to his previous position as head of military procurement.”¹⁵ General Li was previously head of the Central Military Commission’s (CMC) Equipment De-

*On October 24, Qin Gang was also removed from his position as State Councilor. Sylvie Zhuang, “China’s Ex-Foreign Minister Qin Gang Stripped of Last Remaining State Title,” *South China Morning Post*, October 24, 2023.

†In June 2022, Lieutenant General Zhang Zhenzhong’s new position as the deputy chief of staff of the Joint Staff Department of the Central Military Commission was confirmed when he attended the 19th Shangri-La Dialogue as a member of the Chinese delegation. Lin Yunshi, “Personnel Observation | Alternate Central Committee Member Zhang Zhenzhong is Appointed Deputy Chief of Staff of the Joint Staff Department of the Central Military Commission” (人事观察 | 候补中央军委联合参谋部副参谋长), *Caixin*, June 13, 2022, Translation; *Xinhua*, “GLOBALink | China Rebuts U.S. Defense Secretary’s Remarks on South China Sea, Taiwan,” June 12, 2022.

‡During this time, the Political Commissar of the PLA Rocket Force, General Xu Zhongbo, reportedly stepped down and was replaced by General Xu Xisheng, who had previously served as the deputy political commissar of the Southern Theater Command, the political commissar of the PLA Air Force of the Southern Theater Command, and currently a CCP Central Committee member. It is unclear whether General Xu Zhongbo stepped down in connection to the anticorruption investigation. According to Alexander Niell, an adjunct fellow at the Pacific Forum, the appointment of navy and air force officers in the PLA Rocket Force suggests that the Chinese leadership is focused on developing the nuclear triad, which would allow nuclear missiles to be launched from the air, sea, and land under an integrated command system. Joyce Huang, “Analysts Say Shakeup at China’s Rocket Force Suggests Strategy Shift Toward ‘Nuclear Triad,’” *Voice of America*, August 2, 2023; Kathrin Hille, “China Ousts Top Generals from Nuclear Rocket Force,” *Financial Times*, July 31, 2023; Lin Yunshi, “Personnel Observation | The Chief Officer of the Rocket Force has been Adjusted and Promoted to General Wang Houbin and Xu Xisheng to Take Up New Posts Across Service and Arms” (人事观察 | 火箭军主官调整并晋上将 王厚斌, 徐西盛跨军兵种履新), *Caixin*, July 31, 2023. Translation.

20th Party Congress Consolidates Xi's Control, but Turbulence Roils Party's Upper Ranks—*Continued*

velopment Department from 2017 to 2022, during which time he was sanctioned by the United States in 2018 for purchasing Russian weapons.¹⁶ General Li's last public appearance was on August 29 at the China-Africa Peace and Security Forum in Beijing.*¹⁷

CCP Prepares China for Escalating Tensions and Conflict

Throughout late 2022 and 2023, General Secretary Xi continued to escalate his rhetoric and emphasize the need for China to prepare for hardships stemming from what he sees as the hostile actions of the United States and allied countries. In particular, Xi has repeatedly called on Chinese officials and citizens to anticipate “worst-case” and “extreme” scenarios, terms that imply China could face heightened tensions with the United States, serious economic damage resulting from measures like sanctions and export controls, and more intense strategic rivalry, including the possibility of an open war over Taiwan.[†]¹⁸ Xi urged the country to harden itself against “worst-case scenarios” in his speech at the 20th Party Congress in October 2022, emphasizing that China needed to respond to strategic risks and uncertainties in the international environment by upholding the Party's control and adopting a “fighting spirit” so that “we cannot be swayed by fallacies, deterred by intimidation, or cowed by pressure.”[‡]¹⁹ At the 14th NPC in March 2023,[§] Xi directly blamed the United States and its allies for China's recent economic and diplomatic troubles, asserting that “Western countries—led by the U.S.—have implemented all-round containment, encirclement

* On October 24, General Li was removed from his post as the Minister of National Defense, as well as State Councilor, without additional explanation. William Zheng, Jane Cai, and Jack Lau, “China Sacks Missing Defense Chief Li Shangfu with No Explanation,” *South China Morning Post*, October 24, 2023.

† For example, Jin Canrong, the associate dean of the School of International Studies at the Renmin University of China, stated that “extreme scenarios” in particular refer to “the danger of war” and, more specifically, “the Taiwan question,” arguing that the United States' actions in the region, not Beijing's own assertive behavior, are the reasons why this risk exists. Yang Sheng, “Complex Security Threats Call for Modern Thinking, Measures: Experts,” *Global Times*, June 5, 2023.

‡ Additionally, for the first time since 1949, mentions of “security” eclipsed those of the “economy” in the report to the Party Congress. Xi mentioned the term “security” 91 times and “economy” 60 times during his report to the 20th Party Congress. *Bloomberg*, “Xi Mentions of ‘Security’ Eclipse ‘Economy’ in Historic Shift,” October 18, 2022.

§ The proceedings of the March 2023 14th NPC further solidified Xi's position and centralized Party control over the state institutions of China's government. Xi secured an expected third term as state chairman of the People's Republic of China and Chairman of the CMC. The Xi loyalists recently elevated to the Politburo Standing Committee at the Party Congress also took up corresponding leadership roles of China's major state institutions. The NPC also approved a significant restructuring of the State Council, the rough analogue to a ministerial cabinet within China's state government. The reorganization altered the functions of a dozen agencies and created two new Party commissions on priority topics, thereby further strengthening Party control over key government functions and clarifying the role of the state under Xi as primarily an implementer of Party policies. NPC Observer, “A Guide to China's 2023 State Council Restructuring,” March 23, 2023; *AP News*, “Xi Awarded 3rd Term as China's President, Extending Rule,” March 10, 2023; *Xinhua*, “Xi Jinping Unanimously Elected to Serve as State Chairman Central Military Commission Chairman” (习近平全票当选国家主席中央军委主席), March 10, 2023. Translation; Susan V. Lawrence and Mari Y. Lee, “China's Political System in Charts: A Snapshot before the 20th Party Congress,” *Congressional Research Service*, CRS R46977, November 24, 2021, 27, 30.

and suppression against us, bringing unprecedentedly severe challenges to our country's development."²⁰

Recent statements by Xi in May and June 2023 continued to highlight foreign threats to China's security and convey an increasing sense of peril.²¹ At a meeting of the Central National Security Commission on May 30, Xi again invoked "worst-case and extreme scenarios" and called on officials to "modernize our national security system and capacity, and get prepared for actual combat and dealing with practical problems."²² During an inspection tour of an industrial park in Inner Mongolia the following week, Xi emphasized that China's dual-circulation strategy* should aim to ensure the "normal operation of the national economy under extreme circumstances," alluding to economic disruptions stemming from a potential decoupling with the U.S. economy.²³

Xi has also made several direct statements urging the PLA to prepare for war. During a visit to the CMC's Joint Operations Command Center in November 2022, for instance, Xi said that "the entire military must... focus on combat ability as the fundamental and only criterion, concentrate all energy on fighting a war, direct all work towards warfare and speed up to build the ability to win."²⁴ In July 2023, Xi reiterated that the PLA must prepare for war during an inspection tour of the Eastern Theater Command in Jiangsu Province, which is responsible for military operations in the East China Sea and the Taiwan Strait.²⁵

These exhortations to the military have been coupled with a number of legislative, budgetary, and logistical developments indicating that the Chinese leadership is taking preliminary but limited steps to enable effective war mobilization. China's NPC implemented a new Reservists Law that journalist John Pomfret and former Deputy National Security Advisor Matthew Pottinger argued will allow the PLA to "more easily activate its reserve forces and institutionalize a system for replenishing combat troops in the event of war."²⁶ China revised its conscription law to allow retired PLA soldiers to reenlist, and it also focuses on recruiting students with backgrounds in science and engineering to serve in military positions relating to space and cyber warfare.²⁷ Furthermore, China announced a 7.2 percent increase in its official defense spending during the opening session of the 14th NPC, bringing the total defense budget to an estimated \$224 billion.[†]²⁸ Beijing has opened new recruitment centers known as National Defense Mobilization offices‡ across the country since December 2022 while also upgrading air-raid shelters

*Under the "dual-circulation" strategy, China aims to reorient its manufacturing sector toward fulfilling domestic demand, rather than producing for export. It will continue to seek out and draw on international resources, capital, technology, and talent but avoid overreliance on global economic integration. For more on China's "dual-circulation" economic strategy priorities, see U.S.-China Economic and Security Review Commission, Chapter 2, Section 1, "Year in Review: Economics and Trade," in *2020 Annual Report to Congress*, December 2020, 207–208.

†China obscures much of its official defense budget through a fusion of military and civilian spending as well as its non-transparent reporting practices, making it an unreliable figure. For example, in June 2023, Senator Dan Sullivan (R-AK) said that the U.S. intelligence community estimated China's defense budget to be around \$700 billion, far above the stated figure of \$224 billion. Mackenzie Eaglen, "Setting the Record Straight on Beijing's Actual Military Spending," *American Enterprise Institute*, August 8, 2023; *Xinhua*, "China's 2023 Defense Budget to Rise by 7.2%, Remaining Single-Digit for 8th Year," March 6, 2023.

‡China has opened National Defense Mobilization offices in Beijing, Fujian, Hubei, Hunan, Inner Mongolia, Shandong, Shanghai, Sichuan, Tibet, and Wuhan. John Pomfret and Matt Pottinger, "Xi Jinping Says He Is Preparing China for War," *Foreign Affairs*, March 29, 2023.

and at least one “wartime emergency hospital” in Fujian Province, located across the strait from Taiwan.²⁹ China announced it would increase its grain production capacity by 50 million tons in March 2023, which may indicate that Beijing is seeking to improve its food security in the event a war disrupts global supply chains.³⁰

Retooling the Country for Self-Reliance in Science and Technology

In 2023, the CCP made significant personnel changes both to reinforce loyalty to Xi and advance its efforts to build a geopolitically resilient economy less dependent on the United States and other Western countries for foreign technology. These priorities are apparent in personnel appointments in the Politburo Standing Committee, Politburo, and Central Committee:

- The six members of the Politburo Standing Committee serving alongside Xi, who represent the top leadership of the CCP, have mostly had long careers in Party politics and have all proven their loyalty repeatedly to Xi over decades.³¹ Loyalty is the most important credential for promotion to the Politburo Standing Committee; having first served under Xi in 2007, Executive Vice Premier of the State Council Ding Xuexiang stands alone among its members in having credible scientific credentials.³² Ding earned a master’s degree in materials science and spent the first 17 years of his career at the Shanghai Materials Research Institute.³³ His portfolio currently includes science and technology issues.³⁴
- The new 24-man Politburo revealed at the 20th Party Congress not only has members with robust connections to Xi but also has a noticeably higher proportion of members with scientific and technocratic backgrounds than in previous terms.³⁵ Compared to the outgoing leadership team, eight of the new 24-man Politburo have science, technology, engineering, and mathematics (STEM) backgrounds, compared to just four in the 19th Politburo.³⁶ For example, Li Ganjie, Ma Xingrui, Yuan Jiajun, and Zhang Guoqing, known as the “Military-Industrial Gang,” not only have ties to Xi by virtue of their promotion to provincial-level roles on his watch but also have extensive experience managing complex state-owned technology projects.³⁷ The remaining officials with STEM backgrounds have more distant connections to Xi, but all bring noteworthy scientific and technological expertise to the Politburo.³⁸
- STEM backgrounds in the 205-person Central Committee increased by 35 percent to over one-third (69 members) of the total.³⁹ Of the 69 Central Committee members with STEM

*Among the eight current Politburo members with technocratic backgrounds, five hold PhD degrees and three have master’s degrees. These Politburo members have expertise in environmental engineering, materials science, nuclear engineering, systems engineering, aerospace, medical science, and defense technology. Ruihan Huang and AJ Cortese, “Nanometers over GDP: Can Technocrat Leaders Improve China’s Industrial Policy?” *MacroPolo*, May 23, 2023.

†According to the Asia Society Policy Institute, Yin Li allegedly helped Xi’s wife, Peng Liyuan, become a World Health Organization Goodwill Ambassador for Tuberculosis and HIV in 2011. Liu Guozhong worked under Li Zhanshu, a retired Xi confidant, during the 2000s in Heilongjiang. Chen Jining built favor with Xi as an administrator of Tsinghua University in Beijing. *Asia Society Policy Institute*, “Decoding Chinese Politics,” 2023.

backgrounds, 36 also lead provinces in their capacities either as provincial party secretaries or as governors, overseeing the key administrative units in China responsible for implementing Beijing's policies and agenda.⁴⁰

China also announced the reorganization of the Ministry of Science and Technology to improve the coordination of China's science and technology policy, reflecting its focus on achieving self-sufficiency and gaining superiority over the United States in critical technologies.*⁴¹ In a State Council reform plan approved by the NPC in March 2023 as part of a broader Party-state reorganization, the responsibilities of the Ministry of Science and Technology—including evaluating and managing specific research projects and research funding—were redistributed to relevant Party and state bodies that also conduct science and technology work.†⁴² The reform of the Ministry of Science and Technology is intended to streamline and strengthen its management over strategic planning of China's science and technology system.⁴³ The broader reorganization also transferred the state's overall responsibility for managing China's science and technology policy to the Party through the creation of a Central Science and Technology Commission.⁴⁴ In doing so, Party leadership will utilize the new commission to attempt to solve longstanding difficulties in coordination between the Ministry of Science and Technology and other entities under the State Council.‡⁴⁵ (For more on the role of the Central Science and Technology Commission and other institutions created or reorganized during the March 2023 NPC, see Chapter 3, Section 2, "Fiscal, Financial, and Debt Problems Weigh Down Beijing's Ambitions.")

China's Foreign Relations Law Seeks Tools to Counter Western Sanctions

In June 2023, the NPC passed the Foreign Relations Law of the People's Republic of China (PRC), a sweeping piece of legislation that codifies China's foreign policy principles and creates a legal basis for the imposition of "countermeasures" in response to foreign actions Beijing deems a threat.§⁴⁶ According to Chinese state media, the law aims to fix supposed shortcomings in China's approach to foreign affairs and address recent challenges posed by other countries' imposition of sanctions, export controls, and extraterritorial application of domestic law against China.⁴⁷ The law includes pro-

*State Council Secretary-General Xiao Jie framed the motivation for the State Council reform plan in terms of geopolitical competition. "Facing the severe circumstances of international scientific and technological competition as well as external containment and suppression, it is necessary to... accelerate the realization of high-level scientific and technological self-reliance and self-improvement," he said. *Xinhua*, "Explanation of the State Council Institutional Reform Plan" (关于国务院机构改革方案的说明), March 8, 2023. Translation.

†These include the Ministry of Agriculture and Rural Affairs, the National Development and Reform Commission, the Ministry of Ecology and Environment, the National Health Commission, and the Ministry of Industry and Information Technology. Huang Yanhao and Han Wei, "In Depth: The Remaking of China's Science and Technology Ministry," *Caixin Global*, March 15, 2023.

‡Prior to the reorganization, coordination of scientific and technological work was challenging because tasks were distributed across several departments within the State Council. The Ministry of Science and Technology had limited power to coordinate work with other ministries on the same bureaucratic level. Huang Yanhao and Han Wei, "In Depth: The Remaking of China's Science and Technology Ministry," *Caixin Global*, March 15, 2023.

§The law became effective on July 1, 2023. Evelyn Cheng, "China Has a New Foreign Relations Law. Here's What It Means for Business," *CNBC*, July 10, 2023.

visions that establish China's intention to respond with sanctions and other restrictive measures to actions taken by other countries that harm its sovereignty, security, or development interests (article 33) and assert the CCP's leadership in foreign policy and the importance of "uphold[ing] its system of socialism with Chinese characteristics" (articles 17 and 9).⁴⁸ It also enshrines Xi's global initiatives (article 18) and states that China's implementation of treaties must not "harm national sovereignty or security, or the societal public interest" (article 31).⁴⁹ Moritz Rudolf, a research scholar in law and fellow at Yale Law School's Paul Tsai China Center, observes that article 31 is particularly concerning because its vague language creates uncertainty surrounding China's adherence to its treaty commitments and "sends the signal that the necessity to prepare for 'international struggle' outweighs the other elements of the PRC's foreign relations."⁵⁰ Dr. Rudolf argues that the law underscores China's increasing ambitions to act globally and to use the law as a tool to reshape the international legal environment in its favor.⁵¹ (For more on China's international use of law, see Chapter 2, Section 1, "Rule by Law: China's Increasingly Global Legal Reach.")

Counterespionage Law Tightens State Security, Raises Risks of Arbitrary Detention

The NPC also amended China's Counterespionage Law in April 2023, broadening the definition of espionage and granting the authorities extensive powers to investigate espionage in ways that heighten risks to foreign nationals and businesses operating in China.^{*52} According to the revised law, acts constituting espionage now include efforts to obtain information related to China's national security, "seeking to align with an espionage organization and its agents"—an act that remains undefined—and cyberattacks against Chinese government entities and critical infrastructure.⁵³ The law also allows Chinese authorities to impose exit bans on anyone suspected of or under investigation for espionage, regardless of nationality, if they are deemed a potential national security risk after leaving China.⁵⁴ These provisions signal the Chinese government's heightened scrutiny of data collection activities and have raised concerns among foreign observers that Chinese authorities could designate routine market research and business intelligence activities conducted by foreign companies as forms of espionage, or accuse foreign corporations of spying, if they operate in China and simultaneously conduct business with foreign governments elsewhere.⁵⁵ The new law's administrative investigation powers establish low thresholds for Chinese authorities to raid the offices of foreign businesses, search their phones, examine their business files, or demand access to sensitive data or trade secrets.⁵⁶ Speaking to *Nikkei Asia* about the anti-espionage law in June 2023, Michael Hart, the president of the American Chamber of Commerce in China, said that "AmCham companies want to follow the laws, [but] if normal business activity gets reclassified, that's where people are concerned."⁵⁷ (For more on how China's expanding definition of national security and espionage activities impacts foreign companies in China, see Chapter 1, Section 1, "U.S.-China Bilateral and China's External Economic and Trade Relations.")

*The law became effective on July 1, 2023. China Law Translate, "Counter-Espionage Law of the P.R.C. (2023 ed.)," April 26, 2023.

China's Global Diplomacy

Through its diplomacy in 2023, China sought to recalibrate its relations with the rest of the world while continuing to acquire greater power and influence for itself. Despite the associated economic and reputational risks, China increased its support to Russia amid the war in Ukraine, seeing the Kremlin as a source of material benefits, such as energy imports, and a useful counterbalance to the U.S.-led rules-based international order. With the United States, China has sought limited engagement, seemingly more as a safeguard against further deterioration of the relationship than out of a genuine desire to improve relations. In the Indo-Pacific, China's openly hostile, heavy-handed approach generated resistance from many of its neighbors. At the same time, China vigorously promoted its alternative vision for global governance and made further inroads with governments across Africa as well as Latin America and the Caribbean.

China Supports Russia in Its War against Ukraine

Beginning in late 2022, China's leadership intensified efforts to deepen its relationship with Russia and provide a lifeline to its war against Ukraine.⁵⁸ These efforts have continued despite the damage inflicted to China's relations with major global counterparts, including the United States and the EU.⁵⁹ "At each juncture when Xi Jinping has been faced with decisions on whether to position China in the carefully neutral way he did in 2014 after Russia's annexation of Crimea or to throw China's political weight behind [Russian President Vladimir] Putin and bolster the Sino-Russian relationship, he has chosen the latter, in full knowledge of what the fallout will be," Andrew Small, a senior transatlantic fellow at the German Marshall Fund of the United States, observed in his testimony before the Commission.⁶⁰ At the same time, Beijing benefited from Moscow's economic and diplomatic isolation, seizing on the opportunity to import cheap energy and raw materials from its increasingly dependent neighbor.⁶¹ China has leveraged its partnership with Russia to seek influence in and greater access to the Indo-Pacific and in the Arctic.*⁶² As Mr. Small observed, "In the wider struggle that Beijing sees itself engaged in with the United States—and with the West more broadly—there is no partner more important to the PRC than Russia."⁶³

China Provides Diplomatic Cover, Weakens Sanctions on Russia

China continues high-level diplomatic and rhetorical support to protect the Kremlin from sanctions and international condemnation.⁶⁴ Throughout 2022, Chinese officials criticized sanctions imposed on Russia by the United States and other countries, sometimes dismissing them as ineffective while at other times condemning

*China has also sought to take advantage of Russia's diminishing presence in Central Asia as a result of its invasion of Ukraine. For more on China's activities in Central Asia, see U.S.-China Economic and Security Review Commission, Chapter 3, Section 3, "China's Activities and Influence in South and Central Asia," in *2022 Annual Report to Congress*, November 2022, 555–557, 561–563.

them as instances of illegitimate “long-arm jurisdiction.”*⁶⁵ In March 2023, Xi and President Vladimir Putin released a joint statement asserting that China and Russia oppose sanctions “unauthorized by the UN Security Council [UNSC],” denying the legitimacy of any sanctions effort beyond that approved by the UNSC, a body on which the two leaders sit as permanent members and wield a veto.⁶⁶ As of June 2023, China has abstained from at least six UN General Assembly resolutions condemning Russia’s invasion.⁶⁷ Chinese diplomats also protested unilateral U.S. sanctions against Chinese companies that allegedly helped Russia’s military evade export controls and attempted to persuade its EU counterparts to drop a proposed blacklist of eight Chinese firms that provided support to Russia’s military and industrial complex.⁶⁸ Beijing has paired these efforts to discredit and limit sanctions on Russia with the continued amplification of Kremlin propaganda narratives. For example, Chinese diplomats have invoked so-called “legitimate security concerns” in official statements to justify Russia’s unprovoked invasion of Ukraine, used the “legitimate security concerns” language to frame its claims over Taiwan, and regularly criticized NATO on social media.⁶⁹

China’s Material Support to Russia

While the U.S. and other governments have refrained from making a determination that China has delivered “lethal aid”† to Russia, as of August 2023 it has provided a number of military and dual-use exports that have aided Moscow’s war effort.⁷⁰ China’s material support to Russia includes:

- *Semiconductors*: In 2022, China doubled its exports of integrated circuits to Russia, relative to 2021’s figures, to an amount valued at \$179 million.⁷¹ Semiconductors are essential for modern weapons systems like missiles, tanks, drones, and aircraft, and are likely feeding the Russian war machine.⁷² According to an unclassified July 2023 report by the U.S. Office of the Director of National Intelligence, China has made some progress in

*Zhang Hui, a professor at Wuhan University’s Institute of International Law claims that the United States’ use of “long-arm jurisdiction” for national security purposes, particularly secondary sanctions, violates the sovereignty of other countries by limiting their ability to determine their relations with other states. Zhang Hui, “The Hegemonic Essence of U.S. ‘Long Arm’ Jurisdiction” (美国“长臂管辖”的霸权主义本质), *Guangming Daily*, February 17, 2023. Translation.

†Although the term “lethal aid” is not clearly defined in U.S. law, but is rather a term of art, Title 10 of the U.S. Code defines “nonlethal aid” as anything that “is not a weapon, ammunition, or other equipment or material designed to inflict serious bodily injury or death.” For example, communications equipment, intelligence assistance, body armor, and infrastructure could be considered nonlethal aid. U.S. officials have warned that China’s provision of lethal aid to Russia would constitute a red line justifying secondary sanctions or other punitive measures. However, Administration officials have remained vague about what kind of transfers could constitute lethal aid. In February 2023, for example, when Secretary Blinken interviewed with *CBS News*, journalist Margaret Brennan pressed him for specific answers on the types of lethal aid Beijing was considering, but Secretary Blinken only spoke in general terms. Secretary Blinken replied, “There’s a whole gamut of things that—that fit in that category, everything from ammunition to the weapons themselves.” Doina Chiacu and Sarah N. Lynch, “China Lethal Aid to Russia Would Come at Real Cost, U.S. Says,” *Reuters*, February 26, 2023; Claire Parker, “What Counts as an ‘Invasion’ or as ‘Lethal Aid’? Here’s What Some Terms from the Russia-Ukraine Crisis Really Mean,” *Washington Post*, February 23, 2022; Sophia Barkoff, “China Considering Providing ‘Lethal Support’ to Aid Russian Invasion of Ukraine, Blinken Says,” *CBS*, February 19, 2023; Joshua E. Keating, “What Exactly Is ‘Non-Lethal’ Aid?” *Foreign Policy*, August 12, 2012; “Excess Nonlethal Supplies: Availability for Humanitarian Relief, Domestic Emergency Assistance, and Homeless Veterans Assistance,” 10 U.S.C. §2557.

developing and manufacturing chips for military use, but the “failure rate”^{*} for Chinese chips bought by Russia is as high as 40 percent.⁷³

- *Fighter jet parts:* In October 2022, Chinese state-owned aircraft firm AVIC International Holding Corp. sent \$1.2 million worth of Su-35 fighter jet parts to Russian state-owned defense companies.⁷⁴ Russia is using Su-35 fighters for air-to-air combat and ground support operations in Ukraine.⁷⁵
- *Mobile radar units:* In October 2022, a procurement unit of China’s Air Force Equipment Department, China Taly Aviation Technologies Corp., shipped parts for mobile radar units to a sanctioned Russia state-owned missile manufacturer Almaz Antey.⁷⁶ Russia has used mobile radar units in Ukraine as part of its S-400 anti-aircraft missile system to detect enemy jet fighters, missiles, and drones.⁷⁷
- *Super-heavy civilian and armored trucks:* China’s shipments of super-heavy civilian trucks, which are vital for moving heavy military equipment, rose from 370 trucks in December 2021 to 4,598 in December 2022, an increase of over 1,000 percent.⁷⁸ According to the *Wall Street Journal*, in June 2023, shipments of “Tiger” armored trucks produced by Shaanxi Baoji Special Vehicles Manufacturing were also found in Chechnya, a contributor of troops and equipment to Russia’s war in Ukraine.⁷⁹
- *Drones:* Throughout 2022, nearly 70 Chinese exporters shipped \$12 million in drones and drone parts to Russia.⁸⁰ The drones may be used by Russia to carry out reconnaissance missions or drop explosives.⁸¹
- *Navigation equipment:* In August 2022, Chinese state-owned defense company Poly Technologies sent navigation equipment to Russian state-owned military export firm JSC Rosoboronexport to be used in Mi-17 military transport helicopters.⁸²
- *Communications jamming equipment:* In August 2022, Chinese electronics firm Fujian Nanan Baofeng Electronic Co. used an Uzbek state-owned defense firm intermediary to supply JSC Rosoboronexport a telescoping antenna for the RB-531BE electronic warfare vehicle.⁸³
- *Gunpowder:* Chinese state-owned Poly Technologies exported nearly \$2 million of gunpowder in 2022, enough to make 80 million rounds of ammunition.⁸⁴
- *Assault rifles:* Between June and December 2022, China North Industries Group Corporation Limited (NORINCO), one of China’s largest state-owned defense contractors, sent Russia 1,000 CQ-A rifles listed in customs data as “civilian hunting rifles.”⁸⁵ The CQ-A is NORINCO’s copy of the U.S. M-4A1 carbine—a rifle for close-quarters combat that is currently the standard-issue firearm of most U.S. military units.⁸⁶

^{*}The “failure rate” of a semiconductor is a measure of failure per unit of time and is utilized by the semiconductor industry to determine a product’s reliability. William J. Vigrass, “Calculation of Semiconductor Failure Rates,” *Renesas Electronics Corporation*.

- *Body armor*: Russia received 12 tons of Chinese body armor routed via Turkey in December 2022.⁸⁷
- *Satellite imagery of Ukraine*: Changsha Tianyi Space Science and Technology Research Institute (Spacety China) and its Luxembourg-based subsidiary provided high-resolution satellite imagery of Ukraine to a Russia-based technology firm, which helped enable the combat operations of the Russian private military company Wagner Group.⁸⁸

Hong Kong has also served as a transshipment hub for advanced microelectronic components to Russia, circumventing sanctions.⁸⁹ According to the Free Russia Foundation, a DC-based prodemocracy group, Hong Kong doubled its exports of semiconductors and integrated circuits to Russia to around \$400 million in 2022, making it second only to mainland China in the value of trade with Russia in these products.⁹⁰ Brian Kot, a research assistant at the Carnegie Endowment for International Peace, noted that Hong Kong's participation in sanctions busting is a "direct consequence of Hong Kong's increased subservience to China," with Hong Kong's Chief Executive John Lee following Beijing's refusal to recognize U.S. sanctions placed on Russia.⁹¹ Despite U.S. technology companies halting direct sales to Russia in order to stay compliant with sanctions requirements, smaller Hong Kong traders, including one-man operations and recently established businesses, have sent shipments of U.S. chip supplies to Russia.*⁹² One example is Agu Information Technology, a new Hong Kong-based distributor established in April 2022 that sold \$18.7 million worth of Intel semiconductors to Russia.⁹³ Japanese-made chips have also been exported to Russia via Hong Kong.⁹⁴ For instance, in October 2022, 4,000 semiconductors made by Japan's Kioxia Holdings were sent to a Russian company through a Hong Kong-based trading company.⁹⁵

China's Energy Imports and Currency Provide Economic Lifeline to Russia

China has also continued to provide an economic lifeline to the Kremlin through its imports of Russian oil and gas as well as its exports of automobiles, electronics, and semiconductors to Russia.⁹⁶ As a result of this broader economic sustainment of Russia, the renminbi's (RMB) prevalence in the Russian economy has grown.⁹⁷ (For more on China's economic support to Russia, see Chapter 3, Section 2, "Fiscal, Financial, and Debt Problems Weigh Down Beijing's Ambitions.") This support has allowed the Kremlin to sidestep sanctions and export controls by the United States and its allies and partners, blunting their effectiveness.⁹⁸ China's ability to buy cheap overland fossil fuel commodities from Russia has also reduced Beijing's vulnerability to a blockade on its extensive oil imports that transverse the Strait of Malacca.⁹⁹

*In mid-June, officials from the U.S. Department of the Treasury asked Hong Kong banks and regulators for assistance in identifying U.S. high-tech items like semiconductors being transferred to Russia. Echo Wong and Pak Yiu, "U.S. Treasury Warned Hong Kong Banks on Tech Exports to Russia," *Nikkei Asia*, July 6, 2023.

The June 2023 Wagner Incident: Implications for Chinese Leadership

The Wagner Group's direct challenge to the Russian leadership in June 2023 not only underscored the fragility of President Putin's power but also reinforced long-held beliefs within the CCP about the importance of controlling the military and private security companies within China.¹⁰⁰ From June 23 to 24, chief of the Russian private military company Wagner Group Yevgeny Prigozhin* led an armored convoy toward Moscow in what some commentators called an "attempted coup" or "mutiny."¹⁰¹ Several foreign observers assessing the Wagner incident in the weeks following argued that a similar military insurrection would never have been possible in China due to the recent changes in structure and policy that strengthened CCP control over the PLA.¹⁰² Chinese analysts argued that private military companies could eventually pose a threat to CCP leadership if left unchecked, however.¹⁰³ Zhao Long, a senior research fellow at the Chinese state-backed think tank Shanghai Institutes for International Studies, argued in an analysis of the Wagner incident that China should be wary of companies like Wagner Group because "allowing such organizations to grow bigger and stronger, [as well as] ignoring their coordination with traditional military organizations, may lead to infighting and eventually [lead to] civil strife."¹⁰⁴ (For more on China's private security companies, see "Chinese State-Owned Security Companies Could Increase Presence in Africa" later in this section.)

Following the Wagner incident, China's propaganda apparatus emphasized the importance of the CCP's control over the military while simultaneously limiting online public discussion about potential uprisings at home.¹⁰⁵ During the weekend of the Wagner incident, a *Weibo* account run by the PLA made a post about Mao's revamp of the military in 1927 ensuring CCP control over the military.¹⁰⁶ In a June 2023 article posted the day after the Wagner Group halted its march toward Moscow, the *PLA Daily* also praised the political commissar system as "irreplaceable" in guaranteeing the CCP's leadership over the military.¹⁰⁷ An analysis from the U.S.-based nonprofit China Digital Times found that Chinese authorities censored search queries involving the phrase "eliminating the Emperor's cronies," a term dating to the Han Dynasty that describes coups or uprisings, on the social media site *Weibo* following the Wagner incident.¹⁰⁸ Some social media users speculated that the censorship reflected the Chinese lead-

*Prigozhin began his foray into politics in the 1990s with a career in the restaurant industry after serving nine years in prison for crimes ranging from robbery to fraud. Around this time, Prigozhin met future Russian President Vladimir Putin when the latter was a top aide to the mayor of St. Petersburg. Prigozhin obtained major state contracts by leveraging his political connections, earning him the nickname of "Putin's Chef." Prigozhin established the Wagner Group in 2014, which operates in support of Moscow's allies in Syria, Libya, and the Central African Republic. In February 2022, the Wagner Group joined Russia's war effort against Ukraine and led Russia's assault against the Ukrainian city of Bakhmut. Facing heavy losses of Wagner forces during the war, Prigozhin criticized Russia's military leadership for incompetence and treason and subsequently launched an ultimately-aborted attempt to march on Moscow in June 2023. Mark Trevelyan, "Who Is Yevgeny Prigozhin, the Wagner Mercenary Chief?" *Reuters*, August 24, 2023; *Reuters*, "Surrounded by Corpses, Wagner's Prigozhin Blasts Russian Defence Minister in Expletive-laden Video," May 5, 2023.

The June 2023 Wagner Incident: Implications for Chinese Leadership—*Continued*

ership's "deep-seated fears about similar challenges to its own power base."¹⁰⁹

Following Prigozhin's death in a plane crash which some experts speculated was carried out at the behest of the Kremlin,* Chinese commentators contemplated the potential implications of his death for the Wagner Group's future and Russia's war in Ukraine.¹¹⁰ Freelance writer Chen Feng wrote in *Guancha*, a Chinese state media outlet, that Prigozhin's death "is a relief for Poland, Lithuania, Latvia, Estonia and even NATO," adding that "the confrontation with Russia will continue, but the unpredictable and uncontrollable factors brought by Prigozhin and Wagner are greatly reduced."¹¹¹ Mr. Chen notes, however, that Wagner's new leadership will likely be easier for the Kremlin to control, which will benefit President Putin.¹¹² Military analyst Song Zhongping of the *Global Times*, a state-run tabloid, claimed that the United States and its allies were seeking to discredit Putin and undermine Russia's "internal unity and stability" by assessing that he may have been responsible for Prigozhin's death, portraying these assessments as part of a broader "cognitive and information warfare" campaign.¹¹³

Chinese-Russian Coordination in the Indo-Pacific and Beyond

China and Russia coordinate on security issues beyond the war in Ukraine. Notable examples include rhetorical alignment on China's claims over Taiwan, joint military exercises in the Indo-Pacific, and ostensibly scientific activities in the polar regions.

Russian Support for China's Claims on Taiwan

Russia is increasingly willing to provide rhetorical support to China on the Taiwan issue, raising the question of whether those words could eventually evolve into material and operational support for a Chinese war of aggression against the island.¹¹⁴ (For more on China's approach to Taiwan in 2023, see Chapter 5, Section 2, "Taiwan.") In March 2023, President Putin made an unprecedented commitment to Xi, stating that Russia "reaffirms its adherence to the One China principle, recognizes Taiwan as an inalienable part of Chinese territory, opposes any form of 'Taiwan independence,' and firmly supports China's measures to safeguard its sovereignty and territorial integrity."¹¹⁵ Previous Russian statements only noted that the Kremlin respected the One China principle and opposed Taiwan independence but did not express full-throated support for China's actions toward Taiwan.¹¹⁶ In April 2023, Russia further condoned Chinese aggressive behavior toward Taiwan, when Kremlin

*U.S. intelligence officials assessed in a preliminary intelligence report that an explosive device or bomb may have caused the crash, as there was no evidence of a surface-to-air weapon or missile launch directed at the plane based on satellite intelligence. The officials, speaking on the condition of anonymity, stated that it was likely that Putin approved the assassination. Jennifer Jacobs and Alex Wickman, "Russia Rejects US Claims Putin Likely Approved Prigozhin Killing," *Bloomberg*, August 24, 2023; Julian E. Barnes et al., "Blast Likely Downed Jet and Killed Prigozhin, U.S. Officials Say," *New York Times*, August 24, 2023.

Spokesman Dmitry Peskov defended the large-scale military exercises China conducted around Taiwan after Taiwan President Tsai Ing-wen's meeting with then U.S. Speaker of the House Kevin McCarthy in the United States.¹¹⁷ Mr. Peskov asserted that Beijing had the "sovereign right" to respond to "repeated actions that have been provocative toward the People's Republic of China."¹¹⁸ According to Alexander Gabuev, director of the Carnegie Russia Eurasia Center in Berlin, the leverage Beijing is currently gaining over Moscow as a result of the war in Ukraine may also lead to increased Russian sharing of designs and technology for advanced weapons systems over time.¹¹⁹ "This is material support for China's Taiwan policy that's not advertised," Mr. Gabuev observed.¹²⁰

Joint Strategic Bomber Patrols in the Indo-Pacific

China and Russia continued strategic bomber patrols with nuclear-capable aircraft in the Indo-Pacific, demonstrating their deepening military collaboration and collective might to nearby countries.*¹²¹ In November 2022, Chinese H-6K bombers, Russian Tu-95 bombers, and Russian Su-35 fighters flew an eight-hour mission over the Sea of Japan and East China Sea.¹²² During the drill, Russia and China landed their bombers at one another's bases, a first for both militaries.¹²³ The patrols prompted Japan and South Korea to quickly scramble their aircraft in response, and Japan expressed its "severe concerns" with China and Russia's joint air force activities near Japan's territory.[†]¹²⁴ In June 2023, China and Russia again sent H-6 and Tu-95 bombers to the Sea of Japan and East China Sea for two days, prompting Korea and Japan to scramble aircraft and for Japan to again lodge protests.¹²⁵

Scientific and Economic Projects with Russia Could Give China Strategic Advantages in the Polar Regions

Beijing is also leveraging scientific and economic cooperation with Russia to make further inroads in the polar regions.¹²⁶ During Xi's March 2023 state visit to Moscow, he and President Putin agreed to "continue to deepen practical cooperation in polar scientific research," an area in which Russia had previously limited in its interactions with China.¹²⁷ With China's prospects of expanding its presence in the Arctic through collaboration with the Nordic countries shrinking due to deteriorating geopolitical circumstances, Russia is becoming an increasingly important partner in accessing the region.¹²⁸ At the same time, the Kremlin's diplomatic exclusion from the Arctic Council has left Russia in a position where Beijing is its best option for serving as a collaborator.¹²⁹ For example, during

*China and Russia previously carried out joint strategic bomber patrols in 2019, 2020, and 2021. Wang Qi, "Chinese, Russian Bombers Hold Joint Patrol, Safeguarding World Strategic Stability amid Western Provocations," *Global Times*, November 19, 2021; Justin McCurry, "Japan and South Korea Scramble Jets to Track Russian and Chinese Bomber Patrol," *Guardian*, December 22, 2020; Franz-Stefan Gady, "China, Russia Conduct First Ever Joint Strategic Bomber Patrol Flights in Indo-Pacific Region," *Diplomat*, July 23, 2019.

†In April 2023, Japan published a revised version of the "Basic Plan on Ocean Policy," citing Beijing and Moscow's joint naval exercises as a reason for Japan's national interests being "under greater threat than ever before." The following month, then Japanese Foreign Minister Yoshimasa Hayashi expressed additional concern over China and Russia "strengthening their military collaboration," including joint flights and naval exercises. David Keyton and Karl Ritter, "China and Russia are Increasing Their Military Collaboration, Japan's Foreign Minister Warns," *Associated Press*, May 13, 2023; *Kyodo News*, "Japan Wary of China, Russia Military Presence in Updated Ocean Policy," April 28, 2023.

Putin and Xi's March 2023 state visit, Russia demonstrated further willingness to accommodate China in the region by agreeing to create a joint working body focused on the development of the Northern Sea Route, which stretches across Russia's northern coastline from the Kara Strait through the Arctic Ocean to Providence Bay (in northeastern Siberia) and serves as the shortest shipping route between East Asia and Europe.¹³⁰ The China Coast Guard (CCG) and the Russian Federal Security Service also signed a memorandum of understanding (MOU) regarding maritime cooperation in April 2023 during a meeting in the Russian city of Murmansk, located within the Arctic Circle.¹³¹ Although the details of the memorandum were not publicly announced, experts assess it may open the door to deeper security cooperation in the Arctic region.¹³²

Russia and China have publicly described their cooperation as civilian research expeditions and attempted to open a joint scientific research base in the Arctic, but recent cooperation between Russian and Chinese scientists on applications relevant to anti-submarine warfare has raised concerns that this purportedly scientific cooperation in fact has military applications.¹³³ According to the White House's national strategy for the Arctic published in October 2022, China's scientific engagements in the region are used for "dual-use research with intelligence or military applications."¹³⁴ Sarah Kirchner, head of Asia-Pacific Strategy and Security at the Institute for Security Policy at Kiel University, noted in testimony before the Commission that intense research collaboration between Chinese research and development (R&D) institutions with military ties, such as Harbin Engineering University, and Russian counterparts on hydroacoustics communication and fiberoptic hydrophone development in Arctic waters for use under the ice.¹³⁵ These research topics have clear applications for anti-submarine warfare.¹³⁶

China has also made several investments in Russian commodities operations in the Arctic that may someday translate into strategic access for Beijing.¹³⁷ In 2019, the Chinese Academy of Sciences and Fuzhou University conducted a study to identify the Russian ports along the Northern Sea Route that have significant potential for facilitating Chinese access to the region.¹³⁸ An April 2023 report by CSIS found that major Chinese firms have in fact been investing in Russian ports in and around the Arctic Circle for years, including the Chinese state-owned Poly Group's \$300 million investment into a coal terminal in the city of Murmansk and commitment to develop a deep-water port at Arkhangelsk in 2016.¹³⁹ Chinese firms and financiers have also made investments in liquefied natural gas and quartz deposits near the Arctic Circle.¹⁴⁰

China-Russia Collaboration in Artificial Intelligence

China may exploit new opportunities to attract talent in the field of artificial intelligence (AI) due to the exodus of technology workers from Russia amid the war in Ukraine as well as the Russian govern-

*China and Russia began dialogues on Arctic cooperation over a decade ago, but the Kremlin initially had attempted to limit Beijing's presence in the region by trying to prevent its membership in the Arctic Council and prohibiting its research vessels from transiting through the Northern Sea Route. Russia may have been apprehensive about a Chinese presence in the Arctic due to Moscow's placement of strategic assets there, ranging from ballistic missiles to advanced radar arrays. For more, see Matthew P. Funaiolo et al., "Frozen Frontiers: China's Great Power Ambitions in the Polar Regions," *Center for Strategic and International Studies*, April 18, 2023.

ment's stifling of domestic AI R&D.¹⁴¹ Both Xi and Putin view AI as a critical technology for geopolitical power.¹⁴² Although it is unclear how many went to China to seek employment, around 100,000 information technology specialists left Russia in 2022, constituting at least 10 percent of the country's technology workforce.*¹⁴³ In 2021, a Russian government poll assessing the level of confidence in the Kremlin's AI efforts demonstrated that only 64 percent of domestic AI specialists were content with their working conditions.¹⁴⁴ According to the poll, Russia's personnel shortages and a weak venture capital market, among other issues, caused AI development within the country to lag.¹⁴⁵ According to Samuel Bendett, an adjunct senior fellow at the Center for a New American Security (CNAS) and adviser at the Center for Naval Analyses, the Kremlin's plans to address these issues were paused in 2022 following its invasion of Ukraine.¹⁴⁶ The invasion led to the rapid pull-out of major information technology and high-tech companies from Russia, brain drain, and sanctions on advanced technology components that may weaken Russia's domestic AI research and development for years to come.¹⁴⁷ John Lee, the director of East West Futures Consulting, assessed that in the fields of AI and software development before the war, Chinese firms were "attracted by Russia's capable research institutions and skilled labor pool, while the prospect of access to PRC markets attracted Russian partners" and noted that despite ongoing sanctions against the Kremlin, the Chinese will likely try to leverage Russian talent "in software fields that cannot yet be adequately serviced by the PRC's domestic labor force and existing corporate expertise."¹⁴⁸ Prior to 2022, China and Russia's AI collaboration was expanding, with 14 times as many AI-related publications coauthored by Chinese and Russian researchers published in 2019 compared to 2010 and, despite fluctuations in the interim, an overall increase of China-Russia AI investments from \$182 million in 2016 to \$300 million in January 2021.¹⁴⁹

North Korea's Weapons Deal with Russia May Complement China's Material Support for the War against Ukraine

North Korean leader Kim Jong Un's weapons deal with Putin may complement Beijing's effort to materially support Russia's war in Ukraine, but it is unclear whether such an agreement would have a decisive impact on the war effort.† Kim's tour of Russian military facilities in September 2023 and remarks by Putin expressing openness to military cooperation gave rise to speculation that North Korea may provide ammunition and artillery shells to Russia in ex-

*The *New York Times* noted in April 2022 that in the weeks following Russia's invasion of Ukraine, thousands of Russian tech workers fled to Armenia, Georgia, Turkey, the United Arab Emirates, and other countries. Cade Metz and Adam Satariano, "Russian Tech Industry Faces 'Brain Drain' as Workers Flee," *New York Times*, April 13, 2022.

†Cooperation between the three countries has also appeared to increase in recent months. In July 2023, North Korea invited delegations of Chinese and Russian officials to Pyongyang to celebrate the 70th anniversary of the armistice of the Korean War. The following month, Moscow proposed that China, Russia, and North Korea participate in joint naval exercises, which would be a first for Pyongyang, and North Korea hosted Chinese and Russian delegates for a second time during the 75th anniversary of the country's founding. Kim Tong-Hyung, "Kim Jong Un hosts Chinese and Russian Guests at a Parade Celebrating North Korea's 75th Anniversary," *Associated Press*, September 9, 2023; Christian Davies, "Russia Proposes Joint Naval Drills with North Korea and China," *Financial Times*, September 4, 2023; Brad Lendon and Gawon Bae, "North Korea, China and Russia Commemorate 'Victory' 70 Years Ago, While Aligning on Ukraine," *CNN*, July 27, 2023.

change for missile and space technologies.¹⁵⁰ General Mark Milley, then chairman of the Joint Chiefs of Staff, predicted after the meeting that North Korea would provide Moscow with Soviet-era 152mm artillery rounds, although it remained unclear how many rounds would be transferred or how soon the transfer would take place.¹⁵¹ General Milley told reporters he was “skeptical” North Korea’s material assistance to Russia would make a significant impact on the outcome of the war.¹⁵² In October 2023, *CBS News* reported that a U.S. official confirmed Pyongyang was sending artillery to the Kremlin, but it did not specify the quantity or type of rounds.¹⁵³ By contrast, Bruce W. Bennett, a professor at the Pardee RAND Graduate School, argued that the combination of North Korean and Chinese material support could “prolong the war” and “substantially increase the damage inflicted.”¹⁵⁴ Yun Sun, the director of the China program at the Stimson Center, observed that even though Pyongyang’s transfer of military technology to the Kremlin would destabilize the region, “China will turn the table and blame the U.S. and its allies for pushing both Russia and North Korea in a corner. This reinforces China’s opposition to the ‘Asian NATO’ it sees [the] U.S. as orchestrating.”¹⁵⁵

China Selectively Responds to U.S. Engagement while Blaming It for Tensions

China selectively responded to U.S. engagement efforts intended to reduce tensions in 2023, likely for the purpose of preserving its access to foreign technology, markets, and financing.¹⁵⁶ It did so without offering meaningful concessions and while blaming the United States for all problems in the relationship.¹⁵⁷ The U.S.-China relationship was strained at the end of 2022 due to what the United States and its allies saw as Chinese provocations in the Taiwan Strait and South China Sea as well as China’s support throughout the year of Russia’s ongoing invasion of Ukraine.¹⁵⁸ Even so, the November 2022 meeting between U.S. President Joe Biden* and General Secretary Xi on the sidelines of the G-20 Summit in Indonesia culminated in an agreement that U.S. Secretary of State Antony Blinken would visit China in early 2023, creating initial prospects for an improvement in the relationship.[†]¹⁵⁹ These diplomatic efforts at rapprochement were quickly derailed by the discovery of a Chinese surveillance balloon transiting over the United States, resulting in the postponement of Secretary Blinken’s trip and other high-level

*According to a readout released by the White House, President Biden emphasized that United States and China must manage competition responsibly and maintain open lines of communication. He also underscored areas where the United States and China could work together to address transnational challenges such as climate change and global macroeconomic stability (debt relief, health security, and global food security). President Biden also raised concerns about Taiwan, Xinjiang, Tibet, Hong Kong, human rights, the Democratic People’s Republic of Korea, and Russia’s brutal war against Ukraine. White House, *Readout of President Joe Biden’s Meeting with President Xi Jinping of the People’s Republic of China*, November 15, 2022.

†On November 22, 2022, a week after President Biden’s meeting with Xi, U.S. Secretary of Defense Lloyd J. Austin III met with China’s then Minister of National Defense General Wei Fenghe on the margins of the ASEAN Defense Minister’s Meeting-Plus (ADMM-Plus) in Cambodia. This was the first senior-level defense meeting with China since China canceled military-to-military talks following then Speaker of the House Nancy Pelosi’s visit to Taiwan. U.S. Department of Defense, *Readout of Secretary of Defense Lloyd J. Austin III’s Meeting with People’s Republic of China (PRC) Minister of National Defense General Wei Fenghe*, November 22, 2022; *Reuters*, “Pentagon Chief Raises Concern about Beijing’s ‘Dangerous’ Behavior with Chinese Counterpart,” November 22, 2022.

el official exchanges for several months.*¹⁶⁰ Since then, China has hosted or participated in several meetings with U.S. officials, but it has approached these engagements in a transactional way while refusing to substantively discuss issues of concern to the U.S. side.¹⁶¹

China's Spy Balloon Program Publicly Reveals Global Reach of Surveillance Efforts

Although General Milley said publicly in September 2023 that the U.S. intelligence community ultimately concluded the Chinese spy balloon neither collected intelligence over the United States nor transmitted it back to China, the discovery of its transit over the country earlier in the year shed light on the extent of China's global balloon surveillance program.¹⁶² In February, the U.S. Department of Defense (DOD) stated that the Chinese surveillance balloon seen flying across the United States was a part of larger global Chinese surveillance program using high-altitude balloons.¹⁶³ According to DOD, over the past several years, Chinese balloons have been spotted operating over South America, East Asia (including Japan and Taiwan), and Europe.¹⁶⁴ China's balloons are reportedly capable of gathering signals intelligence, allowing it to collect large amounts of communications and data on targets below.¹⁶⁵ Balloons allow China to operate more stealthily because they move with wind patterns rather than the fixed—and thus more predictable—patterns of satellites.¹⁶⁶ Balloons also allow China to gather clearer images because they are able to hover above a target for extended periods of time, unlike a satellite that is in constant motion.[†]¹⁶⁷ According to a former senior U.S. intelligence officer, China's balloon program may also supplement the data collection of its satellite networks by providing information on atmospheric conditions and communications that are only accessible at lower altitudes.¹⁶⁸ This information could assist China in improving and expanding its missile, naval, and air operations.¹⁶⁹

*On January 28, 2023, a PLA surveillance balloon was detected entering U.S. airspace over Alaska after transiting the Pacific Ocean from its launch base in Hainan, China. While Chinese authorities claimed the balloon was a non-military "weather balloon," DOD determined that China's high-altitude balloon program was intended for intelligence collection. The balloon's trajectory took it over Alaska, Canada, and the continental United States, passing close to a number of sensitive U.S. military sites, including those known to host U.S. intercontinental ballistic missiles. President Biden authorized DOD to neutralize the balloon, and an U.S. Air Force F-22 Raptor subsequently shot down the balloon off the coast of South Carolina on February 4. In the hours after the downing, PLA leadership reportedly refused outreach by Defense Secretary Austin on a crisis hotline between the two militaries, reflecting a lack of interest in mitigating the crisis. The incident prompted Secretary Blinken to postpone his planned trip to China, and President Biden described the incident as an "unacceptable" violation of U.S. sovereignty. Ellen Nakashima, Shane Harris, and Jason Samenow, "U.S. Tracked China Spy Balloon from Launch on Hainan Island along Unusual Path," *Washington Post*, February 14, 2023; David Vergun, "Chinese Surveillance Balloons Global in Scope, Says Official," *U.S. Department of Defense*, February 13, 2023; Ellen Knickmeyer and *Associated Press*, "U.S. Military Called China on a Crisis Hotline During the Spy Balloon Crisis but Chinese Officials Refused to Talk: 'That's Really Dangerous,'" *Fortune*, February 10, 2023; Matthew Lee, "Chinese Balloon Soars Across US; Blinken Scraps Beijing Trip," *AP News*, February 3, 2023.

†According to Brian Weeden, director of program planning for Secure World Foundation, balloons can capture images of targets at a "much closer distance and can dwell over an area for a longer time than low Earth orbiting satellites." By contrast, a small constellation of satellites in orbit would be required to capture images of a single area consistently from space. Moreover, a balloon's ability to loiter complicates efforts an adversary might take to protect against intelligence collection, because a balloon's trajectory is less predictable than that of Earth orbiting satellites. Theresa Hitchens, "Balloons vs. Satellites: Popping Some Misconceptions about Capability and Legality," *Breaking Defense*, February 7, 2023; Courtney Albion, "Why Stratospheric Balloons Are Used In Era of Space-Based Intelligence," *CAISRNET*, February 6, 2023.

China Entertains Limited Engagement with the United States

In the aftermath of the spy balloon incident, China engaged with U.S. officials in areas where it had clear economic or strategic interests.¹⁷⁰ U.S. Commerce Secretary Gina Raimondo met with her Chinese counterpart in Washington, DC at the end of May 2023, where they discussed U.S. economic and trade policies of interest to Beijing, including China's concerns over the United States' semiconductor policies, export controls, and foreign investment review.¹⁷¹ The same month, Central Intelligence Agency (CIA) Director William Burns made a secret trip to Beijing, where he met with Chinese officials to emphasize maintaining open lines of communication in intelligence channels, since Beijing had unilaterally broken off most regular calls between senior intelligence officials after the downing of the balloon.¹⁷² Secretary Blinken visited Beijing in June 2023—the first trip by a U.S. secretary of state to China in five years.¹⁷³ U.S. Department of the Treasury Secretary Janet Yellen and the president's special envoy for climate John Kerry both visited China in July 2023.¹⁷⁴ Secretary Blinken's visit included discussion of issues that are strategically important to China, such as Taiwan, U.S. de-risking policies, and global macroeconomic stability; it also resulted in a commitment to work toward increasing the number of commercial flights, and produced an invitation to then Foreign Minister Qin to visit the United States, which he accepted.¹⁷⁵ The meeting with Secretary Yellen reportedly involved discussion of cooperation to stabilize the macro-economy, as well as climate finance and debt distress in low-income and emerging economies.¹⁷⁶

Secretary Raimondo traveled to Beijing in late August 2023, just weeks after the release of a U.S. executive order addressing regulating U.S. investments in certain national security technologies and products in China.¹⁷⁷ (For more on the implications of the executive order, see Chapter 1, Section 1, "U.S.-China Bilateral and China's External Economic and Trade Relations.") During Secretary Raimondo's visit, China and the United States agreed to establish a commercial issues working group to help both sides solve investment and trade issues, with the United States set to host the first meeting in 2024 and subsequent meetings taking place twice a year.¹⁷⁸ The working group will comprise public and private sector leaders from the United States and China.¹⁷⁹ The two sides also reached an agreement to create an export control enforcement information exchange, which will serve as a platform to reduce misunderstandings and ensure clarity of the United States' expectations on national security.¹⁸⁰ Both countries also agreed to allow subject matter experts to participate in discussions during administrative licensing proceedings that involve sensitive business information and trade secrets.¹⁸¹

China Refuses to Accept Responsibility for Bilateral Tensions

China continues to absolve itself of any responsibility for the problems in the bilateral relationship with the United States, placing the onus of improving ties entirely on the United States.¹⁸² While U.S. officials have consistently called for open channels of communication to ensure competition does not veer into conflict, China has used public and private engagements, as well as its propaganda

system, to promote its narrative that the United States is to blame and should acquiesce to China's demands for the sake of improving relations.¹⁸³

At the same time, China has continued to reject U.S. requests for top-level defense talks and the restoration of military communication channels to delay cooperation on curbing the flow of fentanyl precursors from China into the United States and to engage in unprofessional and dangerous military behavior in the Indo-Pacific region. Then Defense Minister General Li Shangfu, who is currently under investigation for corruption, refused to meet with U.S. Secretary of Defense Lloyd Austin at the Shangri-La Dialogue in Singapore in June 2023 due to the Chinese side's insistence that sanctions on Li be lifted before any talks.*¹⁸⁴ Also in June, China reportedly rebuffed Secretary Blinken's calls to restore military-to-military communication, which China had unilaterally severed after then Speaker of the U.S. House of Representatives Nancy Pelosi's visit to Taiwan in 2022.¹⁸⁵ China has also been unresponsive to U.S. calls to cooperate more closely on fentanyl trafficking after it unilaterally canceled talks on the issue following then Speaker Pelosi's visit, saying the United States should instead respond to the crisis by fixing its own societal problems and examining the role of pharmaceutical companies.¹⁸⁶ Although the United States invited China to participate in the first meeting of a global coalition of countries convened to crack down on synthetic drug trafficking in July, China did not respond or attend.[†]¹⁸⁷ Finally, China continued to reject U.S. complaints that the PLA has carried out "unsafe and unprofessional" intercepts of U.S. naval vessels and aircraft in the South China Sea and the Taiwan Strait.[‡]¹⁸⁸ During the 2023 Shangri-La

*On September 20, 2018, the United States imposed sanctions on Li, then the director of the CMC Equipment Development Department, for engaging in significant transactions with persons listed under the Countering America's Adversaries Through Sanctions Act (CAATSA). According to a fact sheet published by the State Department, the transactions involved "Russia's transfer to China of Su-35 combat aircraft and S-400 surface-to-air missile system-related equipment." A State Department spokesperson clarified that Secretary Austin "is able to engage in official United States government business" with Li, despite the sanctions. Nike Ching, "U.S.: Sanctions on China's New Defense Chief Not a Hurdle for Military Talks," *Voice of America*, March 20, 2023; U.S. Department of State, *CAATSA Section 231: Addition of 33 Entities and Individuals to the List of Specified Persons and Imposition of Sanctions on the Equipment Development Department*, September 20, 2018.

†The U.S. Department of the Treasury's Office of Foreign Assets Control designated 12 entities and 13 individuals based in China for the international proliferation of illicit drugs in October 2023. The China-based network was found responsible for manufacturing and distributing "ton quantities" of fentanyl, methamphetamine, and MDMA precursors. The first charges against China-based companies and Chinese nationals occurred on June 23, 2023, when the U.S. Justice Department announced the first prosecutions to charge four China-based precursor chemical manufacturing companies and their employees with crimes related to fentanyl production, distribution, and sales resulting from precursor chemicals. U.S. Department of the Treasury, *Treasury Targets Large Chinese Network of Illicit Drug Producers*, October 3, 2023; U.S. Department of Justice, *Justice Department Announces Charges against China-Based Chemical Manufacturing Companies and Arrests of Executives in Fentanyl Manufacturing*, June 23, 2023.

‡According to a press release issued by DOD in June 2023, there has been an "alarming increase" in the number of intercepts and confrontations in the region. For instance, in December 2022, DOD reported that a Chinese Navy J-11 pilot flew 20 feet next to the nose of a U.S. Air Force RC-135, forcing the U.S. pilot to maneuver away from the PLA Air Force pilot to prevent a collision. A similar incident occurred in May 2023. In March 2023, China made threats to the United States after a U.S. Navy destroyer sailed through disputed waters near the Paracel Islands for two days in a row. In June 2023, DOD released video of a Chinese warship cutting off the U.S. destroyer *USS Chung-Hoon* in the Taiwan Strait, nearly causing a collision after coming within 150 yards of the U.S. ship. Jim Garamone, "Defense Leaders See Increase in Risky Chinese Intercepts," *DOD News*, June 8, 2023; Igor Patrick, "US Military Slams Chinese Warship's 'Unsafe and Unprofessional' Maneuvers in Taiwan Strait," *South China Morning Post*, June 6, 2023; David Rising, "China Threatens Consequences over US Warship's Actions," *Associated Press*, March 24, 2023.

Dialogue, in response to an audience question regarding unprofessional operational behavior, then Defense Minister General Li hit back at the United States, claiming that “foreign vessels and fighter jets com[ing] into areas near [China’s] territory” are “not here for innocent passage” but are “here for provocation.”¹⁸⁹

China Seeks to Shape Global Governance, Mediate Global Conflicts

China seeks to influence global governance organizations to benefit CCP interests. It does so by promoting new initiatives that aspire to rework the norms underpinning global institutions, attempting to change the way existing institutions work, and inserting itself into attempts to mediate active world conflicts.

China Promotes Xi’s Global Initiatives as Solutions to World’s Problems

Beijing continues to promote three mutually reinforcing foreign policy initiatives: the Global Development Initiative, Global Security Initiative, and Global Civilization Initiative. Each is aimed at reshaping global governance in ways amenable to CCP interests. Now featuring prominently in China’s new Foreign Relations Law, the three initiatives establish a blueprint for constructing a new global governance system to replace the rules-based international order led by the United States and its allies.¹⁹⁰ In the proposed system, China would play a leading role in international affairs, other states and international organizations would respect and potentially even emulate China’s authoritarian Party-state system, and universal values such as human rights and democracy would no longer be upheld as a standard for international behavior.¹⁹¹ While advancing this objective, China’s leadership aims to gain recognition for contributing solutions to global problems.¹⁹² The details of China’s agenda for these three interrelated initiatives remain amorphous as China’s government institutions continue to flesh out the initiatives via leadership speeches, Chinese state media commentary, and other avenues.

The Global Development Initiative aims to promote China’s leadership in the international development sphere.¹⁹³ Xi introduced the initiative on September 21, 2021, in a speech before the UN General Assembly.¹⁹⁴ The initiative has been strategically promoted in association with the UN’s 2030 Sustainable Development Goals, allowing China to project an image of itself as a positive contributor to international economic stability and sustainability.¹⁹⁵ China has also established a forum at the UN called the “Group of Friends of the Global Development Initiative” to discuss the agenda and implementation of the initiative.¹⁹⁶ Implementation of projects associated with the initiative has reportedly been occurring jointly between the China International Development Cooperation Agency (CIDCA),* China’s Minister of Commerce, and various ASEAN and UN agencies.¹⁹⁷ (For more on the development of the Global Development

*As stated by Chairman of the CIDCA, Luo Zhaohui, CIDCA manages China’s foreign aid and international development cooperation and is in charge of coordinating Global Development Initiative projects. Luo Zhaohui, “GDI Contributes to UN Development Goals,” *China Daily*, April 26, 2023.

Initiative in 2023, see Chapter 1, Section 1, “U.S.-China Bilateral and China’s External Economic and Trade Relations.”)

The Global Security Initiative aims to establish China as a leader of global security affairs.* Xi introduced the Global Security Initiative in a speech at the Boao Forum for Asia† on April 21, 2022, in Hainan, China.¹⁹⁸ China presents the Global Security Initiative as a framework that is applicable worldwide and able to address a wide range of traditional and nontraditional security challenges.‡¹⁹⁹ Through the Global Security Initiative, China’s leaders hope to undermine U.S. leadership in international security affairs, establish a role for China in mediating international conflicts, and normalize its selective application of its stated principle of “non-interference.”²⁰⁰ The Global Security Initiative has been a constant theme in China’s diplomacy in 2023, with leaders invoking the initiative in remarks at high-profile events, such as the Shangri-La Dialogue and the G20 Foreign Ministers Meeting, and careful integration of the concept into China’s other major diplomatic efforts.§²⁰¹ In February 2023, China released a Global Security Initiative Concept Paper elaborating on the initiative and laying out plans for its further implementation worldwide.²⁰² The concept paper specifically identifies the Shanghai Cooperation Organization (SCO), BRICS (Brazil, Russia, India, China, South Africa) Cooperation, the China-Africa Peace and Security Forum, the Middle East Security Forum, the Beijing Xiangshan Forum, and the Global Public Security Cooperation Forum¶ as organizations that could promote Global Security Initiative principles.²⁰³

The Global Civilization Initiative focuses mainly on governance and aims to promote China’s leadership in international political affairs. Xi introduced the Global Civilization Initiative in a speech

*For more on the introduction and key objectives of the Global Security Initiative, see U.S.-China Economic and Security Review Commission, Chapter 3, Section 1, “Year in Review: Security and Foreign Affairs,” in *2022 Annual Report to Congress*, November 2022, 368–370. For more on the Global Security Initiative as a case study of China’s foreign policy formulation process, see U.S.-China Economic and Security Review Commission, Chapter 1, “CCP Decision-Making and Xi Jinping’s Centralization of Authority,” in *2022 Annual Report to Congress*, November 2022, 65–67.

†The Boao Forum for Asia is an international organization created by China with a stated mission of promoting economic integration and advancing development in Asia. The forum is headquartered in the town of Boao in Hainan Province, China. *Boao Forum for Asia*, “About BFA,” 2021–2022.

‡For example, China’s Global Security Initiative Concept Paper identified 20 areas of cooperation that China will prioritize including addressing security challenges in ASEAN, the Middle East, Africa, Latin America and the Caribbean, and the Pacific Islands. According to the Concept Paper, issues pursued under the Global Security Initiative framework will reportedly include pursuing cooperation on transnational maritime issues, counterterrorism, information security, biosecurity, AI, outer space, food and energy security, law enforcement, and climate change. China’s Ministry of Foreign Affairs, *The Global Security Initiative Concept Paper*, February 21, 2023.

§China’s position paper on the war in Ukraine leaned heavily on talking points associated with the Global Security Initiative, and Chinese state media directly invoked the concept in connection to the peace deal between Iran and Saudi Arabia. Michael Schuman, Jonathan Fulton, and Tuvia Gering, “How Beijing’s Newest Global Initiatives Seek to Remake the World Order,” *Atlantic Council*, June 21, 2023; Kheir Diabat, “Security Initiative Works in Middle East,” *China Daily*, March 16, 2023; China’s Ministry of Foreign Affairs, *China’s Position on the Political Settlement of the Ukraine Crisis*, February 24, 2023.

¶The Global Public Security Cooperation Forum—commonly referred to by China as Lianyungang, after the name of the Chinese city where it is hosted—was established in 2015 by China’s Ministry of Public Security (MPS). According to Jordan Link, an independent researcher, at the Lianyungang Forum, “The MPS holds international convenings, trains foreign police officers, provides opportunities for information sharing, and promotes Chinese security technologies.” The forum has been attended by police and security sector officials from 30 to 40 countries annually and representatives from organizations such as Interpol and the SCO. Jordan Link, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China’s Military Diplomacy and Overseas Security Activities*, January 26, 2023, 6–7; Jordan Link, “The Expanding International Reach of China’s Police,” *Center for American Progress*, October 17, 2022.

at the CCP Dialogue with World Political Parties High-Level Meeting on March 15, 2023.²⁰⁴ Through the initiative, China's leadership seeks to normalize the concept of the relativity of values, undermining the idea that certain values such as democracy and human rights are universally applicable.²⁰⁵ According to Evan Ellis, a research professor of Latin American studies at the U.S. Army War College, "By promoting the relativism of values and arguing against calling out bad behavior and seeking to stop it, the concept appeals to regimes that desire to do what they wish, from criminality and repression at home to the ruthless invasion of their neighbors under the spurious mantle of 'legitimate security concerns.'"²⁰⁶ The concept also encourages ruling political parties to play a greater role in global governance worldwide.²⁰⁷ As the newest of the three initiatives, the Global Civilization Initiative remains the least developed in its implementation, but China's ambassadors abroad are actively promoting the concept through various channels such as op-eds and webinars.²⁰⁸

China Seeks to Burnish Image as Global Peacemaker

China pushed aggressively in 2023 to involve itself in conflict mediation efforts across the Middle East, Africa, and Europe, reflecting a desire for greater diplomatic prestige and aspirations to supplant the United States as the primary leader in global governance.²⁰⁹ These efforts included the following:

- *China claims credit for brokering Saudi-Iran deal:* In March 2023, China claimed to have brokered an agreement between Iran and Saudi Arabia to restore diplomatic relations, ending a seven-year dispute and fueling speculation that Beijing seeks to take up the U.S. mantle of peacemaker in the Middle East.*²¹⁰ Chinese officials were quick to hail China's role in the talks despite the fact they were initially facilitated by Iraq and Oman several years earlier.²¹¹ As of August 2023, Saudi Arabia and Iran had reopened their respective embassies, but other parts of the deal had not yet been implemented.²¹²
- *China offers to host talks to end Israel-Palestine conflict:* China also offered to mediate the conflict between Israelis and Palestinians in 2023.²¹³ In June, Xi put forward a three-point proposal for a two-state solution to the conflict during Palestinian Authority President Mahmoud Abbas's June visit to Beijing.²¹⁴

*In 2016, Saudi Arabia cut ties with Iran following an attack on its embassy in Tehran in response to Saudi Arabia's execution of the Saudi Shia cleric Sheikh Nimr al-Nimr, a prominent Saudi Shia opposition cleric. Over the next six years, distrust between the two countries continued despite a few attempts to establish dialogue. Analysts cite several major events between 2018 and 2021 that prevented the restoration of diplomatic relations: Saudi Arabia's opposition to Iran's nuclear and ballistic missile advances, the Kingdom's accusation that Iran was behind missile and drone attacks on Saudi Arabian oil facilities and tankers in 2019 (denied by Iran), and Yemen's Iran-aligned Houthi movement. Under the deal, Saudi Arabia and Iran will reportedly normalize diplomatic relations, re-open their respective embassies and missions, and implement two previously signed agreements related to security, economics, trade, technology, and cultural cooperation. United States Institute of Peace, "Timeline of Iran-Saudi Relations," September 20, 2023; Adam Gallagher, Sarhang Hamasaeed, and Garrett Nada, "What You Need to Know about China's Saudi-Iran Deal," *United States Institute of Peace*, March 16, 2023; Saeed Azimi, "The Story behind China's Role in the Iran-Saudi Deal," *Stimson Center*, March 13, 2023; China's Embassy to the Kingdom of Sweden, *Joint Trilateral Statement by the People's Republic of China, the Kingdom of Saudi Arabia, and the Islamic Republic of Iran*, March 10, 2023; Parisa Hafezi, Nayera Abdallah, and Aziz El Yaakoubi, "Iran and Saudi Arabia Agree to Resume Ties in Talks Brokered by China," *Reuters*, March 10, 2023.

This proposal was similar to a previous plan Beijing put forward in 2013, which had failed to gain traction among the parties.²¹⁵ Palestinians have been more receptive to the idea of China as a peace broker, with one survey finding that around 80 percent of Palestinians support China's facilitation of peace talks, but Israel is less likely to accept China playing such a role.*²¹⁶ There is no evidence China's offer was taken up by either side.²¹⁷

- *China offers to facilitate peace in Ethiopia:* China also sought to involve itself this year in efforts to implement a peace accord that was reached by the Ethiopian government and Tigray People's Liberation Front in November 2022.²¹⁸ In March 2023, China's special envoy for the Horn of Africa Xue Bing flew to Addis Ababa, Ethiopia, to meet with Ethiopian government officials to discuss the challenges that ongoing instability posed to the accord, slightly beating Secretary Blinken to the city for talks.²¹⁹ During his visit, Special Envoy Xue pandered to the Ethiopian government by describing the conflict as Ethiopia's internal affair and made a veiled criticism of the United States' sanctions on Ethiopia for human rights abuses by condemning "interference in other countries' sovereignty and domestic affairs in the name of humanitarianism and human rights."²²⁰ The same month, China undermined U.S. efforts to hold the Ethiopian government accountable for implementing all elements of the peace agreement by opening a new export market for Ethiopia and granting zero tariff treatment to 98 percent of tariff lines on products from Ethiopia.²²¹ The zero tariff treatment is likely to offer Ethiopia some benefits in further diversifying its exports.²²² Though given the outsized trade imbalance† between Ethiopia and China, the zero tariff treatment is a low-cost option for China to improve political relations with Ethiopia. China's announcement follows the United States' continued suspension of Ethiopia's duty-free access to the U.S. market under the Africa Growth and Opportunity Act (AGOA) trade preference program due to gross violations of internationally recognized human rights perpetrated by the government of Ethiopia.²²³
- *China postures as neutral mediator of Russia's war against Ukraine:* China's Ministry of Foreign Affairs released a position paper on Ukraine in February 2023 purporting to provide a neutral, 12-point political framework for settling the war while demonstrating China's capacity to be a global peacemaker.‡²²⁴

*Aspects of China's peace proposal, such as ceasing the development of settlement homes in the West Bank, are largely non-starters for Netanyahu's government, which has taken a firmer stance on land claims. Israeli ambassador to the United States Michael Herzog noted he does not believe China will successfully broker peace between Israel and Palestine, calling China's efforts a "political initiative" and suggesting that if peace talks were to begin again, he would expect the United States to be actively involved in the mediation. Jacob Magid, "Having Given Up on the US, Palestinians Look to China to Mediate Peace with Israel," *Times of Israel*, June 15, 2023; Liz Jassin, "China Won't Broker Israel-Palestine Peace: Michael Herzog," *News Nation*, April 25, 2023; Dan Williams, "Israel's Netanyahu Returns with Hard-Right Cabinet Set to Expand Settlements," *Reuters*, December 29, 2022.

†In 2021, China exported \$2.8 billion to Ethiopia, compared to the \$148 million Ethiopia exported to China. Observatory of Economic Complexity, "China and Ethiopia," <https://oec.world/en/profile/bilateral-country/chn/partner/eth>.

‡China's position on the political settlement of Russia's war against Ukraine included the following 12 points: (1) respecting the sovereignty of all countries, (2) abandoning the Cold War

The document repeated established Chinese talking points about the war, including Beijing's support for the UN Charter and territorial integrity, opposition to unilateral sanctions, and condemnation of any expansion of U.S.-led military alliances.²²⁵ The paper also placed the onus on "all parties" to resolve the conflict, rather than acknowledging Russia as the aggressor, and implicitly blamed Ukraine's allies for allegedly perpetuating a "Cold War mentality" that did not take into account Russia's "legitimate security interests."²²⁶ China's position paper provoked skepticism from Europe and the United States as well as a lukewarm reaction from Russia and Ukraine, consigning it to a position of irrelevance.²²⁷

China Continues to Make Inroads in Latin America and the Caribbean

China's efforts to increase its presence and influence in the Global South* are particularly visible in Latin America and the Caribbean. China continued its aggressive courtship of Latin American and Caribbean governments through diplomacy, investments in strategically valuable infrastructure, and space cooperation. These measures could ultimately lead to an expanded Chinese footprint in the region, including for the PLA.

China's Diplomacy Wins Friends, Support for Beijing's Initiatives

China's diplomacy toward Latin American and Caribbean countries in 2023 targeted countries of strategic value to Beijing while emphasizing its contributions to regional development, its alternative vision of the global order, and the benefits of breaking diplomatic ties with Taiwan.²²⁸ Between November 2022 and June 2023, Chinese leaders met with leaders from Argentina, Chile, Bolivia, Brazil, Barbados, and Honduras, reflecting a wide-ranging diplomatic approach to a region with historically deep U.S. influence.²²⁹ Notable meetings included the following:

- In November 2022, Argentinian President Alberto Fernández and General Secretary Xi met in Bali, Indonesia, on the margins of the G20 summit, where the Chinese leader expressed his desire to increase imports of Argentinian goods and promoted his global initiatives in the hope Argentina would support them.²³⁰ The meeting reflected China's strategic interests in deepening its ties with Argentina, which include diplomatic

mentality, (3) ceasing hostilities, (4) resuming peace talks, (5) resolving the humanitarian crisis, (6) protecting civilians and prisoners of war, (7) keeping nuclear power plants safe, (8) reducing strategic risks, (9) facilitating grain exports, (10) stopping unilateral sanctions, (11) keeping industrial and supply chains stable, and (12) promoting post-conflict reconstruction. China's Ministry of Foreign Affairs, *China's Position on the Political Settlement of the Ukraine Crisis*, February 24, 2023.

*According to Anne Garland Mahler, associate professor of Spanish at the University of Virginia, the term "Global South" is used in intergovernmental development organizations, especially those that originated from the Non-Aligned Movement, to describe economically disadvantaged nation-states and to offer a post-Cold War alternative to the "Third World." Authors Nour Dados and Raewyn Connell, faculty members at the University of Sydney, assert that the Global South encompasses the regions of Latin America, Asia, Africa, and Oceania, all regions outside of Europe and North America with lower-income countries that are often "politically or culturally marginalized." Nour Dados and Raewyn Connell, "The Global South," *American Sociological Association* 11:1 (February 2012): 12; Anne Garland Mahler, "What/Where Is the Global South?" *University of Virginia*.

support and continued access to the PLA-run space tracking station in Neuquén Province.²³¹

- In January 2023, Xi addressed the seventh summit of the Community of Latin American and Caribbean States (CELAC) in Buenos Aires, Argentina, where he promoted engagement with Latin American and Caribbean countries through his global initiatives.²³² According to Dr. Ellis, China views CELAC as a key multilateral tool for engaging with the region while excluding the United States and Canada.*²³³ Beijing and CELAC hold forums through which China engages participating countries on telecommunications, biotechnology, agriculture, infrastructure, space, and local governance, among other areas.²³⁴
- In June 2023, Honduran President Xiomara Castro made a state visit to Beijing, just three months after the island's decision to break diplomatic ties with Taiwan.²³⁵ During the meeting, President Castro expressed Honduras's support for China's Belt and Road Initiative (BRI) and other global initiatives, while Xi called for a free trade agreement and deepened people-to-people exchanges.²³⁶ China likely views Honduras as an important trade and investment partner in Central America, with Beijing seeking to earn money from participating in the country's infrastructure projects relating to dams and power generation, as well as a \$20 billion rail line linking its coasts.²³⁷

China's vigorous diplomacy has translated into some Latin American and Caribbean leaders' public support for Chinese interests and initiatives. For example, during his April 2023 state visit to China, Brazilian President Luiz Inácio Lula da Silva called for a shift away from dollar-denominated trade, expressed support for Beijing's One China principle, and demonstrated enthusiasm for deepened economic and technology cooperation with China.²³⁸ To take another example, in May, Bolivian President Luis Arce expressed support for Xi's global initiatives and called for further cooperation on the production of zinc and lithium† during a conference organized by the Chinese Council for the Promotion of International Trade (CCPIT), an organization affiliated with China's united front system.‡²³⁹ President Arce also expressed interest in using the RMB

*China and CELAC established a cooperation mechanism known as the China-CELAC Forum in 2014. China's Ministry of Foreign Affairs Department of Latin America and Caribbean Affairs, *Basic Information about China-CELAC Forum*, April 2016, 3–4.

†China is an important driver of lithium and zinc demand due to its manufacturing needs. Lithium is a key component of China's electric vehicle production, while zinc is used for rust-proofing metals. Aside from lithium and zinc, silver, lead, and tin are mined in Bolivia. In January, Bolivia signed an agreement with Chinese firms Contemporary Amperex Technology Co. Ltd. (CATL), CATL's recycling subsidiary BRUNP, and the mining company CMOC to partner with the Bolivian state-owned lithium mining company Yacimientos de Litio Bolivianos (YLB) to explore Bolivia's untapped lithium resources. Bolivia solicited proposals to mine its lithium in 2021 and received submissions from companies in Argentina, China, Russia, and the United States. Daniel Ramos, "Bolivia Hikes Lithium Resources Estimate to 23 Million Tons," *Reuters*, July 20, 2023; Joseph Bouchard, "In Bolivia, China Signs Deal for World's Largest Lithium Reserves," *Diplomat*, February 10, 2023; Matt Blois, "Bolivia Picks Chinese Firms for \$1 Billion Lithium Project," *Chemical and Engineering News*, January 24, 2023; Dillon Jaghory, "How China Is Transforming the Global Lithium Industry," *Global X*, September 27, 2022; *Economic Times*, "China Is the Key Driver of Zinc Demand at Present: Gavin Wendt, MineLife," November 2, 2016.

‡The CCPIT, established in 1952, is a quasi-governmental entity linked to the Ministry of Commerce and responsible for national foreign trade and investment promotion. CCPIT was recognized in a de-classified 1957 CIA report on China's united front system as a "front organization" used as an instrument by the CCP to "mobilize a number of federations and important persons in support of an important propaganda program." As a tool of the Party-state system, CCPIT

for international trade during a press conference in May and called for reducing “dependence on the U.S. dollar” at the 62nd Summit of Heads of State of MERCOSUR and Associated States in July.²⁴⁰

China Invests in Latin American and Caribbean Strategic Infrastructure

China is continuing commercial investments with potential strategic implications in the Latin America and Caribbean region. China has leveraged its relationships with Latin American and Caribbean countries in recent years to help finance and construct potential dual-use infrastructure, such as energy grids and ports, which could give China sway over important strategic assets or provide a foothold for a future military presence in the region.²⁴¹ Notable developments in 2023 include:

- In April 2023, *Caixin Global* reported that the state-owned China Southern Power Grid Co. Ltd. will pay \$2.9 billion to acquire two local power suppliers in Peru from Italy’s Enel, pending regulatory approval.²⁴² Enel’s Peruvian subsidiary—Enel Peru—agreed to sell all shares that it owns in its subsidiary power distribution and supply company Enel Distribución Perú SAA and its subsidiary energy services provider Enel X Perú SAC to China Southern Power Grid Co. Ltd.²⁴³ The Peruvian National Society of Industries, a chamber of private companies, has expressed concerns that by acquiring the two power suppliers, Beijing could achieve a monopoly over Peru’s energy sector, especially in and around the capital of Lima, where the two energy firms power electricity for over half of the population.²⁴⁴ The acquisition would complement the 2020 purchase by Chinese state-owned Three Gorges Corporation of Luz del Sur, which provides power to the other half of Lima, as well as the corporation’s 2018 deal for the Chaglla hydroelectrical plant that serves as Peru’s third-largest power generator.²⁴⁵
- An MOU signed between the Chinese state-owned Shaanxi Chemical Industry Group and the governor of Tierra del Fuego, Argentina, in August 2022 was reportedly kept secret until it was ratified by the Argentinian provincial executive later that year.²⁴⁶ Under the terms of the MOU, the Chinese state-owned company will invest approximately \$1.2 billion into a petrochemical plant and a multipurpose port.²⁴⁷ The MOU has sparked pushback in Argentina, where national legislators such as Federico Frigerio have said that the project “encourages a Chinese state-owned company to take control of our strategic infrastructure.”²⁴⁸ Some observers argue that China could utilize this port in Tierra del Fuego to control the passage of vessels in the Magellan Strait, more directly access Antarctica, and even support China’s fishing fleet in the South Atlantic, where

partners with organizations such as the All-China Federation of Industry and Commerce, another component of the CCP’s united front system. Lukasz Sarek, “CCPIT in Poland: Economic Cooperation in the Hands of a Party-State Actor,” *Sinopsis*, May 4, 2023, 2; Jichang Lulu, “Repurposing Democracy: The European Parliament China Friendship Cluster,” *Sinopsis*, November 26, 2019, 24–26; *China Council for the Promotion of International Trade*, “About CCPIT,” March 24, 2016; U.S. Central Intelligence Agency, *The United Front in Communist China*, May 1957 (approved for release August 24, 1999), 13, 59, 63.

in 2022 there were an estimated 800 Chinese vessels fishing illegally.²⁴⁹

- A subsidiary of the state-owned China Ocean Shipping Company (COSCO) Ltd. called COSCO Shipping Ports Ltd. is continuing construction of a commercial port and industrial zone in Chancay, a fishing and farming town located 50 miles north of Peru's capital, Lima, that is supposed to be completed in 2024.²⁵⁰ In May 2023, however, Peru's prosecution office initiated an investigation into the construction site, where a landslide damaged at least four houses near a tunnel and forced COSCO Shipping Ports Ltd. to halt construction.²⁵¹ Commentators note that the port would aid China's efforts to bolster its energy and food security and could also hypothetically serve as an intermediate staging base for PLA operations in the Eastern Pacific.²⁵²

China-Latin America Space Cooperation

Beijing is deepening space cooperation with Latin American countries to help achieve its goal of becoming a major space power.²⁵³ During President Lula da Silva's visit to China in April 2023, Chinese state media reported that Brazil and China would deepen project planning for the CBERS-05 satellite, accelerate development of the CBERS-06 satellite, and expand cooperation in lunar and deep-space exploration.^{*254} Also in April 2023, following Beijing's invitation, Venezuela expressed its interest in joining the International Lunar Research Station (ILRS), a planned lunar base run by China and Russia that was unveiled in 2021 and reportedly aims to begin construction by the 2030s.^{†255} Beijing also announced the International Lunar Research Station Cooperation Organization (ILRSO) in April 2023, which—unlike the U.S.-led Artemis Accords (a non-binding multilateral agreement)—will be a formal organization with a bureaucratic structure and leadership potentially led by China.²⁵⁶ This organization may become a platform through which Beijing further elevates regional space cooperation with Latin American and Caribbean countries.^{‡257}

China is also developing ground-based satellites throughout the Latin America and Caribbean region that could be used for future military and intelligence collection purposes in the Southern Hemisphere.^{‡258} According to an October 2022 report by CSIS, satellite

*The China-Brazil Earth Resources Satellite (CBERS) satellites provide global optical remote-sensing data on earth resources. China and Brazil launched the first version of the CBERS satellite in 1999. *Xinhua*, "New China-Brazil Earth Resource Satellite Sent into Space," December 20, 2019.

†When the CELAC joint plan was first released in 2021, China invited regional member countries to join the ILRS. Since then, China has signed cooperation agreements or statements of intent with Argentina, Brazil, and Peru (as a member of the Asia-Pacific Space Cooperation Organization). Ling Xin, "China's Moon Ambitions Take Shape with Construction Road Map for Research Station," *South China Morning Post*, April 25, 2023.

‡The development of Chinese-operated satellite ground stations in Latin America and Caribbean countries, such as Venezuela, Brazil, Bolivia, Argentina, and Chile, provides China with coverage of the skies over the Southern Hemisphere. These facilities are a component of China's expanding global network of ground stations to track and maintain communications with satellites in orbit. The proximity of these ground stations to the United States raises concerns that the facilities could further Chinese intelligence gathering and intercept sensitive information. In testimony to the House Armed Services Committee in 2019, then commander of the U.S. Southern Command Admiral Craig Faller stated that China could "monitor and potentially target U.S., Allied, and partner space activities" using deep space tracking facility in Argentina. Matthew P. Funaiole et al., "Eyes on the Skies: China's Growing Space Footprint in South America," *Center for Strategic and International Studies, Hidden Reach Issue No. 1*, October 4, 2022. For more

imagery reveals that China's Espacio Lejano Station in Neuquén, Argentina, which has operated since 2017, and is likely run by personnel of the PLA's Strategic Support Force,* has only utilized a small portion of the 500 acres of land that was leased to Beijing, indicating that the ground station may expand in the future.²⁵⁹ Currently, Espacio Lejano's 35-meter antenna can send and receive data in S- and X- bands;† these bands may be used to transmit data related to airborne early warning, intelligence, surveillance, and reconnaissance (ISR) and command and control in addition to civil applications in telecommunications systems and deep space operations.²⁶⁰ The facility can also receive data in the Ka-band, which could support close-range targeting radars on military aircraft in addition to civil applications like high-resolution mapping and radio astronomy.²⁶¹ The report also notes that Emposat, a Beijing-based firm tied to the Chinese Academy of Sciences, is planning to build another ground station in Río Gallegos with Argentine company Ascentio, which will house four to six antennas and provide increased coverage of Earth-orbiting satellites due to its proximity to the South Pole.²⁶²

Chinese Engagement with Africa Remains Persistent, Multifaceted

In 2023, China continued its efforts to build goodwill in the Global South and support for China's foreign policy initiatives by engaging countries on the African continent through diplomacy and medical cooperation. There were also indications that Chinese private security companies could expand their presence in Africa in the near future.

China Seeks African Countries' Support for CCP Vision of Global Order

China's diplomacy toward Africa in 2023 reflected its efforts to build support within the Global South for the CCP's proposed revisions to the international order and multilateral institutions.²⁶³ In January 2023, then Foreign Minister Qin continued the more than three-decade tradition of his predecessors by making Africa the first destination of the year, visiting five African countries, including Ethiopia, Gabon, Angola, Benin, and Egypt.²⁶⁴ According to

on China's space cooperation and influence in Latin America and the Caribbean, see U.S.-China Economic and Security Review Commission, Chapter 1, Section 2, "China's Influence in Latin America and the Caribbean," in *2021 Annual Report to Congress*, November 2021, 99–100. For more on China's expanding global network of ground stations, see U.S.-China Economic and Security Review Commission, Chapter 4, Section 3, "China's Ambitions in Space: Contesting the Final Frontier," in *2019 Annual Report to Congress*, November 2019, 371–372.

*As a result of the merger of the former China Satellite Launch and Tracking Control General (CLTC) with other space-related military organizations in 2015, the PLA's Strategic Support Force Space Systems Department plays a role in the operation of China's overseas ground stations. For instance, the Espacio Lejano ground station in Argentina is run by the China Satellite Launch and Tracking Control General, a sub-entity of the PLA Strategic Support Force. Matthew P. Funaiole et al., "Eyes on the Skies: China's Growing Space Footprint in South America," *Center for Strategic and International Studies, Hidden Reach Issue No. 1*, October 4, 2022. For more on China's expanding global network of ground stations, see U.S.-China Economic and Security Review Commission, Chapter 4, Section 3, "China's Ambitions in Space: Contesting the Final Frontier," in *2019 Annual Report to Congress*, November 2019, 371–372.

†Antennas communicate via radio waves that are segmented into sections, or "bands," that are located on the radio spectrum. The use of a particular antenna can be ascertained by understanding what types of data are transmitted across these bands. Matthew P. Funaiole et al., "Eyes on the Skies: China's Growing Space Footprint in South America," *Center for Strategic and International Studies, Hidden Reach Issue No. 1*, October 4, 2022.

Paul Nantulya, a Research Associate at the U.S. National Defense University Africa Center for Strategic Studies, Chinese diplomatic efforts are motivated by the recognition that “Africa has something China needs to increase its clout at the multilateral level, that is, its voting and representational strength.”²⁶⁵ Following then Foreign Minister Qin’s visit to Africa, Beijing hosted an “Africa Day” reception for various African foreign ministers, ambassadors, and diplomatic envoys on May 25, 2023, where Qin called for closer China-Africa cooperation.*²⁶⁶ At the reception, then Foreign Minister Qin appealed to African nations by asserting China’s status as a fellow “developing nation” that has shared “weal and woe” with African countries for 60 years.²⁶⁷ In tribute to this supposed solidarity, then Foreign Minister Qin stated that China hopes to work with African countries to implement the Global Development Initiative, Global Security Initiative, and Global Civilization Initiative in tandem with “push[ing] forward the reform of the global governance system.”²⁶⁸ In June 2023, political cadres from the ruling parties of six African countries graduated from a leadership training workshop at the CCP-funded Mwalimu Julius Nyerere Leadership School in Kibaha, Tanzania.²⁶⁹ The school is a \$40 million joint project of the CCP and the Former Liberation Movements of Southern Africa (FLMSA), where party officials of the member countries learn about China’s model of governance.†²⁷⁰

Medical Diplomacy Cultivates Goodwill

China has touted its medical diplomacy toward Africa, which involves building healthcare facilities and dispatching Chinese healthcare workers abroad. In January 2023, China and the African Union unveiled the Africa Center for Disease Control and Prevention (CDC) headquarters in Addis Ababa, Ethiopia, built and funded by China as a flagship project for China’s medical diplomacy in Africa.²⁷¹ The Africa CDC headquarters is intended to increase the African Union’s epidemic response capacity and includes facilities to improve disease prevention and monitoring capabilities.²⁷² At the Third China-Africa Economic and Trade Expo in June 2023, an official from China’s National Medical Products Administration said that Chinese pharmaceutical companies would expand investment in Africa, support the development of local African medicine, and carry out joint medical research with African partners.²⁷³ China also continues to dispatch medical personnel to Africa.²⁷⁴ In 2023, China’s Ministry of Foreign Affairs and Chinese state media marked the 60th anniversary of China’s first dispatch of a Chinese medical team to Africa.‡²⁷⁵

*According to the remarks made by then Foreign Minister Qin, the following African diplomatic personnel attended the event: Demeke Mekonnen Hassen, Deputy Prime Minister and Minister of Foreign Affairs of Ethiopia; Christophe Lutundula, Vice Prime Minister and Minister of Foreign Affairs of the Democratic Republic of Congo; Martin Mpana, Dean of the African Diplomatic Corps in China and Ambassador of Cameroon to China; Rahamtalla M. Osman, Permanent Representative of the African Union to China; and Ambassador Charif Maoulana of the Union of Comoros, chair of the African Union. China’s Ministry of Foreign Affairs, *When Brothers Are of One Heart and One Mind, They Have the Strength to Break Metal*, May 25, 2023.

†The six African countries include Tanzania, South Africa, Mozambique, Zimbabwe, Namibia, and Angola. Jevans Nyabiage, “China’s Political Party School in Africa Takes First Students from 6 Countries,” *South China Morning Post*, June 21, 2022.

‡According to the National Health Commission of China, China has dispatched around 30,000 medical personnel to 76 countries and regions across five continents since the first Chinese medical team arrived in Algeria in 1963. The Chinese personnel have primarily focused on Africa,

Chinese State-Owned Security Companies Could Increase Presence in Africa

Developments in 2022 and 2023 suggest Beijing may increase the presence of its “private security companies,” which are actually state controlled, on the African continent to better protect Chinese assets in the future.²⁷⁶ During the 20th Party Congress in October 2022, Xi stressed the need to “strengthen our capacity to ensure overseas security and protect the lawful rights and interests of Chinese citizens and legal entities overseas.”²⁷⁷ These interests include multi-million-dollar programs sponsored by Chinese state-owned enterprises as part of BRI, which runs through many countries with civil conflict.²⁷⁸ The March 2023 killings of nine Chinese nationals by heavily armed gunmen at a mine in the Central African Republic highlighted this risk, prompting Xi to call for those responsible to be “severely punished” and the Chinese Ministry of Foreign Affairs to issue a security alert for its citizens.²⁷⁹ Experts assert that Beijing may ramp up the use of security companies in light of the murders.²⁸⁰ At present, there are Chinese security companies operating in 14 African countries, primarily concentrated in East and Southern Africa.²⁸¹ Due to the direct control Beijing asserts over these companies, firms such as the Huaxin Zhong An Security Group or Beijing DeWe Security Service are restricted by Chinese law in their use of firearms, often relying on collaboration with host nation security companies, local militias, or local authorities.²⁸² Mr. Nantulya, asserts that these Chinese companies “work very, very differently from Russian ones like Wagner” because the Wagner Group, a private military company, is engaged in combat operations and becomes part of the state security apparatus of the country by fighting a war on the host nation’s behalf.*²⁸³

China’s Regional Approach: Heavy-Handed and Aggressive Treatment toward Neighbors

China continued to adopt a heavy-handed and at times confrontational approach to its neighbors in the Indo-Pacific region. In the South China Sea, China acted aggressively toward claimant states and transiting military forces alike. In East Asia, China sought to drive a wedge between the United States and its allies. Meanwhile, tensions simmered on the border with India, and Pacific Island nations balked at China’s efforts to gain strategic influence in their region.

China’s Harassment of Vessels in the South China Sea

China maneuvered aggressively against claimant states in the South China Sea, including the Philippines and Vietnam. The CCG has consistently harassed Philippine Coast Guard ships operating in the South China Sea. In February 2023, a CCG ship allegedly used a military-grade laser against the Philippine Coast Guard to prevent

providing 290 million diagnoses and treatments for local people. *Xinhua*, “Six Decades of Selfless Aid Make Chinese Doctors ‘Most Welcome Guests’ in Africa,” April 6, 2023.

*For example, Central African Republic president Faustin-Archange Touadéra has retained Wagner since 2018 to help maintain his grip on power by fighting rebels that control large areas of the country. Approximately 1,500 Wagner troops work alongside the Central African Republic’s military. Katarina Hoije, “Wagner-Backed Central African Leader Wins Right to Third Term,” *Bloomberg*, August 8, 2023.

delivery of supplies within the Second Thomas Shoal.²⁸⁴ China's aggressive behavior in the region prompted the commanding general of the Philippine Army to assert in May that his country faces threats from China "every day" in the South China Sea.²⁸⁵ In April, a CCG ship blocked a Philippine patrol vessel steaming into the Second Thomas Shoal for an underwater survey, nearly causing a collision, and in June, multiple CCG vessels followed, harassed, and obstructed Philippine Coast Guard vessels operating near the Second Thomas Shoal.²⁸⁶ In response to China's harassment, the Philippines' Foreign Ministry has filed 97 diplomatic protests against China since President Ferdinand Marcos assumed office last year, with 30 of those protests filed between January 1 and July 6 of 2023.²⁸⁷ In September 2023, the Philippine Coast Guard reported that three CCG boats and one Chinese maritime militia boat installed a floating barrier to prevent fishing boats from entering a disputed area of the South China Sea, spanning 300 meters in the Scarborough Shoal.²⁸⁸ Philippine authorities removed the barrier, and the Philippine Coast Guard subsequently issued a statement saying that "the barrier posed a hazard to navigation, a clear violation of international law."²⁸⁹ From May to June 2023, a Chinese research ship and its escort vessels also operated in Vietnam's exclusive economic zone (EEZ) for nearly a month, including into areas where Russia and Vietnam operate joint energy projects.²⁹⁰ The Chinese ships refused to leave in response to a request by the Vietnamese government, but they ultimately returned to Hainan, China.²⁹¹

Philippines Expands Military Cooperation with United States in Response to China's Maritime Aggression

Continued Chinese aggression in the South China Sea has prompted the Philippines to deepen its military cooperation with the United States.*²⁹² Most notably, in February 2023, the Philippines announced it would be expanding its Enhanced Defense Cooperation Agreement (EDCA) with the United States to include four new sites, bringing the total number of Philippine Armed Forces bases from which the United States can operate from five to nine.†²⁹³ The U.S.-Philippines base deal has clear implications for a war over Taiwan, both for the potential rescue of Filipino nationals living in Taiwan, as President Marcos has suggested, and due to the potential for U.S. forces to operate from the bases.²⁹⁴ President Marcos also said publicly that it would be difficult for the Philippines to remain neutral during a conflict over Taiwan, prompting the Chinese ambassador to the Philippines to make veiled threats against overseas Filipino workers in Taiwan, advising Manila to "unequivocally

*In April 2023, the Philippines hosted the largest ever Balikatan joint exercise between the United States, Philippines, and Australia, with 17,600 personnel in attendance. The same month, U.S. and Philippine defense and diplomatic officials met for the first "2 Plus 2" meeting in seven years. Rene Acosta and Jon Grady, "U.S., Philippines Kick Off Largest-Ever Balikatan Exercise as Defense, Foreign Affairs Leaders Meet in Washington," *USNI*, April 11, 2023; U.S. Department of State, *Joint Statement of the U.S.-Philippines 2+2 Ministerial Dialogue*, April 11, 2023.

†The U.S.-Philippines EDCA was originally signed in 2014 to supplement the existing Visiting Forces Agreement of 1998 and allows a U.S. military presence on a rotational basis for disaster and humanitarian responses and to facilitate U.S.-Philippine military exercises. United States Embassy in the Philippines, *Fact Sheet: Enhanced Defense Cooperation Agreement*, March 20, 2023; U.S. Department of State, *U.S. Security Cooperation with the Philippines*, October 7, 2022; Government of the Philippines, *Agreement between the Government of the Republic of the Philippines and the Government of the United States of America Regarding the Treatment of United States Armed Forces Visiting the Philippines*, February 10, 1998.

oppose” Taiwan independence if it cared about the wellbeing of the 150,000 Filipinos working there.²⁹⁵ The Chinese Embassy in Manila reacted to the expansion of the EDCA by accusing the United States of attempting to encircle China and stating that granting the U.S. military greater access to Philippine military bases will drag the Philippines into “geopolitical strife” that will “seriously harm Philippine national interests.”²⁹⁶ China’s foreign ministry spokeswoman Mao Ning also accused the United States of acting “out of self-interest” and of holding a “zero-sum mentality” that would “inevitably” result in increased military tension.²⁹⁷

China Condemns Japan’s Alignment with the United States

While China and Japan had several diplomatic engagements in late 2022 and early 2023, they have been undercut by Beijing’s hostile rhetoric and aggressive maritime activity around Japan. After Japan Prime Minister Fumio Kishida and General Secretary Xi met on the margins of the Asia-Pacific Economic Cooperation (APEC) forum in November 2022, both sides reportedly agreed to increase communications and hold a series of high-level dialogues.²⁹⁸ In February 2023, China and Japan’s Foreign Ministries held the first security dialogue in four years, and the two sides’ militaries agreed to establish the first ever defense hotline.²⁹⁹ The hotline, which connects Japan’s Defense Minister and China’s Minister of National Defense, was established in March 2023 and held its inaugural conversation in May.³⁰⁰

Despite these positive diplomatic engagements, China continued its intrusions into Japanese waters and stridently criticized Japan’s engagement with the United States and NATO.³⁰¹ In November 2022, four CCG ships—including one armed with a 76mm cannon, the largest ever seen on such a vessel—were seen in the waters near the Japanese-administered Senkaku Islands.³⁰² Three similar incidents took place in March and May 2023, with one lasting for over 80 hours, which the *Kyodo News* claimed was the “longest period Chinese ships have intruded into the waters since the Japanese government put the islets under state control in 2012.”³⁰³ In April, then Foreign Minister Qin responded to Japan’s decision to restrict exports of semiconductor manufacturing equipment in alignment with the United States by stating that “Japan should not help a villain do evil.”³⁰⁴ In May, Beijing slammed Japan over reports that it was considering hosting a NATO liaison office in Tokyo, although as of July 2023 there had been no concrete movement to establish the office.³⁰⁵ In July, Director of the Office of the Central Foreign Affairs Commission Wang Yi, China’s top diplomat, appealed to Japanese and South Korean government and nongovernment participants of the International Forum for Trilateral Cooperation to pursue “strategic autonomy” from the United States and cooperate with Beijing

*French President Emmanuel Macron also opposed the opening of the proposed NATO office in Tokyo, arguing that Japan is located too far outside the geographic scope of the organization. President Macron has also previously opposed NATO focusing on China, such as in 2021, when he stated that “we shouldn’t confuse our goals,” asserting that, “NATO is a military organization, the issue of our relationship with China isn’t just a military issue. NATO is an organization that concerns the North Atlantic, China has little to do with the North Atlantic.” Stuart Lau and Laura Kayali, “Macron Blocks NATO Outpost in Japan amid Chinese Complaints,” *Politico*, July 7, 2023.

to “revitalize Asia.”*³⁰⁶ Later that month, following the two-day NATO summit in Vilnius, Lithuania, Beijing reacted angrily to a NATO communiqué portraying China as a major challenge to the military alliance’s interests and criticized the presence of Australia, Japan, New Zealand, and South Korea at the summit.³⁰⁷ (For more on the NATO Summit in Vilnius and NATO’s engagement with the Indo-Pacific, see Chapter 5, Section 1, “Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation.”)

China also instigated a diplomatic row with the Japanese government and launched an online disinformation campaign following the discharge of treated water from the Fukushima Daiichi nuclear power plant in August.³⁰⁸ In response to the release of the treated water, on August 24 China’s General Administration of Customs announced an import ban on all aquatic products from Japan, including seafood.³⁰⁹ Despite Japan’s cooperation with the International Atomic Energy Agency (IAEA) to conduct continuous safety reviews of the discharged treated water, China has consistently and vocally opposed Japan’s plan.[†]³¹⁰ China’s Ministry of Foreign Affairs fueled doubt and concern among domestic and international audiences by criticizing Japan for being “extremely selfish and irresponsible” and accusing the Japanese government of choosing the “cheapest option” for managing the contaminated water.³¹¹ China-linked actors have conducted a coordinated online disinformation campaign about the risks of the water release.³¹² The UK-based data analysis firm Logically found that between January and August 2023, Chinese officials, state media, and pro-China influencers amplified the disinformation and narratives in line with Chinese government statements that opposed Japan’s decision to release the wastewater.³¹³ Both the Chinese government’s statements and this disinformation campaign encouraged Chinese citizens to engage in abusive behavior, such as throwing bricks, rocks, and eggs at Japanese consulates and schools in China, and make over 400,000 nuisance calls to the Japanese Embassy.³¹⁴ These moves prompted Japan’s prime minister to call on China to urge its citizens to halt acts of harassment.³¹⁵

China Critical of South Korea’s Views on Taiwan, Relations with United States

China’s approach to South Korea in 2023 mirrored its approach to Japan, featuring an attempt at high-level diplomatic engagement that was ultimately undermined by strident Chinese criticism of South Korea’s remarks on Taiwan and engagement with the United States. In November 2022, President Yoon Suk-yeol of South Korea

*During the event, Wang Yi made off-color racial remarks to Japanese and South Korean participants of the forum in an attempt to revitalize racial pan-East Asian solidarity against the West. Wang Yi stated, “No matter how blonde you dye your hair, how sharp you shape your nose, you can never become a European or American, you can never become a Westerner.” Nectar Gan, “You Can Never Become a Westerner: China’s Top Diplomat Urges Japan and South Korea to Align with Beijing and ‘Revitalize Asia,’” *CNN*, July 5, 2023.

†Following the destruction of the Fukushima nuclear plant by a tsunami in 2011, water has been used to cool down the reactor’s fuel rods, producing contaminated water that was later treated and stored in tanks. The treated water still contains high levels of radioactive substances tritium and carbon-14. Japan proposed diluting the treated water with seawater before releasing it into the ocean, a plan the IAEA determined complied with international safety standards and would have “negligible” impact on the environment. Tessa Wong, “Fukushima: China Retaliates as Japan Releases Treated Nuclear Water,” *BBC*, August 24, 2023; International Atomic Energy Agency, “IAEA Finds Japan’s Plans to Release Treated Water into the Sea at Fukushima Consistent with International Safety Standards,” July 4, 2023.

met with General Secretary Xi on the margins of the G20 summit in Bali, Indonesia.³¹⁶ During the meeting, Xi called for a bilateral trade agreement, high-tech manufacturing cooperation, and for South Korea to “oppose politicizing economic cooperation”—a veiled reference to cooperating with U.S. export controls and other economic measures—while President Yoon expressed a desire for China to respond more vigorously to North Korea’s continued threats, amounting to what one observer described as “a confirmation of each leader’s differences.”³¹⁷

Since the Yoon-Xi meeting, China’s foreign ministry has been openly critical of South Korea’s foreign policy, straining relations.³¹⁸ In April, then Foreign Minister Qin sharply rejected President Yoon’s description of Taiwan as a “global issue,” urging Seoul to act with caution on Taiwan and stating that the issue “is a matter for the Chinese, who do not need to be told what should or should not be done.”³¹⁹ In June, China’s ambassador to Seoul Xing Haiming met with South Korean opposition leader Lee Jae-myung and criticized South Korea’s engagement with the United States, warning that “those who bet on China’s loss [in rivalry with the United States] will definitely regret it.”³²⁰ Ahead of President Biden’s meeting with Japanese Prime Minister Kishida and South Korean President Yoon at Camp David in August, China’s foreign ministry spokesman Wang Wenbin criticized South Korea’s trilateral diplomacy by condemning the alleged “cobbling together of various small circles by the countries concerned.”³²¹

India’s Tensions with China Continue

Relations between India and China in 2023 continued to be strained by clashes along the disputed border. On December 9, 2022, Indian and Chinese forces engaged in a violent altercation along the Line of Actual Control, a 2,100-mile contested border in the Tawang district of Arunachal Pradesh.³²² While neither side used firearms and no fatalities were reported, both sides sustained injuries.³²³ The incident in Tawang marked the most consequential skirmish between Indian and Chinese forces since deadly fighting in Galwan Valley in 2020 that led to 20 Indian casualties and four reported Chinese casualties.³²⁴ Despite more than 17 rounds of military talks between Chinese and Indian forces since the 2020 clash to address the disengagement along the western sector of Aksai Chin,* the Tawang altercation demonstrated that tensions along the border remain between India and China and could potentially escalate.³²⁵ Both sides also continued to build up their military forces and infrastructure along the Line of Actual Control, investing in light tanks that can maneuver in high altitudes and mountainous terrain.†³²⁶ China further strained relations when it published a new 2023

*The Aksai Chin region along the Line of Actual Control has held the most clashes between Indian and Chinese forces, including Dopsang Valley in 2013, Chumar in 2014, Burtse in 2015, Hot Spring in 2020, Galwan Valley in 2020, and Pangong Tso in 2020. To reference disputed areas and military incidents along the Sino-Indian Border (2013–2022) see U.S.-China Economic and Security Review Commission, Chapter 3, Section 3, “China’s Activities and Influence in South and Central Asia,” in *2022 Annual Report to Congress*, November 2022, 536.

†Following the altercation, Indian and Chinese forces held an additional two rounds of military talks, as the two sides appeared to be tempering their disagreements to allow for a potential meeting between Xi and India’s Prime Minister Narendra Modi at the 15th BRICS summit held in South Africa in August 2023. Sudha Ramachandran, “19th Round of India-China Border Talks Produces Joint Statement,” *Diplomat*, August 17, 2023.

edition of its so-called “standard map of China” on August 28 that continued to depict India’s Arunachal Pradesh and the disputed Aksai Chin plateau as part of Chinese territory.³²⁷ Despite meeting with Indian Prime Minister Narendra Modi on the sidelines of the BRICS summit in August, Xi did not attend the G-20 summit hosted by India in September, an apparent snub that set back prospects for the two leaders to resolve the border tensions.³²⁸

India’s relationship with China is also becoming increasingly complicated as a result of the latter’s deepening ties with Russia amid the war in Ukraine.³²⁹ Experts assess that Indian leaders may be concerned about Russia’s weakened position and growing reliance on China for economic and strategic support, since such a dependency could ensure continued Russian arms sales* to China or even Russian support for China in a potential Sino-Indian border conflict.³³⁰ In July 2023, India hosted a virtual summit of the Shanghai Cooperation Organization that was attended by Putin and Xi.³³¹ Some experts argued that the shift of the summit to a virtual format could be an effort by India to downplay the meeting, which took place just weeks after Modi’s state visit to Washington.³³²

India faces a more complicated security environment created by China’s engagement with Pakistan, a neighboring country India regards as hostile.³³³ China has longstanding security ties with Pakistan motivated by a common geopolitical rivalry and territorial disputes with India.³³⁴ Since 2015, these ties have been bolstered by the China-Pakistan Economic Corridor (CPEC), an initiative that promises massive infrastructure investment as part of China’s BRI but has so far fallen short of expectations in its implementation.³³⁵ China’s existing investment in Pakistani ports has raised suspicions that these ports may be intended for use as PLA Navy bases, which would enable China to project power and undermine India’s influence in the Indian Ocean.³³⁶ China also continues to sell conventional, strategic,† and offensive strike weapons to Pakistan that could be used against India,‡ accounting for 75 percent of all of Pakistan’s imported arms by value since 2015.³³⁷ In April 2023, China’s defense ministry officials announced that the two countries would expand military cooperation.³³⁸ The following month, China

*Russia provides China with advanced platforms such as Su-35 fighter jets, which may give the PLA an edge over India’s military. Krzysztof Iwanek, “Does China-Russia Cooperation Hurt India’s National Interests?” *Diplomat*, April 25, 2023; Stockholm International Peace Research Institute, “SIPRI Arms Transfers Database.”

†Between the 1970s and 1990s, China assisted Pakistan’s nuclear weapons program, including bomb designs, the development of high-explosive components, and nuclear weapons delivery capabilities. One of the primary figures facilitating this transfer was AQ Khan, a Pakistani nuclear scientist who cooperated with China’s nuclear establishment to establish Islamabad’s nuclear arsenal, and who later facilitated the illegal proliferation of nuclear weapons expertise and technology around the world. More recently, China has further advanced Pakistan’s strategic capabilities by providing space access and advanced optical tracking systems for the development of multiple independent reentry vehicles (MIRVs) on missiles. According to the U.S. Institute of Peace, some analysts assess that China may assist Pakistan in developing or acquiring hypersonic weapons such as the Dongfeng DF-17 medium-range ballistic missile, or provide assistance as Pakistan pursues an anti-ship ballistic missile (P-282) modeled on China’s DF-21D. Sameer P. Lalwani, “A Threshold Alliance: The China-Pakistan Military Relationship,” *United States Institute of Peace*, March 2023, 11; Peter Huessy, “The China Connection: How AQ Khan Helped the World Proliferate,” *National Interest*, October 16, 2021.

‡According to the U.S. Institute of Peace, Pakistan’s conventional arms appear to be increasingly tied to and dependent on China’s Beidou navigation satellite system for positioning, navigation, and timing. This is especially true of Pakistan’s advanced air-delivered strike capabilities, such as the Raad II and Babur cruise missiles, and the Ababeel ballistic missile. Sameer P. Lalwani, “A Threshold Alliance: The China-Pakistan Military Relationship,” *United States Institute of Peace*, March 2023, 12.

delivered two frigates to Pakistan's navy intended to safeguard the seas around CPEC.³³⁹

China's Growing Presence in the Pacific Islands Prompts Backlash

In 2023, China persisted in efforts to increase military access and diplomatic clout with Pacific Island nations through both persuasive and coercive means. These efforts came despite China's failure to secure a region-wide security pact with the Pacific Island nations last year and amid increased U.S. engagement with some of the key island nations.³⁴⁰ Most notably, in May 2023, the United States signed a new security pact with Papua New Guinea, and renewed its Compact of Free Association agreements with Palau and the Federated States of Micronesia,* contrasting with China's failed overture in 2022.†³⁴¹ President Biden also hosted the leaders of 18 Pacific Island countries in Washington, DC, in September 2023, underscoring the United States' commitment to investing in and engaging with the region.³⁴²

One example of China's continued efforts to win over the Pacific Islands in 2023 was its expanded engagement with the Solomon Islands.‡ In July 2023, Solomon Islands Prime Minister Manasseh Sogavare met with Xi in Beijing, where the two leaders reportedly established and discussed the outlines of a new "comprehensive strategic partnership" between the two countries and formalized a police cooperation deal that permits China to help "strengthen Solomon Islands' police law enforcement capacity" through 2025.³⁴³ China has previously provided the Solomon Islands with riot control equipment and police training.³⁴⁴

Despite Beijing's progress with the Solomon Islands, other Pacific Island nations have condemned China's efforts to expand its influence through coercion. In March 2023, outgoing Micronesian President David Panuelo accused China of seeking to intimidate him, attempting to bribe government officials, and gathering intelligence on Micronesia's resources and submarine paths through the use of research vessels in the waters around Micronesia.³⁴⁵ Then President Panuelo asserted that China's use of these tactics were

*As of October 6, the United States and the Marshall Island's Compact of Free Association agreement lapsed on September 30, and had yet to be renewed. Khushboo Razdan, "U.S. Deal with Marshall Island Lapses Without Renewal, but Cofa Talks Continue; Micronesia and Palau Reaffirm Ties," *South China Morning Post*, October 3, 2023.

†The United States also increased its diplomatic presence in the Solomon Islands by reopening the U.S. embassy there in January 2023. The embassy had been closed there for 30 years as part of a global reduction in diplomatic posts. In September 2023, the United States also announced that embassies would open in two other South Pacific nations, the Cook Islands and Niue. Angela Cullen, "Biden Set to Announce New Embassies in Cook Islands, Niue," *Bloomberg*, September 24, 2023; Nick Perry, "US Opens Embassy in Solomon Islands to Counter China," *AP News*, February 2, 2023.

‡In 2022, China and the Solomon Islands signed a secretive security pact that would allow Beijing to send law enforcement and military personnel, protect Chinese personnel and projects, and allow China to carry out logistical replenishment, according to a draft of the agreement, which alarmed international observers. PLA access to the Solomon Islands could potentially compromise the ability of the U.S. and Australian militaries to transit through the region on their way to a conflict in East Asia. Prime Minister Sogavare said in June 2023 that he requested a review of the Solomon Islands' security pact with Australia, yet he claimed he did not wish to downgrade the Solomon Islands' relations with Australia. *Agence France-Presse*, "Solomons PM Calls for 'Review' of Australia Defence Pact," June 29, 2023; U.S.-China Economic and Security Review Commission, *2022 Annual Report to Congress*, November 2022, 380; Patricia M. Kim, "Does the China-Solomon Islands Security Pact Portend a More Interventionist Beijing?" *Brookings Institution*, May 6, 2022.

motivated by a desire to align Micronesia with China or ensure its neutrality in the event of a Taiwan invasion.³⁴⁶ In April 2023, Fijian Prime Minister Sitiveni Rabuka stated that his government was investigating Panuelo's claims that he was spied on during a visit to Fiji and argued that China should not use the Pacific Islands as part of a powerplay in the region.*³⁴⁷ In June 2023, Palau President Surangel Whipps asked the United States, Japan, and other allies to help his country deter Chinese research vessels from operating without its consent in Palau's EEZ after several reported incursions there.³⁴⁸ Also in June, Fijian Prime Minister Rabuka said Fiji was reconsidering its 2011 policing agreement with Beijing allowing Chinese police officers to be stationed in the island nation, citing differences between Fiji and China's systems and values.³⁴⁹

China Expands Global Military, Espionage Capabilities

The PLA continues to acquire the overseas access and skills it needs to sustain a more permanent military presence beyond its borders. (For more on China's global military diplomacy and operations, see Chapter 4, Section 1, "China's Relations With Foreign Militaries.") China's intelligence apparatus has also intensified its intelligence collection efforts, displaying increasing sophistication against a range of targets.

Basing and Overseas Operations Expand Power Projection Capabilities

China continues to build or seek access to military facilities overseas and practice the skills needed for power projection, likely with the goals of ensuring the rapid seizure of Taiwan and denying U.S. military access to the Indo-Pacific.

Construction of Artificial Islands in South China Sea Continues

China continues to build up its artificial islands in the South China Sea to bolster its expansive territorial claims and support its military footprint there. In December 2022, *Bloomberg* reported that China is building up "several unoccupied land features" in the northern Spratly Islands.³⁵⁰ In Eldad Reef, new land formations have appeared above water, with images showing "large holes, debris piles and excavator tracks at a site that used to be only partially exposed at high tide."³⁵¹ Similar activity was also sighted at Lankiam Cay, Whitsun Reef, and Sandy Cay.³⁵² China has also continued improving the equipment it uses for artificial island building.³⁵³ In February 2023, the *South China Morning Post* reported that China had opened supermarkets to serve military personnel in three of its largest man-made islands,† enhancing its ability to sustain its military outposts in the South China Sea.³⁵⁴

*Fijian Prime Minister Sitiveni Rabuka later clarified his comments to *Australian Broadcasting Corporation*, that he did not believe China was "intentionally using" the Pacific as a powerplay in the region. Lice Movono, Nick Sas, and Stephen Dziedzic, "Fiji Prime Minister Investigating China Spy Claims, Says 'Survival' Is Key Issue for Pacific Nations," *Australian Broadcasting Corporation*, April 5, 2023.

†These artificial islands include Fiery Cross Reef, Subi Reef, and Mischief Reef in the Spratly Islands. For more, see Laura Zhou, "South China Sea: Disputed Spratly Islands Now Home to

More Construction on Cambodian Naval Base Linked to China's Military

Satellite imagery captured in 2023 revealed new construction at Cambodia's Naval Base in Ream, where the PLA reportedly has exclusive use of the military facility.³⁵⁵ In February, *Radio Free Asia* released satellite pictures from earth imaging company Planet Labs showing the construction of new structures, large-scale land clearance, and two new piers.³⁵⁶ According to analysis by Tom Shugart, adjunct senior fellow with the Defense Program at CNAS, the imagery appears to show a deep pier that could dock full-size PLA Navy combatants.³⁵⁷ In April, the Cambodian government also announced plans to develop an air defense center and expand a radar system near the Ream Naval Base.³⁵⁸ Cambodia's development of a deep water port and an air defense system will enhance the strategic value of the base as a potential site for intelligence collection, air defense operations, and naval operations and maintenance.*³⁵⁹

PLA Evacuation of Chinese Nationals from Sudan Practices Expeditionary Capabilities

China has honed skills relevant to power projection through its humanitarian rescue efforts in Sudan. In April 2023, the PLA evacuated 940 Chinese citizens and 231 foreigners from Port Sudan, a city in the country of Sudan, where a war is raging between the Sudanese military and a rival militant group.³⁶⁰ The PLA Navy guided missile destroyer *Nanning* and the Type 903 supply ship *Weishanhu* were diverted from their escort missions and antipiracy patrols in the Gulf of Aden to carry out the evacuation.³⁶¹ The supply ship carried a helicopter and 490 officers and soldiers including dozens of special forces personnel.³⁶² Notably, no PLA assets were deployed from China's military base in Djibouti, even though humanitarian operations were one of the stated reasons behind its establishment.³⁶³ The Sudan evacuation was the third time the PLA Navy had participated in an evacuation operation from a conflict zone.†³⁶⁴ Chinese state media capitalized on the evacuation, asserting that it exemplified China's ability to protect its nationals living abroad.³⁶⁵

China Spies on Foreign Adversaries and Debtor Nations

Chinese state-sponsored espionage continued apace in 2023. Notable developments included public revelations about a listening post in Cuba as well as a spate of cyberattacks against the United States and other countries.

Supermarkets for PLA Soldiers," *South China Morning Post*, February 11, 2023.

*According to *Nikkei Asia*, a Cambodian defense ministry spokesperson said there would be no Chinese funding, support, or presence at these facilities. Jack Brook and Phin Rathana, "Cambodia Reveals Air Defense Plans near China-Funded Naval Base," *Nikkei Asia*, April 1, 2023. For more on Ream Naval Base as a potential node of PLA power projection, see U.S.-China Economic and Security Review Commission, Chapter 3, Section 2, "China's Growing Power Projection and Expeditionary Capabilities," in *2020 Annual Report to Congress*, December 2020, 407–408.

†China first used its armed forces to evacuate more than 30,000 Chinese citizens from Libya in 2011. In 2015, China deployed a naval fleet to evacuate more than 600 Chinese citizens from Yemen. *China Daily*, "Sudan Evacuation Shows China Fulfills Its International Obligation," *China Military Online*, May 11, 2023; Gabe Collins and Andrew S. Erickson, "Implications of China's Military Evacuation of Citizens from Libya," *Jamestown Foundation*, March 11, 2011.

China's Surveillance and Military Facilities in Cuba Could Facilitate Spying on United States

In 2023, media revelations emerged that China has operated an intelligence facility in Cuba since 2019 and that it is negotiating to establish a new joint military training facility there.³⁶⁶

- In June 2023, the *Wall Street Journal* reported that China and Cuba had reached a secret agreement to build a signals intelligence facility on the island, potentially allowing China to eavesdrop on electronic communications at military bases throughout the southeastern United States.³⁶⁷ A Biden Administration official subsequently told the *New York Times* that China had operated an intelligence facility in Cuba since before 2019.³⁶⁸ The media reporting led members of Congress and experts to express concern about China's intelligence collection activities near the United States.³⁶⁹ According to Dr. Ellis, China's use of electronic intelligence facilities in Cuba could enable it to monitor and potentially disrupt U.S. military deployments and sustainment flows in the event of a conflict between the United States and China.³⁷⁰ Paul Kolbe, a 25-year CIA officer and now senior fellow at Harvard Kennedy School's Belfer Center, said that China's spy post was just one element of a "vast apparatus of Chinese intelligence activities directed against the U.S."³⁷¹ He assessed that the intelligence facility in Cuba reflects China's "geopolitical goals of expansion and assiduous cultivation of governments in Latin America."³⁷²
- Another report by the *Wall Street Journal* later that month found that China and Cuba were negotiating to establish a new joint military training facility on Cuba's northern coast.³⁷³ U.S. officials have reportedly made contact with Cuban officials to discourage the deal from moving forward and raised concern of Cuba ceding sovereignty to China.³⁷⁴ Former National Security Advisor John Bolton noted that such a facility could allow the PLA to train within close proximity to the United States and to conceal a number of offensive weapons, delivery systems, and other threatening capabilities, such as hypersonic cruise missiles.³⁷⁵

Chinese Cyber Operations Target U.S. and Foreign Governments

In 2023, actors linked to China's government perpetrated multiple cyberespionage attacks against the U.S. and foreign governments, demonstrating the growing prowess and danger posed by Beijing's cyber operations.³⁷⁶ These included the following:

- A Chinese state-backed hacking group infiltrated the unclassified Microsoft email servers of the U.S. Department of Commerce and the U.S. Department of State beginning in May 2023, perpetrating the first publicly known, successful Chinese hack of a Cabinet-level official since 2008.*³⁷⁷ Although the hackers

*According to a comprehensive survey of publicly available information on instances of Chinese espionage directed against the United States since 2000 by CSIS, the last known instance of a Cabinet-level official facing a Chinese hack was then-U.S. Secretary of Commerce Carlos Gutierrez in May 2008. According to the survey, Chinese officials inserted spyware onto then Secretary

failed to access Secretary Blinken's account, they did manage to break into the email accounts of several senior State Department officials, including U.S. Ambassador to China Nicholas Burns and the Assistant Secretary of State for East Asia Daniel J. Kritenbrink as well as Commerce Secretary Raimondo's account.³⁷⁸ The hacks took place mere weeks before Secretary Blinken's visit to Beijing and may have provided the Chinese government insights into U.S. policy thinking ahead of the visit.³⁷⁹

- Microsoft announced in May 2023 that a Chinese state-sponsored hacking group known as Volt Typhoon had targeted critical infrastructure in Guam and elsewhere in the United States.³⁸⁰ The cyberespionage campaign reportedly targeted critical infrastructure organizations in the government, maritime, communications, transportation, manufacturing, and information technology sectors, among others.³⁸¹ U.S. Secretary of the Navy Carlos Del Toro stated that the U.S. Navy was "impacted" by the cyberattack but declined to provide further details.³⁸² The U.S. National Security Agency released a joint advisory with Five Eyes partner agencies sharing information about the sophisticated tactics used by Volt Typhoon and best practices on how to detect and mitigate further malicious activity.³⁸³
- *Reuters* reported in May 2023 that Chinese-backed hackers had conducted a cyberespionage campaign against the Kenyan government over a three-year period, allegedly for the purpose of collecting information about Kenya's ability to repay BRI-related debts owed to the Chinese government.³⁸⁴ Eight of Kenya's ministries and government departments—including the presidential office, Kenya's intelligence service, and the treasury and foreign affairs departments—were compromised in the hack.³⁸⁵ The hackers reportedly stole documents pertaining to Kenya's foreign debt, a sixth of which is owed to China.³⁸⁶
- The cybersecurity firm Mandiant reported in June 2023 that Chinese state-backed hackers were likely behind the massive exploitation of a recently discovered flaw in Barracuda Networks' email security system.*³⁸⁷ The hackers reportedly exfiltrated data involving email domains and users from a variety of government and private organizations.†³⁸⁸ Compromised organizations identified by Mandiant included Asian and European government officials, the ASEAN Ministry of Foreign

Gutierrez's laptop during a trade mission. *Center for Strategic and International Studies*, "Survey of Chinese Espionage in the United States since 2000," March 2023, 5.

*Barracuda Networks is a security, networking, and storage solutions company based in Campbell, California, that offers Software as a Service (SaaS) deployment, cloud computing, threat protection, backups, and other solutions. Barracuda has more than 200,000 global customers around the world, including government clients. Barracuda, "Company," <https://www.barracuda.com/company>; Barracuda, "Customers," <https://www.barracuda.com/company/customers>; Bloomberg, "Barracuda Networks Inc." <https://www.bloomberg.com/profile/company/CUDA:US?sref=mxblZFb4>.

†Chinese hackers were able to break into the networks of hundreds of these public and private organizations around the world, with nearly a third being government agencies. Public and private organizations in at least 16 countries across the Americas, Asia-Pacific, Europe, the Middle East, and Africa were impacted by the hacks. Frank Bajak, "Chinese Spies Breached Hundreds of Public, Private Networks, Security Firm Says," *Associated Press*, September 4, 2023; Austin Larsen et al., "Barracuda ESG Zero-Day Vulnerability (CVE-2023-2868) Exploited Globally by Aggressive and Skilled Actor, Suspected Links to China," *Mandiant*, June 15, 2023.

Affairs, and academic researchers and organizations in Taiwan and Hong Kong.³⁸⁹ The Cybersecurity and Infrastructure Security Agency (CISA) issued a notice to U.S. federal agencies warning of the vulnerability.³⁹⁰ Charles Carmakal, Mandiant's chief technical officer, called the exploitation the "broadest cyberespionage campaign known to be conducted by a China-nexus threat actor" since the 2021 Microsoft Exchange hack, which affected at least 30,000 U.S. organizations.³⁹¹

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CHAPTER 2

CHINA'S EFFORTS TO SUBVERT NORMS AND EXPLOIT OPEN SOCIETIES

SECTION 1: RULE BY LAW: CHINA'S INCREASINGLY GLOBAL LEGAL REACH

Abstract

China is attempting to use its own and other countries' legal systems and regulatory bodies to achieve a suite of strategic and political goals, including silencing critics of the regime, stalling litigation against Chinese firms that steal intellectual property (IP), and targeting other actors that challenge Chinese Communist Party (CCP) goals. At the same time, the CCP is attempting to draw more foreign business by increasing the efficiency and professionalism of its legal system. Despite using terms and practices consistent with a rule of law system, these reforms should not be confused with acceptance of the principles underlying that system. Instead, China's "rule by law" system aims to strengthen the Party's control through its ability to intervene in rulings and achieve its goals while also applying Chinese law outside its borders. Internationally, China seeks to shape international law in its favor by discrediting established norms, exporting authoritarian elements of its legal system, and influencing laws and norms development in and through emerging fields like space and cyber governance. The United States and countries committed to the rule of law lack mechanisms to adequately deal with the challenges China's rule by law presents to the integrity of their institutions and the international system.

Key Findings

- The CCP uses law as a tool to wield power, not constrain it. Rather than viewing courts as independent, neutral arbiters of disputes between equal parties, the Party-state leverages the judiciary as a tool to advance its policy and political goals through a rule *by* law system. Under this construct, the CCP pays lip service to clear, stable, and evenly applied laws, taking full advantage when they produce outcomes determined to be favorable to Beijing but quickly departing this system once it impedes CCP interests. Rule by law does not limit the Party's exercise of power or hold central leaders accountable.
- Chinese legislation increasingly includes extraterritorial provisions, and China's government is expanding its ability to apply Chinese laws outside its borders. Its efforts range from extraterritorial enforcement of Chinese laws—sometimes unbeknownst

to the host country—to penalizing firms operating in China for their activities in other jurisdictions.

- The CCP seeks to advance techno-authoritarianism beyond China’s borders, especially through partnerships and trainings with developing nations and those in the Belt and Road Initiative (BRI). Beijing encourages these governments to acquire its sophisticated surveillance tech and to use it to normalize censorship, lack of privacy, and other authoritarian norms within their countries, dampening the prevalence of Western concepts like “rule of law,” which it denigrates as “erroneous Western thought.”
- China’s promotion of surveillance technology to other governments also carries an ulterior benefit for Beijing: exercising certain powers granted to it within the Chinese legal system, the Party-state can compel Chinese firms to provide data from citizens of other countries collected on those platforms. The Party-state may then use these data to enforce its laws beyond China’s borders, in effect giving Beijing’s domestic laws international force and applications. In this way, Beijing grants itself power within the sovereign borders of other states.
- Beijing’s rule by law approach creates hazards for international firms, which must navigate competing legal systems with contradictory requirements, expectations, and mandates. To comply with the legal and regulatory provisions of China’s authoritarian system as well as democratic systems, some companies must establish segregated operations in China or even prioritize compliance with one legal system over another.
- In international law, or the rules and norms that govern relations between countries, China actively participates in fora it believes it can influence but deliberately undermines fora and laws that conflict with its objectives. For the former, its efforts are focused on setting rules of the road in emerging areas of international law that could have substantial future commercial impact, such as cyber governance and space.
- China’s government exploits the openness of the U.S. legal system to bring meritless lawsuits against its critics in U.S. court, imposing burdensome legal costs on dissidents and adversaries. While some U.S. states have procedural safeguards to throw out these politically motivated suits, there is no federal statute to prevent China from using U.S. federal court to silence critics and dissidents.

Recommendations

The Commission recommends:

- Congress enact legislation to address politically oppressive lawsuits initiated by the Chinese government or its proxies attempting to silence, intimidate, or impose significant litigation costs on parties for exercising protected rights through political engagement or other public participation. Such legislation would create a procedure providing for expedited consideration of efforts to dismiss such lawsuits and staying expensive discov-

ery proceedings until the court has made a threshold determination on the merits of the lawsuit.

- Congress pass legislation requiring the Judicial Conference of the United States to prepare an evaluation and guidance for U.S. courts and administrative personnel on the Chinese legal system and body of law for purposes of assisting courts in assessing recognition of Chinese judgments and change of venue, choice of law, and *forum non conveniens* inquiries.

Introduction

Just as economic development and international engagement have not fostered political liberalization in China, neither have they strengthened China's rule of law or resulted in convergence with legal systems in liberal democracies. As the Chinese Communist Party (CCP) has tightened political control over society and the market, it is similarly intervening in the legal system with an eye toward enacting laws and establishing courts that serve as instruments of CCP power. China's ambitions in wielding laws and courts to advance its geopolitical objectives extend beyond its borders as well. China is increasing its sway in international commercial dispute resolution, expanding extraterritorial enforcement of its laws, and shaping emerging fields within international law. Its efforts even extend to U.S. courtrooms, where it has brought frivolous lawsuits against dissidents simply to impose legal costs.

This section catalogues China's various uses of its own legal system, international law, and foreign courts to implement Chinese policy—in other words using law to achieve goals that are distinctly not legal in nature. The section opens with a short discussion of how Chinese jurists and legal theorists view the law. It then reviews key developments in China's legal system under CCP General Secretary Xi Jinping, particularly increased Party influence in court rulings and greater use of extraterritorial provisions in legislation. Through a series of case studies, the section analyzes how China is attempting to export ideas from its own legal system, shape the development of international rules and norms, and compromise other countries' sovereignty in extending law enforcement efforts beyond its borders. The section concludes with a discussion of challenges U.S. courts confront from Chinese parties and in interpreting China's laws before offering an assessment of the implications for the United States.

The CCP Uses Law as a Tool to Wield, Not Constrain, Power

The CCP views law as a tool to increase the state's capacity to achieve its political objectives without limiting central leaders' power. To this end, the CCP seeks the commercial efficiencies afforded by clear, stable, and evenly applied laws in most cases. To facilitate economic development, it has adopted many elements of contract law and equity ownership from both common law systems like that of the United States and UK as well as civil law systems like that of Germany. At the same time, the CCP views the legal system as a means to reinforce its authority, and it rejects concepts like sep-

aration of powers that would enable the legal system to provide independent oversight over the political elite or check their exercise of power.¹ In criminal proceedings in China, suspects have no right to refuse interrogation, enjoy no presumption of innocence, have no right to confront their accusers or compel the presence of witnesses to testify in their defense, and are granted extremely limited rights to counsel.*² Nonetheless, central leaders want the legal system to help them enforce laws consistently to achieve CCP objectives and implement policy priorities that might otherwise face resistance from lower levels of government. Similar to its goals domestically, the CCP wants international law—the norms and rules countries agree to in their interactions with one another and the institutions they form to decide and uphold these norms and rules—to work as its domestic legal system does: to function effectively but not constrain China’s actions. Taken together, this approach constitutes China’s vision of “rule by law”† and aims to achieve the governance benefits of a rule of a law system without undermining one-party rule.

China’s Legal System under Xi Jinping: More Party Influence, More Extraterritoriality

To strengthen China’s ability to use the law as an instrument of Party-state power, General Secretary Xi has restructured the judiciary and expanded the remit of China’s legislature. When Xi entered office in 2012, China’s court system was highly susceptible to interference from local governments.³ Moreover, China’s laws are often deliberately vague to allow for flexibility in implementation, so government agencies’ regulations to supplement and implement laws become authoritative sources of guidance.⁴ Xi’s initiatives to strengthen rule by law, articulated in several key CCP meetings since 2014 and the Plan on Building the Rule of Law in China (2020–2025), focus on shoring up the capacity of the jurisdiction and legislature while preserving the CCP’s ultimate authority and reining in local governments’ leeway in interpreting laws.⁵

Even as these documents affirm the importance of establishing a uniquely Chinese approach to the law, jurists’ and legislators’ efforts to improve the efficacy of the legal system readily draw from and adapt concepts from other legal systems.⁶ While some of these include procedural measures that improve the consistency and transparency of China’s courts, others pose challenges to the United

* China is a signatory to the Vienna Convention on Consular Relations of 1963, which sets forth signatory countries’ obligations to foreign nationals detained within their jurisdictions. Under article 36 of the convention, Chinese authorities are obligated to advise detained foreign nationals of their right of access to a consular representative “without delay,” but they are not obligated to inform the detained persons’ consular posts of the detention or arrest unless the detained foreign national requests notification. China has violated the convention in the past, such as the denial by Chinese authorities of Australian national Yang Hengjun’s right of consular access in 2021. Kirsty Needham and Cate Cadell, “China Keeps Diplomats out of Espionage Trial of Australian Yang Hengjun,” *Reuters*, May 27, 2021; Sandra Weiland, “The Vienna Convention on Consular Relations: Persuasive Force or Binding Law,” *Denver Journal of International Law and Policy* 33:4 (Fall 2005), 675–687, 675, 678.

† Chinese sources since 1997 have used the term “法治,” translated as “rule of law,” to describe China’s approach to the law, distinguishing it from “法制” or “rule by law” used in prior official documents. Yale Law School fellow Moritz Rudolph notes that the CCP’s fundamentally “rule by law” approach has not changed, however, and is guided by a Marxist tradition of viewing law as subservient to the goals of the state. Moritz Rudolph, written testimony for the U.S.-China Economic and Security Review Commission, *Hearing on Rule by Law: China’s Increasingly Global Legal Reach*, May 4, 2023, 1.

States and other countries. Chief among these is a concerted attempt to increase longarm jurisdiction in China's laws and also penalize compliance with foreign sanctions.⁷ China's selective application of procedural concepts from foreign courts can also undermine transnational litigation, as China's courts may employ procedural steps explicitly to advance Party-state policy objectives where foreign courts employ them as neutral arbiters between disputants. China's recent extensive use of anti-suit injunctions to forestall unfavorable litigation against Chinese companies in IP cases, discussed below, demonstrates this challenge.

Xi's Judicial Reforms Aim to Foster Capable Judges Loyal to the CCP

Changes to the judicial system under Xi aim to improve the professional capacity of China's courts to hear complex commercial cases and strengthen their independence from local governments while bringing them more directly under the supervision of the CCP and higher courts. China's local governments often intervene in cases to support local industries, shield themselves from liability in administrative lawsuits, or protect corruption.⁸ Because courts are part of the bureaucracy rather than an independent branch of government, other agencies sometimes refuse to cooperate in enforcing local courts' judgments. Additionally, because formulation of laws and regulations is highly centralized in China—until 2015, only 31 of China's sub-provincial-level jurisdictions and 18 of its largest cities could enact local statutes—local officials have traditionally had broad leeway to interpret law and regulations according to “local conditions.”⁹ In what George Washington University law professor Donald Clarke describes as its “first meeting specifically devoted to the legal system,” the CCP Central Committee's 2014 Fourth Plenum Decision separated China's judiciary from the rest of China's civil service, cutting off local governments' ability to interfere in cases through control over judicial appointments and salary determinations within their administrative jurisdiction.¹⁰ Additionally, the decision proposed to establish circuit courts to hear cross-jurisdictional cases less subject to pressure from local governments, which saw the first pilot courts established in 2016.¹¹

None of these efforts to strengthen the judiciary's resilience against local political interference create genuine judicial independence, however, and the structure of the judiciary reinforces Party oversight. CCP political-legal committees oversee the work of the courts—among other aspects of the bureaucracy—at each level of China's government, and many of China's judges are CCP members.[†]¹² Moreover, special committees led by court presidents can

^{*}This is compounded because China does not have a common law system in which legal precedent determines future interpretation. In China, the “law” encompasses statutes, regulations, and in many cases unpublished Party directives or guidance, but it does not include case law. China's courts nonetheless also hear cases and interpret government regulations in a fashion similar to judging the application of law.

[†]A 2016 editorial from the *Legal Daily*, a state-run paper on China's court system, indicated upward of 85 percent of judges are CCP members. There is not an explicit requirement for judges to be Party members, but Party membership is required to join the Communist Party Group, an institution with ten-members at the apex of each level of the judiciary. *Judiciaries Worldwide*, “China,” *Federal Judicial Center*; Zhao Hongqi, “Party Member Judges Must Strengthen Their Awareness of Judicial Service to the People” (党员法官更要强化司法为民意识), *Legal Daily*, June 15, 2016. Translation.

review, override, or approve decisions at each level of the judiciary, an authority often exercised in complex and politically sensitive cases.¹³ As Florida University law professor Larry DiMatto explains:

[T]he impartial, objective, and well-reasoned judicial application of the law has not been a hallmark of China's court system. Important governmental (bureaucracy), Party, and local non-governmental power structures (organizations, rural collectives) continue to influence judicial decision making. As one scholar has noted, the Communist Party is the "ghost hidden in the legal machine." For most courts if there is a perceived conflict between government policy (national, regional, local) and formal law they will most often ignore the law and side with policy objectives.¹⁴

In testimony before the Commission, Harris Bricken founding partner Dan Harris indicated that judges in China will preemptively seek guidance from higher courts before reaching a decision when the case pertains to a topic the CCP considers sensitive.¹⁵ As the CCP's industrial policy and national security goals have grown more expansive, the number of potentially sensitive cases has increased significantly, inviting greater CCP interference in court decisions.¹⁶

Like Economic Policy, Judicial Reform Aims to Increase Efficiency and Control

The goals for the court system mirror the CCP's goals for economic development: to foster general market efficiency in nonstrategic sectors while retaining the ability to exercise selective control over the nonstate sector through centralized authority. Likewise, the CCP wants the legal system to function effectively in resolving commercial disputes and creating a favorable business environment but at the same time enabling the Party to steer outcomes and decisions when it desires. To this end, many aspects of China's legal system function efficiently and fairly, provided the case is not sensitive. As Mr. Harris describes, "Many Chinese lawyers call this the 90-10 rule. Ninety percent of the time the Chinese courts rule fairly because that allows China's economy to function and that ultimately benefits the CCP. But if a case is critical to CCP power and control, fairness gets tossed out the window."¹⁷ He similarly notes contract enforcement is often effective at resolving disputes quickly and providing plaintiffs preliminary relief, such as ordering a defendant to stop infringing on IP, provided plaintiffs pursue litigation in Chinese courts and contracts are written in Chinese and governed by China's laws.¹⁸ A key component of China's efforts to improve the court system's efficiency is extensive use of technology and digital processes (see "China Uses Technology Extensively in Law Enforcement and Court Procedure" later in this section).¹⁹

China has also launched numerous programs to improve the technical acumen of judges focused on high-value commercial cases. These include establishing foreign exchange programs to improve Chinese judges' knowledge of international law and creating various tiers of specialized IP courts with educational criteria for judges.²⁰ Much of this training dovetails with other efforts to improve the attractiveness of China's venues for dispute settlement, both to en-

courage greater foreign investment and to bolster China's ability to steer international disputes with Chinese companies toward domestic courts.²¹ In cultivating a stronger cadre of jurists with expertise in technical and foreign law, China's government also aims to formulate strategies for advancing China's interests in international law.²²

China Uses Technology Extensively in Enforcement and Court Procedure

China's government views integration of digital processes as a means to improve the legal system's efficiency, enforcement capacity, and resilience against interference from lower governments. The most pervasive and notable example is China's sprawling social credit system, a nationwide system to monitor individual and corporate compliance with laws and regulations.* The social credit system incentivizes compliance through a series of sticks and carrots, for instance offering fast-tracked regulatory approvals to "creditworthy" entities and a series of tiered penalties to violators. The worst of these includes being "blacklisted" until the offender undertakes corrective measures. For individuals, being blacklisted can result in prohibitions on purchasing plane or upper-class train tickets.²³ For companies, it can mean being barred from participating in government procurement or receiving subsidies.²⁴ The system can also target foreign companies for actions outside of China's jurisdiction. For instance, in 2018, China's Civil Aviation Administration threatened to punish 44 international airlines for listing Taiwan separately from China on their international websites, a directive the majority complied with to avoid penalties.²⁵ In a report prepared for the Commission, research consultancy Trivium China found that blacklists often target violations that regulators struggle to address through China's legal system, such as defaulting on debt.²⁶

Other technology-enabled solutions in China's legal system focus on establishing "smart courts," an umbrella term for reforms to streamline and digitize judicial proceedings. Steps to implement smart courts range from establishing e-filing portals, including a feature enabling parties to file lawsuits or motions for evidence via social media platform WeChat, to moving courts fully online—a step China quickly implemented at the onset of COVID.²⁷ Since 2014, China's courts have also published extensive records online, including tens of millions of decisions, although scholarly analysis indicates numerous cases that are likely deemed sensitive have been omitted from public view.²⁸ While these steps improve the court system's efficiency and provide some degree of transparency, they are also explicitly intended to provide more capacity to monitor judges and not for the purpose of establishing precedent-based case law.²⁹

China's Laws Attempt to Counteract Sanctions and Govern Activity beyond Its Borders

Chinese legislators and administrative agencies are trying to strengthen China's ability to apply commercial and criminal law extraterritorially and mitigate the impact of foreign economic re-

*For more on China's corporate social credit system, see Kendra Schaefer, "China's Corporate Social Credit System: Context, Competition, Technology and Geopolitics," *Trivium China* (prepared for the U.S.-China Economic and Security Review Commission), November 16, 2020, 26–29.

strictions on China. Both are key elements of China's attempts to build capacity in "foreign-related rule of law," a core element of Xi Jinping Thought on the Rule of Law.* The Plan on Building the Rule of Law in China (2020–2025) explicitly calls for China to "promote the construction of a legal system applicable outside the jurisdiction of [the] country."³⁰ Xi uses the same turn of phrase in describing goals for "using rule by law to carry out international struggles" in an April 2022 article in authoritative CCP journal *Seeking Truth*. In the same article, he calls on China to "further improve laws and regulations countering sanctions, interference, and 'long-arm jurisdiction.'"³¹ Chinese University of Political Science and Law professor Huo Zhengxin characterizes these as the spear and shield of foreign-related rule of law, likening extraterritorial laws as an offensive approach to asserting China's interests beyond its borders, coupled with a defensive tactic of blocking other countries' attempts to assert longarm jurisdiction against Chinese entities.³² In addition to strengthening China's ability to apply its own laws extraterritorially and to counter foreign economic restrictions, the CCP is encouraging courts in China to become more adept at interpreting and applying foreign law.³³

In implementation, Chinese legal theorists see foreign-related rule of law as an extension of China's domestic rule by law. Professor Huo explains that "foreign-related rule of law includes not only the elements of China's domestic legal system that address foreign and international affairs... but also includes China's immersion in the international legal system through participation in formulation of international laws, law enforcement, and judicial cooperation.... To put it bluntly, foreign-related rule of law breaks the long-standing distinction between domestic law and international law."³⁴ Researchers at the United States Institute of Peace note, "By linking domestic and international law, the party seeks to achieve its ultimate goal of enabling the PRC [People's Republic of China] to occupy the same role vis-à-vis other states internationally as the CCP plays for Chinese citizens domestically."³⁵

The Spear of Foreign-Related Rule of Law: Extraterritorial Laws

On the offensive side, China's legislature has increased its issuance of laws containing expressly extraterritorial provisions in the last ten years (see Appendix I: Extraterritorial Provisions and Countermeasures in Chinese Laws). Many of these laws seek to regulate commercial interactions with Chinese entities that occur outside China's borders. China's Antimonopoly Law, issued in 2007, extends to conduct outside China that impacts competition in China's domestic market.³⁶ China's evolving data governance regime is a source of many extraterritorial provisions, including the Personal Information Protection Law's application to "the activities carried out outside the territory of [China] to process the personal information of natural persons within the territory."³⁷ While some

*As noted above, Chinese official translations render "法治" as "rule of law," including in Xi Jinping Thought on the Rule of Law and the Plan on Building the Rule of Law in China (2020–2025), but the CCP's fundamentally "rule by law" approach has not changed. Moritz Rudolph, written testimony for the U.S.-China Economic and Security Review Commission, *Hearing on Rule by Law: China's Increasingly Global Legal Reach*, May 4, 2023, 1.

[†]For more on China's data governance regime, see Emma Rafaelof, "China's Evolving Data Governance Regime," *U.S.-China Economic and Security Review Commission*, July 26, 2022.

of these regulations are in principle similar to components of the EU's General Data Protection Regulation (GDPR),* China's requirements are stricter and less clearly defined and require more review by government authorities, creating far greater compliance burdens for organizations outside China.³⁸ Article 43 of the 2021 Personal Information Protection Law also establishes retaliatory measures against countries that adopt discriminatory measures against China, a provision that Stanford University and New America's Digi-China Project assesses could be used to target competitors.³⁹

China is also strengthening its ability to enforce laws against a vaguely defined, broad scope of national security interests and related offenses. For instance, China's 2018 amendment of the Counterterrorism Law defines terrorism as "propositions and actions that create social panic, endanger public safety, violate person and property, or coerce national organs or international organizations," and indicates the state will pursue criminal responsibility for terrorist activity outside China.[†]⁴⁰ Article 38 of the 2020 Hong Kong National Security Law extends the law's application to anyone who commits undefined "offenses" against Hong Kong, regardless of where the activity deemed an offense took place. In July 2023, Hong Kong police issued arrest warrants offering rewards of over \$127,000 (1 million Hong Kong dollars) for each of eight overseas activists, including former lawmakers Dennis Kwok and Ted Hui (for more on enforcement of the National Security Law, see Chapter 5, Section 3, "Hong Kong").[‡]⁴¹ Sarah Cook, senior advisor for China, Hong Kong, and Taiwan at Freedom House, notes that article 38 "exposes a much wider array of individuals... to detention and prosecution should they travel to Hong Kong, mainland China, or any country where the rule of law is weak and the government is eager to curry favor with Beijing."⁴² The latter is of increasing concern for U.S. citizens, as China's government is expanding its criminal enforcement through cooperation agreements and extradition treaties, discussed below.

The Shield of Foreign-Related Rule of Law: Reciprocal Countermeasures

On the "defensive" side, China's government is formalizing a legal and regulatory framework to counter foreign trade restrictions and sanctions, aimed especially at export controls on Chinese companies and financial sanctions on Chinese individuals (see Appendix I: Extraterritorial Provisions and Countermeasures in Chinese Laws). The most sweeping of these new measures are the June 2021 Anti-Foreign Sanctions Law and the June 2023 Foreign Relations Law.§ The former prohibits companies operating in China from com-

*For instance, article 53 in China's Personal Information Protection Law requires "personal information processors" outside of China to establish entities or appoint representatives within the country responsible for relevant matters of personal information protection, similar to requirements for "data controllers" in the GDPR. Julia Zhu, "The Personal Information Protection Law: China's Version of the GDPR?" *Columbia Journal of Translation Law*, February 14, 2022.

†The initial draft of the law included "thought, speech, or behavior" that attempts to "influence national policy-making" in the definition of terrorism. Human Rights Watch, "China: Draft Counterterrorism Law a Recipe for Abuses," January 20, 2015.

‡The other six include activists Nathan Law, Anna Kwok, Finn Lau, lawyer Kevin Yam, labor organizer Mung Siu-tat, and internet commentator Yuan Gong-yi. James Pomfret and Jessie Pang, "Hong Kong Police Issue Arrest Warrants for Eight Overseas Activists," *Reuters*, July 3, 2023.

§The law's purview extends beyond strengthening China's retaliatory measures, outlining China's general foreign policy framework and goals. Dr. Rudolph notes the law, "restates China's

plying with foreign sanctions the Chinese government determines are “discriminatory” and gives those affected by sanctions the right to sue.⁴³ The latter has an even broader scope, establishing China’s right to impose countermeasures and restrictive measures “against acts that harm [its] sovereignty, security, and developmental interests in violation of international law and fundamental norms of international relations.”⁴⁴ A Chinese legal theorist and Chinese state media have attempted to justify this by alleging that U.S. longarm jurisdiction, in particular secondary sanctions, violates the fundamental norms of international relations by limiting countries’ ability to determine their relations with other states.⁴⁵

Vague and ideologically driven framing could extend Beijing’s evolving retaliatory framework well beyond responding to economic restrictions. Under Xi’s “comprehensive national security concept” introduced in 2014, areas as diverse and broad-ranging as “cultural security” are deemed elements of national security.⁴⁶ As analysts at the Mercator Institute for China Studies note:

*[E]verything has become a matter of national security for the party. Creating a favorable international public opinion environment, i.e., strengthening China’s positions and keeping criticism on key issues in check, is seen as key for China’s development interests. This thinking underlies the expansion of Beijing’s red lines and core interests over the past years, hence the recent inclusion of “maritime issues” and “pandemics” to the list of sensitive topics. These now sit alongside longstanding sore points like Xinjiang, Tibet, and Taiwan as issue areas where criticism or interference by foreign countries could warrant countersanctions by China.*⁴⁷

Campaign-Style Enforcement Adds Risk of Sudden, Swift Implementation

Though China has significantly expanded its toolkit for applying retaliatory restrictions, it has only invoked the new measures in a few instances and so far without great effect. In part, this is because it continues to rely on ad hoc retaliatory measures and other forms of coercion.⁴⁸ For instance, months after China’s Ministry of Commerce released its Rules on Counteracting Unjustified Extra-Territorial Application of Foreign Legislation and Other Measures (see Appendix I, Table 2), it introduced a series of restrictions on outgoing Trump Administration and other U.S. government officials* simply via a press conference without employing the formal mechanism it had just created.⁴⁹ Professor Huo notes that continued application of countermeasures on an ad hoc basis will likely undermine the potential deterrent effect of establishing such measures via formal legal and regulatory channels.⁵⁰ He also suggests that China’s long-standing criticism of U.S. longarm jurisdiction without a codified

long-standing foreign policy positions and codifies its foreign policy praxis.” The law also highlights China’s recently launched Global Security Initiative, Global Development Initiative, and Global Civilization Initiative. For more on the law’s impact on China’s foreign policy, see Chapter 1, Section 2, “Year in Review: Security and Foreign Affairs.” Moritz Rudolph, “China’s Foreign Relations Law: Balancing ‘Struggle’ with Beijing’s ‘Responsible Great Power’ Narrative,” *NPC Observer*, July 3, 2023.

*The Commission’s current chairman was among those sanctioned by China.

response has led to a perception that China is simply paying lip service to norms of international relations.⁵¹

For U.S. entities operating in China, the risk that Chinese agencies begin to implement retaliatory measures abruptly and expansively creates uncertainty. Owing both to a legacy of Mao-era governance* and in part because the state does not have the administrative capacity to enforce laws and regulations consistently, China's government often initiates "shock and awe" campaigns to enforce certain laws.⁵² These campaigns are aimed at scaring regulated individuals and entities into compliance.⁵³ Frequently, these campaigns seek to make examples of prominent firms.⁵⁴ Although Chinese entities are much more often the targets of such campaigns, their application against foreigners and foreign firms operating in China tends to result in much higher fines.⁵⁵ Campaign-style enforcement is also harsh because regulators are incentivized to take a harder line for their own promotion prospects and because administrative agencies in China are seldom subject to judicial scrutiny.⁵⁶ For instance, in an unprecedented and sweeping application of China's Antimonopoly Law in 2014, U.S. chip maker Qualcomm was fined a record \$975 million (renminbi [RMB] 6 billion) and also agreed to license its chip designs to Chinese firms at a significant discount to its global rates.[†]⁵⁷ This year, in an effort to inhibit foreign firms from collecting potentially damaging evidence about Chinese entities or negative information on China's economic performance, China's government conducted a series of raids on offices of foreign consulting firms, including Capvision, Bain & Company, and Mintz Group.[‡]⁵⁸ The raids coincided with the revision of China's Counterespionage Law to expand its scope, including encompassing all "documents, data, materials or items related to national security" where the prior version of the law had only concerned "state secrets and intelligence."⁵⁹ (For more on the Counterespionage Law and implications for the United States, see Chapter 1, Section 2, "Year in Review: Security and Foreign Affairs.")

China's Courts Back Commercial Interests: Setting Global Licensing Rates through Anti-Suit Injunctions

In 2020 and 2021, China's courts aggressively issued orders to prevent foreign patent-holders from suing Chinese firms for IP infringement. These orders, called anti-suit injunctions (ASIs), hold plaintiffs in contempt of court in China and may impose fines if they proceed with cases abroad.§ In common law juris-

*In testimony before the Commission, Fordham Law professor Carl Minzer traced the evolution of Mao-era campaigns against crime into enforcement actions against nonstate companies. See Carl Minzer, written testimony for the U.S.-China Economic and Security Review Commission, *Hearing on Stability in China: Lessons from Tiananmen and Implications for the United States*, May 15, 2014.

†Heftier fines have since been levied as part of a regulatory tightening campaign against internet firms starting in late 2020, including a \$2.6 billion (RMB 18.1 billion) fine for Alibaba in 2021 (also for antitrust violations) and a \$985 million (RMB 7 billion) fine for Ant Group in 2023 for corporate governance, consumer protection, and other violations. Julie Zhu and Jane Xu, "China Ends Ant Group's Regulatory Revamp with a Nearly \$1 Billion Fine," *Reuters*, July 7, 2023; Raymond Zhang, "China Fines Alibaba \$2.8 Billion in Landmark Antitrust Case," *New York Times*, April 9, 2021.

‡In August 2023, Mintz Group was fined \$1.5 million (RMB 10.7 million) for conducting "unapproved statistical work." Laura He, "China Fines US Due Diligence Firm Mintz Group \$1.5 Million for 'Unapproved' Investigations," *CNN*, August 22, 2023.

§In three cases in 2020, *Conversant v. Huawei*, *InterDigital v. Xiaomi*, and *OPPO v. Sharp*, Chinese courts granted ASIs requested by the Chinese manufacturer, imposing fines of approximately

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dictions, ASIs are interim orders to prohibit litigants from initiating or continuing parallel litigation in another jurisdiction so as to minimize friction between courts and prevent cases from being heard in multiple different jurisdictions at once. Chinese courts' implementation of ASIs differs from this practice in several important respects, demonstrating their politicized nature. ASIs issued by Chinese courts only target foreign litigation and only apply to cases outside of China.* They are also highly non-transparent, as many Chinese courts' decisions in related cases have not been published, and their application does not have a clear legislative basis.⁶⁰

For a sign of China's courts' willingness to back Chinese commercial interests, the country's recent wave of ASIs in IP-related litigation is instructive: it amounts to a nonindependent judiciary advancing an industrial policy objective, namely driving down the fair, reasonable, and nondiscriminatory (FRAND) royalty rates for standard-essential patents (SEPs)[†] owned by overseas companies, thereby reducing the cost of foreign technology inputs for Chinese manufacturers.⁶¹ Mark Cohen, Asia IP project director at Berkeley Center for Law & Technology, notes that "China's ASI practices have been promoted and endorsed by the highest levels of China's political and judicial leadership."⁶² Shenzhen Intermediate People's Court Judge Zhu Jianjun advocates for China to use SEPs to "form countermeasures in international competition... [and] build the main battlefield for foreign-related dispute resolution."⁶³ Law professors Jorge Contreras and Yang Yu also observe that the global scope of some of China's ASIs "is more sweeping than any ASI issued in U.S. or other courts in FRAND cases."⁶⁴ While ASIs generally address the jurisdictions in which parallel proceedings are occurring, China seeks global enforcement through its ASIs, employing them to prevent any jurisdic-

\$150,000 (renminbi [RMB] 1 million per day) for any violation. Jorge L. Contreras, "Anti-Suit Injunctions and Jurisdictional Competition in Global FRAND Litigation: The Case for Judicial Restraint," *New York University Journal of Intellectual Property and Entertainment Law* 11:2 (Fall 2021): 178.

*The Shenzhen Intermediate People's Court determined in October 2020 that other courts in China can still rule on global licensing terms for SEPs even when litigants are prohibited from pursuing parallel litigation in other countries, a ruling upheld a year later by the Intellectual Property Tribunal of the Supreme People's Court of China. Zhongren Cheng, "The Chinese Supreme Court Affirms Chinese Courts' Jurisdiction over Global Royalty Rates of Standard-Essential Patents: Sharp v. Oppo," *Berkeley Technology Law Journal* (January 3, 2022); Aaron Wininger, "China's Supreme People's Court Affirms Right to Set Royalty Rates Worldwide in OPPO/Sharp Standard Essential Patent Case," *National Law Review*, September 5, 2021.

[†]Technical standards for emerging technologies often incorporate cutting-edge features held under patent by the original developer. Because this IP may become essential to following the standard, or "standard-essential," other companies that adopt the standard are required to license the SEP from the patent holder. This can guarantee billions in revenue for widely licensed patents, as complying with a standard generally means a producer is locked into using features specified by the standard—and paying royalties to the SEP holder—until another standard becomes dominant. To prevent SEP holders from abusing their market position and charging unreasonable licensing fees, the standards-making bodies obligate the holder to license the SEP under "fair, reasonable, and non-discriminatory" terms, or FRAND. FRAND terms apply globally, but SEP holders must often enforce their IP in multiple jurisdictions in order to assert their claim to licensing fees. Michael T. Renaud et al., "Key Considerations for Global SEP Litigation—Part 1," *Mintz*, October 30, 2019; Abraham Kasdan and Michael J. Kasdan, "Recent Developments in the Licensing of Standards Essential Patents," *National Law Review*, August 30, 2019.

**China's Courts Back Commercial Interests: Setting
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*Continued***

tion in the world other than China from determining FRAND rates on valuable SEP patents.⁶⁵ As Mr. Cohen described in testimony before the Commission, “These cases often were highly intrusive of the sovereignty of foreign courts to adjudicate patent claims granted in their respective jurisdictions. As patents are territorial, only national courts generally adjudicate local patent claims, unless the parties have otherwise consented, which is rare.”⁶⁶

China's use of ASIs is an example of China's courts adapting concepts from foreign legal systems to advance China's strategic goals, namely the industrial policy objectives described above, and to expand China's influence in setting global judicial norms.⁶⁷ By using terminology from other legal systems, China's courts seek to convey a sense of legitimacy for their highly distorted application of transplanted concepts. Fortunately, China appears to have ceased issuing global ASIs for IP-related cases, after the EU filed a case against China at the WTO in 2022 over its use of ASIs to restrict EU firms from defending their SEPs, to which the United States, Canada, and Japan have requested to join as third parties.⁶⁸ A panel was composed to hear the case in March 2023.⁶⁹

China's Attempt to Shape International Legal Regimes

Domestically, the CCP seeks to craft a legal system that brings the advantages of rule of law without any of its accompanying limits on the Party's power; beyond China's borders, the Party aims to do the same. Short of exporting its legal system wholesale to other countries, China's objective is to establish global laws and norms that recognize the legitimacy—and even the superiority—of its own authoritarian system. Additionally, China wants to prevent international law from constraining its exercise of power or enforcement of its laws beyond its jurisdiction. In parallel to its promotion of its governance model abroad, China is trying to increase its influence in international law by simultaneously strengthening its position in international fora where it believes it can shape outcomes in its favor. At the same time, China undermines fora it believes serve as obstacles to its strategic priorities, establishing alternative institutions to support its agenda and working bilaterally to export elements of its model and build other governments' capacity to implement them. For the United States and other countries committed to rule of law, China's multipronged efforts pose three primary challenges examined in case studies below: (1) China undermines international law that contradicts its objectives; (2) China seeks to align foreign and international law with its own law and illiberal values; and (3) China aims to enforce its laws, particularly criminal laws, globally.

China Undermines International Law That Contradicts Its Objectives

China has disregarded multiple treaties to which it is a party, justifying its actions by claiming the treaties did not apply to areas it claims as sovereign territory. China demonstrates a particular antipathy toward those that provide for international arbitration measures, which China also views as infringing on its sovereignty.⁷⁰ For example, despite being a signatory of the UN Convention on the Law of the Sea (UNCLOS), China has refused to recognize the 2016 UNCLOS arbitral ruling determining that China's territorial claims in the South China Sea violate the Philippines' exclusive economic zone (EEZ).^{*71} Additionally, the National People's Congress's 2020 passage of the Hong Kong National Security Law and its subsequent implementation in Hong Kong has been in abrogation of the Sino-British Joint Declaration.⁷² While China has ratified seven of the 11 fundamental international labor conventions of the UN's International Labor Organization,[†] Beijing has also been accused of breaching the same conventions it ratified.⁷³ These include widespread accusations of not only labor violations but also human rights violations throughout the country.⁷⁴ While China signed the Forced Labor Convention and Abolition of Forced Labor Convention in 2022, China's continued use of forced labor in Xinjiang highlights its insincerity toward international law.⁷⁵ A UN assessment in 2022 suggested that China is in violation of its commitments to end forced labor under the Forced Labor Convention and Abolition of Forced Labor Convention.⁷⁶ Based on observations from 2020 and 2021, the International Trade Union Confederation alleged that China's government has engaged in a widespread and systemic program of forced labor in Xinjiang targeting Uyghur and other Turkic or Muslim minorities for agriculture and industrial activities.⁷⁷ China's assent to international treaties concerning human rights has also been selective, and it has been widely accused of breaking its international commitments to human rights, with UN experts calling on China to address systematic human rights violations.⁷⁸

China's violations of its international agreements—performed with impunity—weaken international law. With China facing limited or no recourse for its actions, countries are less likely to look to interstate dispute resolution mechanisms to challenge Beijing or hold it accountable. The failure of international law to govern conduct between countries in maritime East Asia directly challenges U.S. security interests in the region.

*An exclusive economic zone, as prescribed by the 1982 United Nations Convention on the Law of the Sea, is an area of the sea in which a state has exclusive rights over the exploration and use of marine resources. An EEZ stretches from the outer limit of the territorial sea (12 nautical miles from the baseline) to 200 nautical miles from the coast of the state. UN Convention on the Law of the Sea §55–75, 1982.

†The seven fundamental conventions of the International Labor Organization ratified by China are the Equal Remuneration Convention, the Discrimination (Employment and Occupation) Convention, the Minimum Age Convention, the Worst Forms of Child Labor Convention, the Occupational Safety and Health Convention, the Forced Labor Convention, and the Abolition of Forced Labor Convention. China has not ratified the Freedom of Association and Protection of the Right to Organize Convention, the Right to Organize and Collective Bargaining Convention, the Promotional Framework for Occupational Safety and Health Convention, or the Protocol of 2014 to the Forced Labor Convention. International Labor Organization, "Ratifications for China."

The Maritime Domain: China Undermines the Law of the Sea

Despite signing and ratifying UNCLOS,* China rejects the limitations that would be imposed on it by adhering to the convention.⁷⁹ China justifies its position by claiming that the key areas of contention in its maritime periphery are its sovereign territory and that international law does not apply.⁸⁰ The prime targets of this justification are China's claims in the South China Sea and Senkaku Islands.⁸¹ China claims almost 90 percent of the total area of the South China Sea based on disputed historical evidence and argues that all of the maritime features within its nine-dash line are its sovereign territory; it also makes unclarified ambiguous claims to the waters within the nine-dash line.⁸² China has even incorporated its claimed features in the South China Sea into its administrative structure† to lend weight to its argument that these features are just as integral to China's territory as any of its other provinces.⁸³

China has attempted to claim excessive maritime rights by directly labeling or alluding to the waters between certain features in its periphery as internal waters, a designation under UNCLOS that would allow China to regulate passage through those waters.⁸⁴ China has drawn baselines around both its claimed features in the Paracels in the South China Sea and the Senkaku Islands in the East China Sea that demarcate the waters between them as its internal waters even though the geography in these locations does not match the requirements established under UNCLOS for doing so.‡⁸⁵ Notably, China has not made such specific baseline claims in the Spratlys—where it occupies a number of features and also makes undefined claims to all of the features and surrounding waters—likely due to how escalatory a declaration would be, as such a move would put Vietnamese- and Philippine-occupied features within what China claims as internal waters.⁸⁶ Furthermore, some advocates of the PRC position posit that the PRC's lack of declared baselines in or around the Spratlys generate no opposable claim for a nation like the Philippines to dispute, again demonstrating the PRC's strategy of limiting the applicability of international law.⁸⁷ Despite the unspecified nature of China's position, the 2016 arbitral tribunal ruled that China has no justifiable claim under UNCLOS to internal waters in the Spratlys.§⁸⁸ In addition to this ruling on

*Entered into force in 1994, UNCLOS lays down a comprehensive regime of law and order in the world's oceans and seas, establishing rules governing all uses of the oceans and their resources. The United States, while a signatory to UNCLOS, has not ratified the convention. UN Convention on the Law of the Sea, 1982.

†In 2012, the PRC created the "Sansha Municipal Prefecture" as an administrative prefecture of Hainan Province that had responsibility for all features in the South China Sea, including expressly the Xisha, Nansha, and Zhongsha districts. Zachary Haver, "Sansha and the Expansion of China's South China Sea Administration," *Center for Strategic and International Studies*, May 12, 2020.

‡China has drawn what are known as "straight baselines" in these areas. In contrast to the standard method for determining baselines, UNCLOS allows a coastal state to draw straight baselines "In localities where the coastline is deeply indented and cut into, or if there is a fringe of islands along the coast in its immediate vicinity." The geography of the Paracels and Senkaku Islands does not meet either of these conditions. James Kraska, "China's Excessive Straight Baseline Claims," in James Kraska, Ronan Long, and Myron H. Nordquist eds., *Peaceful Maritime Engagement in East Asia and the Pacific Region*, Oceans Law and Policy, 2023, 157–160; The UN Convention on the Law of the Sea § 5, 7, 1982.

§The tribunal found China cannot justifiably claim internal waters in the Spratlys by drawing straight baselines around the features because the geography does not match UNCLOS' requirement of a deeply indented coastline or a fringe of islands in the immediate vicinity of the coastline. The Tribunal similarly ruled that China cannot claim internal waters in the Spratlys by asserting the rights of an archipelagic state to draw "archipelagic baselines" around the features.

internal waters, the 2016 arbitral tribunal found that none of the maritime features in the Spratlys meet the criteria to be considered an island under UNCLOS, which invalidates any potential Chinese claims to an EEZ or continental shelf around them.⁸⁹

To further erode the effectiveness of international law, China pushes its neighbors toward resolving disputes in the South China Sea bilaterally.⁹⁰ Unless claimant countries like Vietnam and the Philippines accept Beijing's terms, China is often able to block claimants' ability to exercise their resource rights.⁹¹ For instance, it has prevented Vietnam and the Philippines from developing underwater oil and gas fields located in areas where their EEZs overlap with China's claimed waters.⁹² This establishes what Isaac Kardon, senior fellow at the Carnegie Endowment for International Peace, refers to as "veto jurisdiction" over maritime resources claims in its periphery: backed by its naval power, China holds final say in what its neighbors can do in their own EEZs.⁹³

Since the 2016 ruling in the favor of the Philippines, China has not changed its policy toward the disputed features and waters, continuing to treat them as its own territory, as UNCLOS has no effective enforcement mechanism.⁹⁴ By disregarding a dispute resolution mechanism that it agreed to in signing UNCLOS,* China appears to have discouraged other claimants from putting their faith in the convention.⁹⁵ Despite the Philippines' favorable ruling, there have been no follow-on cases brought by other South China Sea claimants as might be expected, indicating that countries with valid claims against China may have lost faith that a favorable ruling by the Permanent Court of Arbitration would provide relief.⁹⁶

China Claims UN Resolution Establishes Its Sovereignty over Taiwan

Using sovereignty claims to mitigate the applicability of international law, as China has done in the South China Sea, holds direct implications for Taiwan. Just as China contends that its maritime claims along its periphery are China's internal territory, China has been vocal in its assertions that Taiwan's status is a matter of its own internal affairs and will not tolerate interference from other nations.⁹⁷ China is attempting to leverage a false interpretation of the UN resolution recognizing the PRC as the

As defined by UNCLOS, an "archipelagic state" is constituted wholly by one or more archipelagos and may include other islands, a condition that China does not meet. Recognized archipelagic states include the Philippines and Indonesia. The tribunal further noted that even an archipelagic state would not be entitled to draw archipelagic baselines around the Spratlys because the water-to-land ratio greatly exceeds the allowable limit under UNCLOS. Dai Tamada, "Straight or Archipelagic Baseline with Respect to Offshore Archipelago?" in James Kraska, Ronan Long, and Myron H. Nordquist eds., *Peaceful Maritime Engagement in East Asia and the Pacific Region*, Oceans Law and Policy, 2023, 190–192; Asia Maritime Transparency Initiative, "Reading between the Lines: The Next Spratly Legal Dispute," *Center for Strategic and International Studies*, March 21, 2019; PCA Case No. 2013-19 in the Matter of the South China Sea Arbitration before an Arbitral Tribunal Constituted Under Annex VII to the 1982 United Nations Convention on the Law of the Sea between the Republic of the Philippines and the People's Republic of China, Award, July 12, 2016, 235–237; UN Convention on the Law of the Sea § 5, 7, 46–54, 1982.

*The PRC government asserts that its 2006 statement rejecting the arbitration clause of UNCLOS constitutes a valid reservation against submitting to compulsory arbitration; such an interpretation is not supported by UNCLOS article 309, which states that "no reservations or exceptions may be made to this Convention unless expressly permitted by other article of this Convention." Article 310 allows for declarations and reservations upon ratification, but the PRC did not elect to do so.

China Claims UN Resolution Establishes Its Sovereignty over Taiwan—*Continued*

rightful representative of China, promoting a view that this resolution codifies China's "One China principle," a phrase China uses to assert that Taiwan is a part of China.*⁹⁸ China's State Council's Taiwan Affairs Office claims UN General Assembly Resolution 2758 is "a political document encapsulating the One China Principle whose legal authority leaves no room for doubt and has been acknowledged worldwide."⁹⁹ In fact, Resolution 2758 solely addresses the question of China's representation in the UN and does not mention "one China" or Taiwan or address the self-governed island's sovereignty.¹⁰⁰ In her testimony before the Commission, Yu-Jie Chen of Academia Sinica argued that Beijing's intensified efforts to exclude Taiwan from international institutions are aimed not only at isolating Taiwan but also at promoting the One China principle internationally to present Taiwan's legal status as a matter of China's internal affairs.¹⁰¹ Such a distinction would be particularly useful to Beijing in a conflict across the Taiwan Strait, which China's government would almost certainly claim to be a domestic issue rather than an invasion to annex a functionally sovereign Taiwan.¹⁰² Similarly, China has protested the passage of foreign warships through the Taiwan Strait, claiming that those ships were passing through China's internal waters.¹⁰³

China Seeks to Align Foreign and International Law with Its Own Law

China is encouraging other countries to adopt laws and procedures like its own and is attempting to shape the evolution of international law to advance its objectives. These efforts are especially focused on areas Chinese jurists call "frontier law"—emerging fields in which international law has been less clearly defined, better positioning China to influence its evolution—including cyber law and norms, space law, polar law, climate change law, maritime law, and nuclear security. Notably, China's encouragement of other countries to adopt elements of Chinese law and its attempt to steer international law can be mutually reinforcing. In cyber law, for instance, Vietnam and Uzbekistan have both adopted elements of China's restrictive cyber governance regime; both have also voted in favor of UN General Assembly resolutions that support countries' discretion to curb internet freedoms. If successful, China's efforts could provide a model of authoritarian law for other countries to follow, potentially harming U.S. interests or U.S. citizens' safety in those countries while also establishing international frameworks that challenge liberal Western values and U.S. strategic objectives.

*The "One China principle" refers to the Chinese government's position that there is only one China; that there is only one legitimate government of China, the People's Republic of China (PRC); and that Taiwan is an inalienable part of the state called "China." By contrast, the "One China policy" of the U.S. government refers to its position recognizing the PRC—rather than the Republic of China (ROC) government on Taiwan—as the sole legal government of China but only "acknowledging" the PRC's position that Taiwan is part of China. Many other countries that maintain official ties with Beijing use the phrase "One China policy" to describe their stance of officially recognizing the PRC while simultaneously not recognizing the Republic of China.

China Expands Its Influence in International Arbitration via the Belt and Road

China is attempting to increase the attractiveness of its own courts and arbitral institutions to draw more cases to China while at the same time increasing the application of Chinese law and procedure abroad. It is particularly focusing its efforts in areas where China has significant commercial interests and in countries that have borrowed heavily from China but have weak domestic legal institutions, especially those involved in BRI. In 2019, the China International Commercial Court (CICC),* a branch of the Supreme People's Court designated for proceedings on international disputes, began hearing cases. China has since established eight more international commercial courts in major Chinese cities.†¹⁰⁴ Chinese entities involved in projects overseas are also insisting that China's laws govern contracts. A study of 100 contracts between Chinese entities and foreign governments by the Center for Global Development showed that the Export–Import Bank of China's debt contracts nearly always stipulate the use of the China International Economic and Trade Arbitration Commission (CIETAC) in dispute resolution and the use of Chinese law in all Export–Import Bank of China concessional and buyer credit loan contracts.¹⁰⁵

China's push to develop capacity in commercial disputes has corresponded with a rise in the number of first-instance foreign-related civil and commercial cases in Chinese courts, from 14,800 in 2013 to 27,300 in 2021.‡¹⁰⁶ As lenders from China insert language into contracts mandating Chinese arbitration in dispute resolution, CIETAC, China's largest arbitral tribunal, also registered a record high number of cases in 2022, with 642 relating to foreign cases totaling about \$5.15 billion (RMB 37.4 billion) in dispute.¹⁰⁷ In total, parties from 69 jurisdictions were involved in CIETAC cases last year, including from 32 countries participating in BRI.¹⁰⁸ Chinese arbitral institutions are also increasing the application of China's laws abroad through partnerships with tribunals in other countries, such as the China Africa Joint Arbitration Center (CAJAC). Prior to its establishment, many disputes between Chinese and African entities were decided in local courts, which could be plagued by inefficiency and bureaucratic red tape.¹⁰⁹ CAJAC enables Chinese entities to resolve disputes guided by China's laws and procedures in centers in Johannesburg and Nairobi. China has established similar joint institutions in Thailand and Kyrgyzstan.¹¹⁰

Though Chinese dispute resolution venues are becoming more competitive, the political nature of China's judicial system limits its attractiveness. As University of Sydney law professor Vivi-

*For more on the CICC, see Leyton Nelson, "Dispute Settlement with Chinese Characteristics: Assessing China's International Commercial Court," *U.S.-China Economic and Security Review Commission*, February 28, 2023.

†Along with Beijing, additional cities with International Commercial Courts include Chengdu, Suzhou, Shenzhen, Hangzhou, Xian, and Xiamen. China Justice Observer, "Xiamen International Commercial Court Holds Its First Hearing," October 31, 2022; China Justice Observer, "Hangzhou Int'l Commercial Court Hears Its First Case Involving Procurement of Test Kits," March 16, 2023; Hansel Pham, "The China International Commercial Court," *White & Case*, March 4, 2021.

‡The Supreme People's Court does not define "foreign-related case."

China Expands Its Influence in International Arbitration via the Belt and Road—*Continued*

enne Bath described in testimony before the Commission, China's courts remain subservient to the CCP's strong oversight, creating, "an ongoing risk of intervention (both political and otherwise) in court decisions which will continue... to undermine the credibility of China's courts as an international dispute resolution venue."¹¹¹ Additionally, nearly all disputes heard by Chinese institutions involve a China- or Hong Kong-based party. The proliferation of Chinese arbitral tribunals and Chinese law governing international contracts nonetheless presents nascent competition with existing patterns of international arbitration largely governed by U.S. law.¹¹² According to Matthew Erie at the University of Oxford, U.S. influence in international law grew in tandem with the U.S. role in international commerce, as lawyers supervising international contracts on behalf of U.S. firms sought to have deals governed by U.S. law.¹¹³ This meant that "[a]s the US became the financial center of the world, New York and Delaware law were used in contracts the world over."¹¹⁴ Now, as Chinese commercial activity expands globally, particularly in developing countries, an increasing number of law firms and courts are specializing in the application of Chinese law.¹¹⁵ Dr. Erie notes that "African lawyers, arbitrators, and businesspeople welcome Chinese capital and want to create legal institutions to facilitate its entry into African markets."¹¹⁶

China's Export of Cyber Restrictions and Techno-Authoritarianism

China is promoting laws and regulations modeled on its own cyber governance regime that appeal to authoritarian countries, potentially paving the way for greater global acceptance of more authoritarian models of the internet. A key tactic in China's exportation of its cyber governance regime is capacity building through state-to-state training workshops. Since 2017, China has held training sessions and seminars with numerous developing countries on China's information policy and management of the internet.¹¹⁷ At the Baise Executive Leadership Academy near the Sino-Vietnam border over, for example, 400 government officials from southeast Asian countries were trained in how to "guide public opinion" online.¹¹⁸ In another two-week Seminar on Cyberspace Management for officials from BRI countries, attendees toured Chinese facilities that tracked cyber activity and examined methods of digitally tracking public sentiment.¹¹⁹ According to an investigation by Freedom House, in 2017 and 2018 alone, government officials from at least 36 countries attended seminars in China on "cyberspace management."¹²⁰

China's state-to-state capacity building appears to have influenced the legal systems of attending countries. Shortly after Vietnamese officials attended training on internet governance and security in 2017, Vietnam introduced a new cybersecurity law in 2018 that closely mimics China's, including close government management over the access to and storage of data.¹²¹ Tanzanian and Ugandan

officials attending Chinese seminars on cyberspace management similarly preceded both countries passing restrictive cyber crime and media laws in 2018.¹²² The laws enhance government powers in censorship and impose harsh punishments for journalists publishing content perceived as damaging to the state.¹²³

China's trainings on cyber governance are also meant to encourage the export of surveillance technologies. According to Freedom House, at least 38 countries, including many who have sent officials to cyber training seminars in China, have received or are set to receive internet equipment from Chinese technology companies.¹²⁴ Among these, 18 are receiving artificial intelligence systems specifically designed for law enforcement.¹²⁵ Deploying surveillance technology from China can also encourage countries to adopt laws and regulations stipulating how authorities might use these technologies. Following Zimbabwe's 2018 purchase of a mass facial recognition system from China-based surveillance tech firm CloudWalk,* for instance, the country adopted a new cybersecurity law modeled on China's that expanded the government's authority to conduct surveillance using CloudWalk's facial recognition tools.¹²⁶ After the Zimbabwe law's adoption in 2021, the EU renewed sanctions on Zimbabwe for undermining human rights, including intimidating political opponents and harassing journalists.¹²⁷

In addition to remodeling other nations' legal structures in the CCP's image and likeness, there is a hidden benefit for Beijing when other countries acquire surveillance tech from China: China's legal system grants the Party-state the authority to access and act upon the data foreign governments might collect with those systems, as long as those systems are serviced by Chinese entities. As outlined in article 11 of China's National Security Law, "to maintain national security, national security agencies may inspect organizational and personal electronic communication tools, facilities, and other related equipment belonging to any organization or individual."¹²⁸ Similarly, article 18 underpins the state's absolute authority to access networks: "when a national security organization investigates any circumstances threatening national security and gathers evidence, organizations and individuals must comply with conveying relevant information to authorities and may not refuse to do so."¹²⁹

The CCP Exercises Extensive Control over Nonstate Firms

Beyond the National Security Law, China has developed numerous avenues through which to intervene in corporate decision-making and direct nonstate firms and resources toward advancing the CCP's priorities. China's government can leverage these tools to strengthen oversight of ostensibly nonstate internet and technology firms exporting surveillance technology as well as firms supporting China's military-civil fusion strategy† and de-

*The U.S. Department of Commerce's Bureau of Industry and Security added CloudWalk to the Entity List in May 2020 for its involvement in human rights violations associated with China's mass detention and repression of the Uyghur Muslim minority in Xinjiang. U.S. Department of Commerce, Bureau of Industry and Security, "Addition of Entities to the Entity List, Revision of Certain Entries on the Entity List," *Federal Register* 85:109, June 5, 2020.

†As articulated in many speeches, Xi's vision for military civil-fusion aims to facilitate transfers between the defense and civilian sectors to improve the sophistication of China's military and cre-

The CCP Exercises Extensive Control over Nonstate Firms—*Continued*

fense modernization objectives. Chinese law grants the state privileged status in the governance of any corporation for which it is a shareholder, regardless of its ownership stake.¹³⁰ The state may exercise these rights through its extensive investment in the non-state economy, which has increased significantly in the last ten years through government guidance funds leading investments in state-directed priority areas, government attempts to stabilize China's stock market through mass share purchases, and "mixed-ownership reform."^{*} Beyond these *de jure* mechanisms for intervention, the CCP itself is not bound by legal constraints and is expanding its influence over firms' management and personnel decisions through CCP committees.¹³¹ Additionally, policy incentives, such as subsidies, grants, and tax breaks, as well as corporate monitoring mechanisms guide companies toward fulfilling the Chinese government's objectives even without direct government influence.¹³²

Within this expanded framework of government control, traditional definitions of state control in an entity no longer apply because any commercial entity may be compelled to act on behalf of the Chinese government's interest, regardless of the state's formal ownership. This rising control makes the distinction between civilian and defense activities of Chinese companies increasingly blurry and furthers the Chinese government's objective of cultivating a commercial environment that supports military-civil fusion and broader technological development.[†] The Chinese government's extensive footprint in China's corporate sector also increases the likelihood that foreign capital invested in China's economy will ultimately fund CCP objectives.

China Is Attempting to Normalize Internet Censorship and Surveillance in International Organizations

State-to-state trainings in cyber governance complement China's attempts to steer international organizations toward embracing an authoritarian vision of the internet more easily censored and regulated at a national level. While global use of the internet carried promise for freedom of speech and has been key to promoting

ate cohesion in Chinese industry and academia working with and in support of military objectives so that the entire system can be effectively mobilized to support the military in the future and to drive technological innovation and economic growth. Greg Levesque, written testimony for the U.S.-China Economic and Security Review Commission, *Hearing on What Keeps Xi Up at Night: Beijing's Internal and External Challenges*, February 7, 2019, 10–16.

^{*}Mixed-ownership reform has attempted to improve the efficiency of China's state sector by inviting private capital and managerial expertise into nonstrategic sectors, such as hotel chains and other services, while allowing China's government to concentrate on managing the operations of a smaller number of state-owned enterprises in critical sectors of strategic importance, such as energy, telecommunications, and technologies prioritized under industrial policy initiatives. In practice, the program has tilted much more heavily toward increased state investment in the nonstate sector rather than vice versa. For more on the state's increased ownership of nonstate firms, see U.S.-China Economic and Security Review Commission, Chapter 2, Section 3, "The Chinese Government's Evolving Control of the Nonstate Sector," in *2021 Annual Report to Congress*, November 2021, 222–224.

[†]For more on the state's increased ownership of nonstate firms, see U.S.-China Economic and Security Review Commission, Chapter 2, Section 4, "U.S.-China Financial Connectivity and Risks to U.S. National Security," in *2021 Annual Report to Congress*, November 2021, 241–286.

free access to information on a global scale, under China's cyber sovereignty model, data and networks would constitute sovereign territory within individual countries' jurisdictions to be governed according to local laws.¹³³ The model is directly in contrast to the free and open multistakeholder platform championed by the United States and other democracies. In effect, China's Cyberspace Administration has moved to narrow the internet's use, invoking the logic of nationally bounded cyberspace to justify limiting the exercise of free speech and personal privacy in China and promoting repressive internet governance on a global scale.¹³⁴

Within the UN and its standards-setting agency, the International Telecommunications Union (ITU), China has tried to promote its overarching vision of centrally controlled, nationally bounded internet. In 2015, China attempted to have the UN adopt cyber sovereignty in a series of documents defining global internet policies and frameworks, aligning with Russia, Cuba, and a group of 134 developing countries.¹³⁵ It ultimately dropped the proposed language owing to strong resistance from developed countries led by the United States, but the final documents approved by the UN General Assembly include phrasing that allows for a greater role for state management of the internet.¹³⁶ Leaked documents from the ITU study group meetings in 2019 indicate China is pushing for adoption of standards for facial recognition technology that would facilitate Chinese-style surveillance norms.¹³⁷ Because standards set by the ITU are more influential among developing countries, dissemination of standards promoting techno-authoritarianism may pave the way for China to align more countries behind its initiatives in the UN and other international organizations.¹³⁸

China Seeks to Ensure Maximum Flexibility in International Space Law

The emerging global space law regime is another area of "frontier law" where China seeks to ensure the alignment of developing international law to its own interests. In contrast to its efforts to revise global cyber governance norms, China views the current international architecture that governs space as favorable to its interests (see Appendix II: International Space Law Frameworks). It has made few efforts toward building space law to a level commensurate with the global space industry's expansion in recent years and has refrained from endorsing efforts to establish norms for responsible behavior in space.¹³⁹ China is wary of proposed changes to the order that it believes would constrain its future actions in space, particularly U.S.-sponsored changes like the voluntary moratorium on destructive antisatellite testing in space.¹⁴⁰

China has countered the influence of the United States and its allies in space legislation within the UN, proposing resolutions that would restrict U.S. actions in space while resisting U.S. and allied initiatives to develop norms of responsible behaviors in space.¹⁴¹ One such example is the 2008 draft presented to the UN by China and Russia titled the Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects (PPWT).¹⁴² In testimony before the Commission, Brian Weeden, director of program planning at the Secure World

Foundation, notes that the PPWT sought to define “space weapons” and to prohibit their deployment into outer space but was silent on the development, testing, and deployment of ground-based antisatellite weapons.¹⁴³ Dr. Weeden states that “most outside experts assess the PPWT as an attempt to limit a potential future U.S. space-based missile defense program, which China and Russia believe would undermine their nuclear deterrent.”¹⁴⁴ Despite both China and Russia advocating for a UN resolution to prevent the militarization of space, the U.S. Defense Intelligence Agency has reported that both countries continue to develop and test space and counterspace weapons systems.¹⁴⁵ In 2021, the United States proposed a resolution that centered around a ban on destructive antisatellite weapons testing that would generate space debris, endangering other nations’ satellites.¹⁴⁶ China opposed the resolution, countering that a binding arms control agreement was needed first.¹⁴⁷

The current absence of defined “rules of the road” in space enables Chinese activities, such as its lack of concern over falling space debris, irresponsible communications practices, and continued destructive antisatellite weapons testing. China appears to apply an extremely lax interpretation of the “due regard”* clause of the 1967 Outer Space Treaty, given that there is no set definition of what constitutes “due regard.”¹⁴⁸ Under the Outer Space Treaty, all nations are bound by a duty to consult with others prior to conducting activities that might “cause potentially harmful interference” with other state parties’ peaceful use of space.¹⁴⁹ The People’s Liberation Army (PLA) and affiliated institutions are reportedly engaged in the development and testing of kinetic kill missiles, ground-based lasers, and orbiting space robots in addition to hypersonic and fractional orbital bombardment systems that that would utilize low-earth orbit as an attack vector.¹⁵⁰ China’s resistance to establishing norms in space allows irresponsible actions to continue; the PLA’s 2007 live-fire antisatellite weapons test generated over 900 debris fragments that remain a danger to space actors and will need to be avoided for decades to come.¹⁵¹ In 2021, just hours before the U.S. National Aeronautics and Space Administration (NASA) was set to launch a crewed mission to the International Space Station (ISS), the ISS was forced to maneuver to avoid being struck by a piece of debris from China’s 2007 test.¹⁵² A PRC rocket launch in October of 2022 that resulted in the uncontrolled reentry of a 23-ton rocket booster was criticized by the heads of both NASA and the European Space Agency, with NASA chief Bill Nelson characterizing it as an unnecessary risk and stating that the PRC did not share trajectory information needed to predict landing zones.¹⁵³ A recently brokered deal between Hong Kong Aerospace Technology Group, a Chinese company, and the government of Djibouti to build a rocket launch facility may represent an attempt by the PRC to circumvent the obligations imposed on it by the Outer Space Treaty by establishing a space launch site in a country that is not party to the treaty.¹⁵⁴ Such a site may be used as a platform to present the PRC’s alterna-

* Codified in article IX of the 1967 Outer Space Treaty (OST), the due regard principle obligates states to conduct all their space activities “with due regard to the corresponding interests of other all other States Parties to the Treaty.” If a state fails to consult with others prior to potentially harmful actions, it must abide by the principle of “due regard.”

tive views of space law while undermining the current international space governance regime.¹⁵⁵

On the question of resources derived from space, current international space law does not include a legal mechanism to clearly adjudicate ownership of space-based resources, leaving room for interpretation based on the dictates of a country's national interests.¹⁵⁶ The Outer Space Treaty states that celestial bodies are not subject to national appropriation, but it is vague on the legal status of any resources extracted from those bodies.¹⁵⁷ While most countries believe the extraction of space-based resources is not incompatible with the ban on sovereignty over these bodies, there is no agreement on what the framework for such activities should be.¹⁵⁸ Previous statements from senior Chinese officials indicate that Beijing intends to claim a right to use space-based resources in the absence of a clear legal framework regulating mining in space, lest Beijing forfeit its "space rights and interests."¹⁵⁹ In 2021, China's Shenzhen Origin Space Technology Co. launched the first commercial spacecraft dedicated to the mining of space resources, indicating Beijing's preparations for eventual space mining operations.¹⁶⁰

China Resists U.S.-Led Initiative on Civil Space Cooperation

Chinese leadership appears to believe that the United States is attempting to build a U.S.-centered legal regime in space with the Artemis Accords,* a U.S.-led nonbinding framework for cooperation in civil space exploration.¹⁶¹ China has expressed opposition to the Artemis Accords, framing the agreement as an attempt by the United States to unilaterally set ground rules for lunar behavior and arguing that the United States is attempting to foment a new space race.¹⁶² While many of the accords' provisions are already in force under existing UN space treaties or would otherwise align with China's interpretations of space resource use, China objects to a commitment to mitigate space debris and the establishment of "safety zones" wherein nations announce and coordinate zones of noninterference for the purpose of deconfliction of lunar activities.¹⁶³ China views the accords as the United States abandoning reforming space law through bodies such as the UN and attempting to build a U.S.-centered legal regime in space.¹⁶⁴ Despite the accords largely aligning with China's interpretation of international law on the extraction and utilization of space resources, China's criticism of the accords likely indicates trepidation that the NASA-led initiative will outpace China's lunar program.¹⁶⁵

China may be preparing to launch its own competing body for space cooperation between nations. A 2022 white paper detailed China's ambitions in space.¹⁶⁶ Of notable inclusion in the document was a section devoted to the governance of space advocating

*The Artemis Accords is a nonbinding multilateral arrangement between the United States government and other world governments participating in the Artemis program, a U.S.-led effort to return humans to the Moon by 2025 with the ultimate goal of expanding space exploration to Mars and beyond. The accords act as a framework for cooperation in the civil exploration and peaceful use of the Moon, Mars, and other astronomical objects. The accords reinforce the commitment by the United States and signatory nations to the Registration Convention and the Rescue and Return Agreement as well as best practices and norms of responsible behavior that NASA and its partners support, including the public release of scientific data. As of July 2023, 27 countries have signed the accords. National Aeronautics and Space Administration, *The Artemis Accords*.

for China to take a greater role in its development, which may be achieved through China's proposed International Lunar Research Station (ILRS).¹⁶⁷ While not explicitly an alternative to the Artemis Accords, China has announced a partnership with Russia to develop the ILRS complete with its own set of principles, which, if they differ from those expressed in the Artemis Accords, could result in a situation where there are multiple competing frameworks for lunar space activities.¹⁶⁸ First announced in 2021 in a joint statement by China and Russia, ILRS signatories are unknown at this time but will likely include members of the China-led Asia Pacific Space Cooperation Organization (APSCO).^{* 169}

China Aims to Enforce Its Laws Around the World

During General Secretary Xi's tenure, China's law enforcement and related agencies have significantly expanded their capacity to investigate and prosecute outside China's borders. This expansion is partly driven by attempts to bring purportedly corrupt Chinese officials living abroad to justice.¹⁷⁰ However, it has also strengthened China's ability to target overseas Chinese nationals or even other countries' citizens for political reasons, particularly criticism of China's government.¹⁷¹ To enforce its laws abroad, China has both greatly increased its network of extradition treaties and reportedly established numerous secret police stations overseas, directly violating host countries' sovereignty.¹⁷² Citizens in countries with which China has concluded mutual legal assistance treaties or law enforcement agreements may be at risk of extradition to China.¹⁷³

Extraterritorial Enforcement of China's Laws via Undeclared Entities and Agents

Beijing considers all individuals of Chinese descent, whether PRC nationals living overseas or ethnically Chinese citizens and residents of foreign countries, part of the Chinese nation.¹⁷⁴ The CCP—through China's law enforcement, intelligence, and public security agencies, in particular—has established numerous operations to investigate and charge residents of other countries for violating PRC law, both in cooperation with foreign countries through formal extradition treaties and coordination mechanisms and in violation of other countries' sovereignty. This increase in extraterritorial ambitions is reinforced by the CCP's view of citizenship and nationality.

China has also sought to place agents and organizations abroad and in the United States designed to monitor, harass, and persuade citizens wanted by PRC authorities to return to China.¹⁷⁵ In April 2023, the Federal Bureau of Investigation arrested two individuals for their involvement in helping manage and operate an undeclared "overseas Chinese police station" in Lower Manhattan without notifying the U.S. government.¹⁷⁶ The U.S. Department of Justice alleges that in 2018, the individuals assisted Chinese law enforcement in efforts to coerce a "PRC fugitive" to return to China and assisted the Ministry of Public Security in locating a prodemocracy activist

* APSCO consists of: Turkey, Peru, Mongolia, Thailand, Pakistan, Iran, Bangladesh, and China. Dues-paying APSCO members are granted access to Chinese space training, ground stations, and satellite development projects. Asia Pacific Space Cooperation Organization, "What Is APSCO?"

in California.¹⁷⁷ U.S. law enforcement alleges that the Fuzhou Public Security Bureau (PSB) operated through a nonprofit organization founded to assist the local Fujian Chinese diaspora in order to disguise its police operations in Manhattan.¹⁷⁸ As argued by Martin Pubrick of the Jamestown Foundation, the operation of police stations in foreign countries without prior consultation of the host nation government constitutes a breach of the UN Vienna Convention on Diplomatic Relations of 1961.*¹⁷⁹ DOJ issued an additional three dozen charges against members of China's national police force who helped facilitate these harassing behaviors from operating sites in China.¹⁸⁰ U.S. attorney Breon Peace of the Eastern District of New York stated that this case "reveals the Chinese government's flagrant violation of our nation's sovereignty by establishing a secret police station in the middle of New York City. As alleged, the defendants and their co-conspirators were tasked with doing the PRC's bidding, including helping locate a Chinese dissident living in the United States, and obstructed our investigation by deleting their communications."¹⁸¹

China Attempts to Enlist Tech Companies in Censorship and Surveillance

The Party-state also seeks to extend China's domestic law enforcement activities to citizens of other countries in virtual settings. In 2020, Xinjiang "Julien" Jin, a former China-based Zoom executive, was charged with multiple counts of conspiracy in blocking commemorative dedications marking the anniversary of the 1989 Tiananmen Square massacre at the Chinese government's behest.¹⁸² According to reporting by the *New York Times*, Mr. Jin allegedly told a colleague in April 2020 that the Chinese government requested Zoom to develop a feature that would terminate a meeting within one minute of discovering any violation of China's laws.¹⁸³ Mr. Jin complied with this request and coordinated across Zoom to have Tiananmen Square memorial meetings shut down for fabricated violations of Zoom's terms of service agreements.¹⁸⁴ At least four meetings commemorating the massacre in 2020—largely attended by U.S.-based users—were terminated as a result of Mr. Jin's actions, according to prosecutors.¹⁸⁵ An internal investigation by Zoom also revealed that Mr. Jin had shared individual user data with Chinese authorities, though Zoom claimed this applied to fewer than ten individuals, and he also requested user data from Zoom's U.S. servers.¹⁸⁶ In 2023, DOJ amended an additional criminal complaint related to *United States v. Julien Jin et al.* charging ten individuals, including six Ministry of Public Security officers and two officials in the Cyberspace Administration of China, with conspiracy to commit interstate harassment and unlawful conspiracy to transfer means of identification.¹⁸⁷

*Article 12 of the convention states that "the sending State may not, without the prior express consent of the receiving State, establish offices forming part of the mission in localities other than those in which the mission itself is established." United Nations, "Vienna Convention on Diplomatic Relations," April 18, 1962, Article 12.

China Leverages Economic Influence to Expand Law Enforcement Cooperation

China is wielding its economic weight to increase its network of extradition treaties and law enforcement cooperation agreements.¹⁸⁸ Countries in Central Asia and Southeast Asia have consented to extradite Uyghurs to China, often coinciding with Chinese investment pledges in these countries.¹⁸⁹ According to a report by the Wilson Center, China is the largest financial creditor to five of the top ten countries in which Uyghurs are most vulnerable to harassment, detention, or extradition to China: Pakistan, Kyrgyzstan, Tajikistan, Cambodia, and Burma (Myanmar).¹⁹⁰ As of 2023, each of these countries except Burma has agreed to a formal extradition treaty with China.¹⁹¹ Other countries that depend on China's economic presence continue to ratify extradition treaties with China, including in the past year the Democratic Republic of the Congo and Uruguay, both of which count China as their largest trading partner.¹⁹² As of September 2023, China has ratified extradition treaties with 45 countries, with 14 other extradition treaties waiting to be ratified by either China or the partner country.*¹⁹³

A prominent case of China using economic leverage for extradition is Tajikistan, where China held more than half of the country's \$2.8 billion external debt in 2017, equivalent to 35.9 percent of its gross domestic product (GDP) that year. Tajikistan has previously paid off debts to China by ceding mining rights and other resource agreements.†¹⁹⁴ Following deepening economic relations and the ratification of an extradition treaty between the two countries in 2015, China has built strategic facilities and border outposts across the country in cooperation with Tajik police forces.¹⁹⁵ The end result has been a mass extradition of Uyghurs to China, with Tajikistan's Uyghur population declining from a height of 3,000 in 2016 to around 100 in 2022.¹⁹⁶ Lawyers for Uyghur rights groups have filed a formal complaint in the International Criminal Court (ICC) against Tajikistan for this practice; the complaint also names Cambodia.¹⁹⁷ As China is not an ICC member and is outside the ICC's jurisdiction, it was not named in the complaint. China continues to pursue additional extradition treaties with countries with sizable Uyghur populations and where it has deepening economic relations, including Turkey, with which China's National People's Congress ratified an extradition treaty in 2020. Facing sizable protests over the safety of Turkey's Uyghur community, the Turkish parliament has yet to ratify the extradition treaty as of July 2023.¹⁹⁸

Europe more broadly has recently moved to push back on China's extradition treaty network with the European Court of Human Rights ruling in January 2023 to halt all extraditions to China, a ruling most recently held up by a court in Italy in March 2023.¹⁹⁹ This extradition ban applies to any nation that is party

*In Europe, Armenia, Turkey, and Greece have yet to ratify their extradition treaties with China. In the Asia Pacific, Sri Lanka, Nepal, and Australia have not yet ratified. The Australia ratification has faced strong protests and is unlikely to move forward. In Latin and South America, Argentina, Chile, Ecuador, and Panama have yet to ratify their treaties. In Africa, Kenya, Senegal, Zimbabwe, and Mauritius have yet to ratify. *Safeguard Defenders*, "China Expands System of Extradition Treaties," January 25, 2023.

†For more on Tajikistan-China economic relations, see U.S.-China Economic and Security Review Commission, Chapter 3, Section 3, "China's Activities and Influence in South and Central Asia," in *2022 Annual Report to Congress*, November 2022, 557–558.

to the European Convention on Human Rights, encompassing virtually every European country except Russia and Belarus.²⁰⁰ Economic leverage has also been used to target citizens of Taiwan. Spanish Human Rights Group Safeguard Defenders released a report in 2019 documenting over 600 cases between 2016 and 2019 of Taiwan nationals abroad who, when accused of criminal activity, have been extradited or deported to China rather than Taiwan.²⁰¹ This practice has been found in countries across Asia, Africa, and Europe.²⁰² Many of the countries that have sent Taiwan nationals to China have close economic relations with China, including Armenia, Indonesia, and the Philippines, all signatories of China's BRI.²⁰³ In one high-profile case, Kenya, one of the highest recipients of BRI investment in Africa, agreed to extradite to mainland China 45 Taiwan citizens implicated in a telecom equipment scam that targeted Chinese nationals, despite protests from Taiwan.²⁰⁴ Kenya continues to deepen its economic relations with China. The year following the deportations, Kenya opened a major railway from the port of Mombasa to the city of Naivasha, financed by a \$5 billion loan from a Chinese bank, and as of 2022, China serves as Kenya's largest external creditor, at 22 percent of its external debt.²⁰⁵ Amid Kenya's deepening reliance on Chinese financing, in 2023 Kenya's Cabinet endorsed a formal extradition treaty with China that appears to encompass Taiwan citizens, as well, if ratified by the National Assembly.²⁰⁶

The CCP Uses U.S. Courts to Target Dissidents and Fugitives

The CCP and its proxies have brought lawsuits alleging manufactured claims in U.S. court in an attempt to exercise sovereign control within U.S. borders. These cases seek both to silence critics of China's government and to pressure fugitives into returning to China to face prosecution on charges that are often politically motivated.²⁰⁷ While many of the suits brought against Chinese dissidents residing in the United States are eventually thrown out, they can impose significant financial costs and time burdens on the defendants.²⁰⁸ Such suits can also deter other potential critics from speaking out for fear they will be targeted in a similar manner.²⁰⁹ Similarly, in 2020, China's electric vehicle maker BYD brought an unsuccessful defamation suit against the Alliance of American Manufacturers and several of its employees for publishing concerns that BYD profited from forced labor in Xinjiang and was controlled by the Chinese government.* Although some states have safeguards to prevent frivolous lawsuits in an attempt to suppress free speech,† there is no equivalent

*BYD alleged that the Alliance of American Manufacturers' (AAM) maliciously published articles claiming BYD benefited from forced labor and was under the control of the Chinese government, although AAM knew the claims were false or intentionally distorted underlying evidence. The District Court for the District of Columbia rejected three attempts at litigation by BYD, finding that it failed to demonstrate that AAM acted with malice. The DC Circuit Court dismissed an appeal on the same grounds, and the Supreme Court rejected writ of certiorari from BYD. AAM's claims that BYD benefited from forced labor were based on a report from the Australian Strategic Policy Institute. *BYD Company Ltd. v. Alliance for American Manufacturing, et al.* (DC Cir. 2022), cert. denied, (U.S. October 11, 2022) (No. 22–137).

†Anti-Strategic Litigation Against Public Participation (SLAPP) statutes establish procedural safeguards against courts accepting such suits. For instance, many state anti-SLAPP statutes shift the burden of proof to demonstrate that a case is not frivolous to the plaintiff if the defendant can show the case was likely brought for political reasons. Eighteen states do not have

for federal cases. Additionally, while China's government can exploit the openness of the U.S. court system to advance political objectives, it is shielded from lawsuits by the Foreign Sovereign Immunities Act and act of state doctrine.* Lawyers representing the CCP or its proxies in these meritless cases may be violating American Bar Association rules.†

Suits seeking to pressure fugitives to return to China are part of Operation Fox Hunt‡ and a similar program called Sky Net launched in 2015, both repatriation operations that claim to target overseas “corrupt officials.”§ The return to China of Xiao Jianming, the former chairman of the state-owned mining company Yunnan Tin Co., demonstrates a CCP success in employing such tactics. Mr. Xiao had fled to the United States in 2012 and was sued in 2019 by a U.S. subsidiary of Yunnan Tin (Yuntinic) in California for allegedly diverting company funds from 2002 to 2006.²¹⁰ One month after the suit was filed, Mr. Xiao returned to China and Yuntinic's lawyer withdrew the suit.²¹¹ The CCP's Discipline Inspection Commission reportedly hailed the lawsuit, saying it caused “tremendous pressure on [Mr. Xiao] and became an important factor that prompted him to make up his mind to return to China.”²¹² While some of the targets of this campaign appear to be financial criminals, these operations are also known to target dissidents within Chinese diaspora communities that have not been accused of corruption, such as Wang Zaigang, who was seemingly targeted under Fox Hunt for participating in a Seattle protest against Xi Jinping in 2015.¶²¹³

such statutes. Austin Vining and Sarah Matthews, “Overview of Anti-SLAPP Laws,” *Reporters Committee for Freedom of the Press*.

*The court-created act of state doctrine instructs that U.S. courts cannot judge the validity of foreign sovereign acts performed in the foreign country's territory, even if authoritarian acts—like expropriation, political persecution, and torture—violate U.S. law and public policy. Citation of the act of state doctrine barred Chinese dissidents' action against a computer hardware provider that allegedly supported China's nationwide surveillance program. In 2014, the Federal District Court in Maryland dismissed *Du Daobin v. Cisco Systems*, a case brought by Chinese dissidents alleging that U.S. company Cisco knowingly customized, marketed, sold, and provided continued support and service for technologies as part of China's Golden Shield, a digital censorship and surveillance system used by the Chinese government to facilitate human rights abuses. Cindy Cohn and Rainey Reitman, “Maryland Court Dismisses Landmark Case That Sought to Hold Cisco Responsible for Violating Human Rights,” *Electronic Frontier Foundation*, February 27, 2014.

†The American Bar Association's Model Rules of Professional Conduct prohibit lawyers from bringing meritless legal actions. The suits brought by the CCP and its proxies are often framed as legitimate business disputes when brought to U.S. courts. American Bar Association, “Model Rules of Professional Conduct,” Rule 3.1.

‡Launched in 2014, Operation Fox Hunt is a Chinese government initiative professed to repatriate allegedly corrupt Chinese officials so they could be prosecuted for their crimes in China. The Chinese government has used a variety of means to bring those officials back, including offering lighter sentences to encourage voluntary repatriation and working with foreign governments (including the United States) to extradite suspects. However, Beijing has also resorted to pressuring its targets by threatening their family members in China or even allegedly kidnapping wanted fugitives, including political dissidents.

§The ability of many CCP officials to flee abroad is assisted by the prevalence of the “naked official” (裸体官员)—a Party or government official whose immediate family members live overseas as permanent residents or have already become foreign nationals.

¶The United States has established procedures for working with foreign law enforcement agencies and has previously cooperated with Chinese authorities on prosecuting and repatriating Chinese nationals accused of financial crimes. However, many of the charges brought against individuals pursued under Operation Fox Hunt are unlikely to hold up to scrutiny by the U.S. justice system. Former Assistant Attorney General John Demers explains that “some of these people didn't do what they are charged with having done. And we also know that the Chinese government has used the anticorruption campaign more broadly within the country with a political purpose.” Aruna Viswanatha and Kate O'Keefe, “China's New Tool to Chase Down Fugitives: American Courts,” *Wall Street Journal*, July 29, 2020.

Rule by Law Distorts U.S. Judicial Doctrine and Processes

Increased economic and social engagement has brought China's legal system into more frequent contact with the U.S. legal system, requiring U.S. courts to construe Chinese law in a variety of settings, from contract and intellectual property disputes to family relations. Likewise, U.S. courts are increasingly confronted with cases requiring them to assess the Chinese system itself, often by evaluating the adequacy of the process afforded in Chinese courts or the specific remedies provided by Chinese law. These evaluations are central to the application of numerous doctrines of international law, especially those that extend a measure of deference to other judicial systems regarding the meaning of their own laws and matters occurring with their own jurisdictions.

These doctrines, including choice of law rules, the doctrine of forum non conveniens, and principles of judicial comity, are well established in international and U.S. legal traditions—and for good reason, as the United States expects other judicial systems to afford comparable deference when dealing with questions of U.S. law and adjudicating cases involving U.S. disputants.

However, the application of these doctrines and others are premised on certain assumptions about the parallels between the U.S. legal system and other legal systems, assumptions that often do not hold in cases involving illiberal judicial systems like China's. The challenge is not simply that there are differences between the U.S. legal system and China's, as there are differences between every legal system. The gulf is more fundamental, as China's authoritarian system lacks institutional cornerstones that independent judicial systems share. Authoritarian regimes like China want the superficial benefits of a modern legal system without actually empowering an independent judiciary that could hear challenges to the CCP's core interests.²¹⁴ To those ends, China departs from notions of the "rule of law" in fundamental ways, namely through written "laws" that do not bind, hidden norms that do, and courts that bend to political interests.*²¹⁵

These departures from the rule of law often can result in distortions in those cases where the U.S. and China's legal systems meet. Indeed, these differences are so profound, and yet so opaque, that U.S. courts may lack sufficient familiarity to fully assess China's legal system or judiciary in determining whether application of certain deferential doctrines is warranted or whether the recognition of China's judicial decisions is appropriate. As Georgetown Law Professor Mark Jia noted, "A regime that uses law selectively at home is probably more likely to do so in litigation abroad," which creates challenges for U.S. courts in evaluating Chinese law, assessing Chinese government-prof-

*Although the Chinese constitution explicitly protects the right to free expression, the constitution itself is not directly enforceable, and other laws and regulations that clearly violate the text of the constitution are not subject to judicial scrutiny. For instance, China's Cybersecurity Law requires companies to censor "prohibited" information and restrict online anonymity.

Rule by Law Distorts U.S. Judicial Doctrine and Processes—*Continued*

ferred interpretations of its own laws, weighing the procedural protections afforded political lawsuits filed or supported by the CCP, and grappling with multi-jurisdictional intellectual property disputes.²¹⁶

Implications for the United States

China's far-reaching ambitions in applying its own laws as an instrument of statecraft and bending international law to its will pose fundamental challenges to the United States and the international system. Critically, the lack of consequences for China's rejection of international law—and its exploitation of the U.S. court system—constitute a significant, long-term threat to both. The United States and other countries committed to the fair administration of justice lack defensive measures to counter China's systematic erosion of the rule of law in international commerce and affairs. While the United States can respond to this challenge domestically, China's continued abrogation of international rules and norms—committed with impunity—undermines confidence in and the effectiveness of international organizations and treaties.

The CCP views law as a tool to further the development goals of the Party-state without constraining the actions of the political elite. This vision of rule by law represents a clash of systems with the impartial, well-reasoned application of law to all citizens and institutions embodied in the democratic concept of rule of law. The most essential element in this clash may be in words and concepts themselves: many of the terms upon which China's legal system is constructed, including ideas it is attempting to export to other countries, appear to be derived from common law or civil law systems in developed democracies. In practice, however, these concepts are distorted and politicized far beyond their original application. In the United States, courts are part of an independent branch of government and serve as a neutral arbiter between two disputants viewed equally before the law. When acting to advance a strategy of helping national champions avoid penalties for infringing on other countries' IP, courts become exponents of China's industrial policy. The challenge is compounded if courts in other jurisdictions fail to recognize the political nature of China's courts and treat their judgments as having been rendered by peer institutions.

Within its own legal system, China's rapid expansion of extraterritorial provisions and countermeasures against foreign sanctions creates new uncertainty for foreign business operating in the country and could influence their actions in other jurisdictions. Laws like China's Anti-Foreign Sanctions Law and Foreign Relations Law establish processes for China to penalize foreign firms for complying with laws and regulations of other countries that it deems discriminatory. A history of abrupt, politically driven enforcement campaigns, poor due process protections, and making examples of foreign firms deepens this uncertainty. Should China employ countermeasures for the full breadth of potential offenses under its expansive definition

of national security, foreign governments and U.S. and foreign firms may increase self-censorship to avoid being targeted.

Globally, the CCP seeks to promote its authoritarian legal system as a viable and even preferable alternative to rule of law. China's initial successes coupling exports of surveillance technology equipment with capacity-building measures to encourage other countries to adopt elements of its cyber governance regime show its efforts have a receptive audience among authoritarian and authoritarian-leaning regimes. Aside from facilitating the spread of rule by law systems akin to its own, China's attempts to shape international law will gain more impact as it is able to form coalitions of like-minded authoritarian states and challenge initiatives from the United States and its democratic allies and partners.

Appendix I: Extraterritorial Provisions and Countermeasures in Chinese Laws

Table 1: Select Chinese Laws with Extraterritorial Provisions

Title and Date	Extraterritorial Provisions
Data Security Law (2021)	Article 2 indicates the law applies to data processing activities outside China that harm “national security, public interests, or the lawful rights and interests of individuals or organizations of the People’s Republic of China.”
Personal Information Protection Law (2021)	Article 3 of the law states that it applies to all entities that handle the personal information of individuals within China’s borders. Article 40 contains a data localization provision mandating that data containing personal information gathered within China be stored in China. Article 42 establishes a blacklist and other punitive measures for foreign companies that violate the law (potentially including those outside China), potentially limiting or altogether banning their ability to access Chinese personal data. Article 43 establishes retaliatory measures against countries that adopt discriminatory measures against China. Article 53 requires any “personal information processor” outside of China to establish a dedicated entity or appoint a representative within China to be responsible for relevant matters of personal information protection.
Hong Kong National Security Law (2020)	Article 38 extends the jurisdiction of the law to individuals who are not residents of Hong Kong and applies to broadly defined “offenses” conducted outside of Hong Kong, including “secession,” “subversion,” “terrorism,” and “collusion with foreign forces.”
Antiterrorism Law (2015, amended 2018)	Article 11 asserts that the PRC exercises jurisdiction over terrorist activity committed against the government, citizens, or organizations of the PRC located outside China’s territory. Article 71 of the law authorizes counterterrorism operations outside China’s borders.
Cyber Security Law (2017)	Article 75 provides an extraterritorial application of the law stipulating that any foreign entities that hack or interfere with any critical information infrastructure causing “serious consequences” will incur legal liability. Article 75 authorizes the Public Security Bureau to impose sanctions, freeze assets, or “take other necessary punitive measures” against entities in breach of the law.
Antimonopoly Law (2007)	Article 2 extends the applicability of the law to “monopolistic conducts” outside of China that may have the effect of eliminating or restricting competition in China’s domestic market.

**Table 1: Select Chinese Laws with Extraterritorial Provisions—
*Continued***

Title and Date	Extraterritorial Provisions
Chinese Criminal Law (1979, amended 2021)	Article 7 applies this law to citizens of the PRC outside China's territory. Article 8 states that this law may be applied to foreigners outside China's territory if the crime committed carries a minimum three-year imprisonment term in China unless the conduct was legal where the crime was committed. Article 10 states that breaches of the law committed outside China's territory may still be investigated, and in some cases punished, even if the offender had already been tried outside China.

Source: Various.²¹⁷

**Table 2: Chinese Laws and Regulations Establishing Reciprocal Measures
against Economic Restrictions**

Title and Date	Countermeasures Established
Foreign Trade Law (1994, amended 2016)	Article 7 in the 2016 revision allows for countermeasures to be adopted by China in response to discriminatory, prohibitive, or restrictive measures taken by another country with respect to trade.
Foreign Investment Law (2020)	While meant to improve the environment for foreign investment and business, article 40 of the law allows reciprocal measures against restrictions on or perceived discrimination against Chinese investors abroad. Ambiguous language awards regulators broad discretionary powers in granting (or blocking) market access.
Unreliable Entity List (2020)	The Unreliable Entity List aims to impose costs on foreign companies that restrict market transactions with Chinese firms, organizations, or individuals to comply with foreign sanctions and blacklists. It creates a working mechanism to designate foreign entities and take punitive measures against them.
Export Control Law (2020)	The law unifies China's previously fragmented export control regime into a single, comprehensive framework. It applies to dual-use, military, and nuclear items as well as to other goods, technologies, and services related to national security. The law provides a basis for export controls to protect the PRC's "national security and interests." Article 48 also allows for reciprocal measures to be taken in response to foreign governments' export controls.
Rules on Counteracting Unjustified Extra-Territorial Application of Foreign Legislation and Other Measures (2021)	The rules are designed to deter what the Chinese government perceives as unjustified extraterritorial application of foreign law, such as secondary sanctions. The rules establish a working mechanism to investigate extraterritorial measures, which may result in a prohibition to comply with said measures.

Table 2: Chinese Laws and Regulations Establishing Reciprocal Measures against Economic Restrictions—*Continued*

Title and Date	Countermeasures Established
Data Security Law (2021)	The law enhances state authority over the collection, use, and protection of data in China. Article 26 allows for “equal countermeasures” to be taken when a foreign country enacts any measure deemed “discriminatory” or “restrictive” with respect to investment or trade related to data or technology for data development and utilization.
Anti-Foreign Sanctions Law (2021)	The law officially intends to provide a legal framework for countersanctions and other measures against foreign countries that impose sanctions on China. In practice, the law acts as a blocking statute, a retaliatory regime, and proactive sanctions legislation rolled into one.
Draft Personal Information Protection Law (2021)	Article 43 of the law contains clear retaliatory provisions. It allows for countermeasures to be taken if the PRC deems any “country or region” to have taken discriminatory prohibitions, limitations, or other measures against the PRC in the area of personal information protection.
Foreign Relations Law (2023)	The law outlines the PRC’s official foreign policy framework and goals and delegates the foreign affairs authority of various Party-state organs. Articles 32 and 37 lay out the PRC’s intent to strengthen capacity for “protecting overseas interests,” while Chapter III codifies the PRC’s ambitions to “pre-serve” and “reform” the international order. ²¹⁸

Source: Adapted from Katja Drinhausen and Helena Legarda, “China’s Anti-Foreign Sanctions Law: A Warning to the World,” *Mercator Institute for China Studies*, June 24, 2021; China Law Translate, “Foreign Relations Law (2023),” June 28, 2023.

Appendix II: International Space Law Frameworks

In addition to each country's national space legislation, a state's space activities are governed by various UN resolutions that went into force in the decade following the passage of the 1967 Outer Space Treaty. Unlike countries such as Japan or the UK,* China lacks an overarching, comprehensive domestic space law that delineates the rights and responsibilities of its institutions in space.²¹⁹ This is likely due to the lack of need for such a law, given that there are comparatively few actors in the Chinese space industry.²²⁰ Due to the absence of such a law, the legal framework for Chinese space activity falls to the international space conventions that China is a party to through the UN.²²¹ China is a signatory to the four most widely adopted treaties governing actions in space, detailed below.

Space Governance Architecture

- Space governance architecture consists of agreements between nations concerning exploration, sovereignty claims, the placement of weapons of mass destruction, and state supervision of their space entities.²²² Space law has evolved as a piecemeal series of treaties, primarily through two UN agencies: the UN Office of Outer Space Affairs (UNOOSA) and the UN Committee on the Peaceful Uses of Outer Space (COPUOS).
- **The 1967 Outer Space Treaty** bans the stationing of weapons of mass destruction in outer space, prohibits military activities on celestial bodies, and details legally binding rules governing the peaceful exploration and use of space.²²³
- **The 1968 Rescue Agreement** provides that countries shall take all possible steps to rescue and assist astronauts in distress and promptly return them to their launching country and that countries shall aid launching countries in recovering space objects that return to earth outside the territory of the country from which they were launched.²²⁴
- **The 1972 Liability Convention** provides that a country shall be liable to pay compensation for damage caused by its space objects to the surface of the earth or to aircraft and liable for damage due to its faults in space.²²⁵
- **The 1976 Registration Convention** requires countries to furnish the UN with specific details about each launched space object.²²⁶

A fifth treaty, the Moon Treaty, was entered into force in 1984 but has seen limited support, with only 18 nations party to the agreement. Major space-capable nations, such as the United States, Russia, and China, are not party to the agreement, which would have provided for an international regime responsible for

*For a full list of nations' domestic space laws and regulations, see the United Nations Office for Outer Space Affairs' list of National Space Laws.

Space Governance Architecture—*Continued*

exploitation of resources on the Moon and other celestial bodies.²²⁷

The Rescue Agreement, Liability Convention, and Registration Convention all act to elaborate on provisions of the Outer Space Treaty.²²⁸

The current legal regime that governs space does very little to constrain nations' actions apart from direct, kinetic interference with their space vehicles and a prohibition on the placement of weapons of mass destruction.²²⁹ Current space law also falls short of addressing issues such as those posed by falling space debris or resource extraction from celestial bodies.²³⁰ Current international law in space does not impose any meaningful restrictions on China's or other nations' actions in space, especially when compared to other areas of international law, such as maritime activities.²³¹

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SECTION 2: BATTLING FOR OVERSEAS HEARTS AND MINDS: CHINA'S UNITED FRONT AND PROPAGANDA WORK

Abstract

Over the past ten years, General Secretary of the Chinese Communist Party (CCP) Xi Jinping has directed a wide-ranging effort to enhance the potency and reach of China's overseas influence activities. Aiming to discredit the CCP's critics while inducing others to advance its strategic goals, these activities involve a variety of agencies within the Party-state as well as proxies who further its initiatives in foreign countries, often—but not always—unwittingly. Foreign countries' media, politicians, businesses, academic institutions, and ethnically Chinese citizens and residents are all major targets of Beijing's harmful, aggressive, and at times illegal overseas influence efforts. Operating with flagrant disregard for sovereignty and the laws of foreign nations, these activities go well beyond "soft power" and persuasion to include bribery and threats of violence against officeholders and candidates for public office; harassment of the press, including allegedly framing individual reporters for criminal activity; and intimidation of the Chinese diaspora on foreign soil through the use of informants and threats against family in China.

Key Findings

- For CCP leaders, influencing how the outside world views and engages with China is a matter of regime survival and a means of advancing national interests. The Party-state recognizes that the success of certain objectives—such as the CCP's unquestioned rule over China, the absence of criticism regarding CCP policies, the Party's unequivocal claim to speak for the Chinese diaspora in a way the outside world acknowledges, and the unification of Taiwan with the Mainland—depends partly on the behavior of foreign leaders and publics. In the same vein, CCP leaders understand that foreign parties' reactions to their efforts may impact the effectiveness of China's signature foreign policy initiatives, foreign investment, and technology transfer as well as the attractiveness of its global image.
- Under Xi's rule, China's overseas influence activities are now more prevalent, institutionalized, technologically sophisticated, and aggressive than under his predecessors. China's overseas influence activities involve many actors within the Party-state and can be found in countries around the world, regardless of their form of government or level of development.
- The Chinese Party-state exhibits a growing and increasingly brazen tendency to employ coercion in tandem with persuasion

to conduct overseas influence activities, often in ways that challenge other countries' sovereignty or threaten the rights of persons living within their borders. Beijing seeks to sow discord in other countries, including the United States, where the uptick in China's influence activities has inflamed rhetoric and contributed to a troubling rise in violence against Asian Americans.

- Certain factors make countries more or less resilient to China's overseas influence activities. These include the presence of liberal democratic institutions, such as a free press and an independent judiciary, the extent of economic dependence on China, the prevalence of domestic corruption, and a foreign society's familiarity with China.
- In the media sphere, China's Party-state aims to bolster its global image by encouraging positive coverage, manipulating local media environments, and silencing critical voices. Content sharing agreements between Chinese state media and foreign media outlets, CCP-sponsored media training programs, investments in local media, disinformation propagated through social media, and intimidation of media figures are all avenues through which the Party-state seeks to control foreign coverage of China.
- In the political sphere, Beijing seeks to empower foreign political figures who will pursue policies it regards as favorable while deterring, threatening, or punishing those who pursue policies it regards as disadvantageous. Covert efforts to influence electoral processes, to violate the civil liberties of people within another country's borders, to curry favor with sitting officials, and to harass unfriendly political figures are all hallmarks of China's overseas political influence activities.
- In the economic sphere, Beijing attempts to align the commercial interests of other countries with its own strategic goals and to distort domestic policymaking. In countries with weak institutions, China often employs outright corruption, enriching ruling elites who advance its objectives. In democracies, industry associations and business councils may serve as proxies for CCP interests. The CCP may also leverage business partnerships in strategic sectors to advocate for policies favorable to China.
- In the academic sphere, the Chinese government endeavors to control access to knowledge about China and, by extension, to influence public opinion regarding the policy choices based on that knowledge. China's influence activities can result in censorship, intimidation, and harassment that shape critical discourse about China in universities around the world.

Recommendations

The Commission recommends:

- Congress address China's state-sponsored influence and interference in the United States by amending the Higher Education Act of 1965 as follows:

- To require the U.S. Department of Education to share data on U.S. universities and colleges' foreign gifts and contract disclosures, required under section 117 of the act, with U.S. federal law enforcement, intelligence agencies, and other relevant agencies, including but not limited to the Federal Bureau of Investigations and the Office of the Director of National Intelligence (ODNI). Such information sharing should encompass gifts and contracts extending back at least ten years, or a period of time determined by Congress, as well as all future gifts and contracts as they are disclosed to the department.
- To direct an interagency review, led by ODNI, to assess the section 117 data to identify risks posed by China- and Hong Kong- origin money received by U.S. universities and colleges. The interagency findings should be reported to Congress and inform steps, including potential suspension of federal funds, to mitigate risks associated with continued receipt of China-origin money by U.S. universities and colleges.
- To require universities and colleges to include in their section 117 reporting when a foreign gift or contract disclosure has been added retroactively or when a past entry has been revised, and to establish penalties for late reporting. Penalties may include loss of federal financial assistance within three consecutive or non-consecutive years of failing to disclose gifts or contracts above the current threshold of \$250,000.
- To direct the Department of Education to evaluate the adequacy of the current reporting threshold of \$250,000 by conducting a study on the average amount of foreign gifts and contracts received or signed by U.S. universities and colleges in a variety of academic disciplines and to determine whether the threshold needs to be adjusted for programs in disciplines that Congress deems critical to U.S. national security. The study should also include an analysis of the amount, focus, and potential impact of China- and Hong Kong-origin gifts and contracts received by U.S. universities and colleges over the last ten years.
- Congress pass legislation to amend the Foreign Investment Risk Review Modernization Act (FIRRMA) to expand the definition of "covered transaction" to include "research contracts." Under the expanded definition, the Committee on Foreign Investment in the United States (CFIUS) should have the authority to review investments made by Chinese entities in the U.S. education system in the form of contracts. All parties to the transaction, including the foreign contracting organizations and U.S. institutions, should file a joint declaration to CFIUS ahead of their contract start date. Upon passage of this legislation, reporting requirements under section 117 of the Higher Education Act should be adjusted through regulation to include foreign gifts to U.S. universities and colleges, effectively transferring the administrative authority to receive and oversee the collection of foreign research contract reporting to CFIUS.

- Congress amend the Lobbying Disclosure Act (LDA) to require domestic associations, such as industry or trade associations, who employ an individual registered as a lobbyist to publicly disclose any donations or member contributions from entities based in China and other countries of concern, as well as their U.S. affiliates.
- Congress support the establishment of a new entity under the U.S. Agency for Global Media (USAGM) to coordinate and disseminate news content internationally in Chinese, English, and other languages to promote fact-based information on China and counter CCP global information manipulation. The entity could facilitate partnerships with international journalists and media, and provide independent content, particularly where Chinese state and state-sponsored entities seek to discredit the United States and the values of liberal democracy and promote false narratives about China. This digital service will:
 - Curate and repackage the best of USAGM entities' daily content to provide uncensored China-related news in Mandarin and English for countries around the world where China is making inroads promoting its values and attempting to discredit the United States; and
 - Engage audiences and partners through multiple platforms and multilateral means to promote responsible and fact-based journalism.
- Congress establish an interagency group, led by the Office of the Director of National Intelligence, to create a public database to assist U.S. companies, universities, and individuals in conducting due diligence on potential business or academic partners in China. The database should enable users to identify how China's military, United Front Work Department, intelligence agencies, and security agencies may be linked to Chinese companies, investment firms and other financial institutions, research institutes, and universities.
- Congress direct the U.S. Department of State, in coordination with the U.S. Department of Commerce and U.S. Trade and Development Agency, to prepare a public biennial assessment of the impact of China's lending and other financial practices on Belt and Road Initiative (BRI) participant countries and recommend best practices for addressing the impacts of China's activities through U.S. diplomatic and programmatic engagements.
 - The assessment should consider the impact of these practices on corruption and social stability within recipient countries, among other issues.
 - Based on the findings of the report, Congress request the Department of State, in coordination with the Development Finance Corporation, United States Trade and Development Agency, and other relevant agencies, to work with the EU to develop a unified approach to addressing the impact of China's activities under BRI in third countries.

- Congress should consider legislative restrictions to address the national security and systemic risks raised by Chinese social media applications.
- Congress should require the U.S. Department of State to establish as grounds for student visa revocation any instance where a foreign student surveils on behalf of or reports to any foreign-state intelligence, security, law enforcement, or political party authority the civil or political speech of any other student, or threatens to do so. The Department of State shall develop appropriate evidentiary sources and standards for revocation.

Introduction

This year, China's government continued to aggressively seek to influence foreign policymakers and interfere with civic life overseas. To advance its goals, Beijing relies on a variety of covert and overt influence tactics, some of which clearly violate U.S. law and undermine the protections afforded to U.S. persons. One such case was publicly revealed in April 2023, when the Federal Bureau of Investigation announced that it had arrested and charged two defendants in connection with opening and operating an illegal overseas "police station" in lower Manhattan, New York, for a provincial branch of China's Ministry of Public Security (MPS).¹ The defendants allegedly helped the Chinese government find Chinese nationals living in the United States, harass them, and in some cases threaten them with consequences if they did not return to China.² Notably, one of the defendants was introduced to the MPS by an official of China's United Front Work Department, the agency responsible for China's overseas influence operations.³ "The PRC [People's Republic of China], through its repressive security apparatus, established a secret physical presence in New York City to monitor and intimidate dissidents and those critical of its government," Assistant Attorney General Matthew G. Olsen of the U.S. Department of Justice's (DOJ) National Security Division said.⁴ "The PRC's actions go far beyond the bounds of acceptable nation-state conduct. We will resolutely defend the freedoms of all those living in our country from the threat of authoritarian repression," he added.⁵

The actions described in the April 2023 complaint offer a window into the Chinese Party-state's overseas influence activities, which have long sought to advance China's priorities at the expense of and with blatant disregard for foreign countries' interests, laws, institutions, and residents.⁶ This section explores how China's overseas influence activities have evolved from the early days of the communist revolution to suit the opportunities and demands of the modern era. This section first assesses the Party-state's efforts to influence foreign societies in covert, harmful, and sometimes illegal ways through two characteristic forms of Leninist political activities known as united front work and external propaganda work. Then, the section surveys the Party-state's influence tactics and their application in a variety of media, political, economic, and academic contexts around the world. The section concludes by considering the implications of China's overseas influence activities for the United States. The section draws on the Commission's March 2023 hearing,

“China’s Global Influence and Interference Activities,” consultations with experts, and open source research and analysis.

Defining China’s Overseas Influence Activities and a Theory of Harm

This section defines “overseas influence activities” as the wide range of actions the CCP leadership undertakes to shape other countries’ perceptions and their policy choices in ways that advance Chinese national interests. Furthermore, this section restricts its focus to only those influence activities that plausibly cause *harm* to the targeted country.* Harm to a country can be construed in a variety of overlapping ways:

- *Compromising political processes and institutions:* This includes corrupting the integrity of political deliberation and its associated processes as well as manipulating political or social activity to disguise actions that advance China’s interests as the efforts of domestic constituencies.⁷
- *Manipulating the information environment:* This includes undermining the ability of media or other civil society actors to hold domestic and foreign actors accountable for choices contrary to the public interest; it also includes restricting the availability of knowledge that domestic policymakers require as the basis for sound decision-making.⁸
- *Encroaching on civil liberties:* This includes preventing citizens in democratic countries from exercising the freedoms to which they are entitled (such as freedom of speech, freedom of assembly, freedom of religion, and freedom of the press) and may take the form of state-sponsored transnational repression schemes carried out by China’s security services.⁹
- *Undermining the commercial environment:* This may involve elite capture and other forms of corruption to create commercial conditions that advance Chinese objectives, including awarding contracts to Chinese firms, deepening dependence on China, and achieving preferential access to resources or export markets. Dependence on China as an export market or as a supplier of critical goods and technology can then be leveraged for coercive purposes.¹⁰

Some of China’s harmful overseas influence activities may be illegal in the targeted country, but others may be entirely legal or occupy a legal gray zone that makes them difficult to mitigate effectively. Some of these activities may exploit differences between federal, state, and local regulations.¹¹ In some cases, a discrete instance of the influence activity may not be problematic, but the cumulative impact of China’s activities may cause harm to the targeted society.

*In contrast to activities that could be understood as beneficial and purely intended to build “soft power,” which refers to the ability of a country to persuade others to do what it wants without force or coercion. Joseph S. Nye, Jr., “Soft Power: The Means to Success in World Politics,” *Foreign Affairs*, May/June 2004.

Influencing Hearts and Minds Abroad: China's United Front and External Propaganda Activities

CCP leaders believe they must influence the outside world in order to protect themselves from threats to their regime and to advance China's national interests, including its "national rejuvenation."^{* 12} Since the Tiananmen Square massacre in 1989, the Party-state has assessed that it faces a hostile Western bloc bent on undermining China's political stability by spreading "subversive" ideas within China as well as among the Chinese diaspora.¹³ At the same time, it maintains that Western countries unfairly smear China's international image and aim to constrain its emergence as a global power.¹⁴ As a result, the Party-state seeks to influence the world in which it operates and shape how China is perceived by foreign audiences in ways observers often label "influence operations" or "foreign interference."¹⁵ Drawing from the ideology developed by Russian political theorist and Marxist revolutionary Vladimir Lenin, the Party-state structures its efforts to influence foreign perceptions around two longstanding Leninist[†] approaches to foreign policy: "united front work" and "external propaganda work."¹⁶ United front work involves rallying support for the CCP and neutralizing opposition to its policies and authority, while external propaganda work aims to control international perceptions of China and increase the CCP's sway over global narratives.¹⁷

The Party-state conducts united front and external propaganda work against a variety of overseas populations[‡] to rally them in support of its agenda or counter threats to the success of that agenda.¹⁸ The CCP's targets include foreign government officials, businesspersons, human rights advocates, and other influential figures the Party-state believes have the clout needed to advance or impede policies aligned with its goals.¹⁹ Another major target is the Chinese diaspora, whom the Party-state views as resources for advancing its

^{*}The CCP's narrative of "national rejuvenation" promises to increase China's material power and redress grievances from what Chinese leaders call the "century of humiliation," which Beijing believes robbed it of its rightful place as a global leader. Xi has repeatedly stated that unification with Taiwan is an important part of national rejuvenation. For more on the national rejuvenation concept, see U.S.-China Economic and Security Review Commission, Chapter 1, Section 2, "The China Model: Return of the Middle Kingdom," in *2020 Annual Report to Congress*, December 2020, 89.

[†]Developed by Lenin in the early 1900s and deployed by the Communist Party of the Soviet Union, Leninism is typically understood as an action-oriented ideology that builds upon the intellectual groundwork laid by Marxism. Leninism builds on Marxism in holding that there exists a singular, collective, utopian goal that polity and society should be organized and mobilized toward reaching. Leninism supplements Marxism, however, in holding that a vanguard Party, operating under the pretense of representing the working class or the "proletariat," is both uniquely qualified and necessary for achieving Marxism's prophesied communist future. The core legacy of Leninism is a blueprint for creating an "organizational weapon," namely a set of organizational tactics for achieving, maintaining, and enacting societal control and influence. The organizational weapon in Lenin's framework is the Communist Party, which, operating under regimented hierarchical control of "democratic centralism," is meant to thoroughly penetrate every sphere of society and implement plans from the top down. Philip Selznick, "The Organizational Weapon," *McGraw Hill (RAND series)*, 1952, 3–8; U.S.-China Economic and Security Review Commission, *The China Rising Leaders Project, Part 1: The Chinese Communist Party and Its Emerging Next-Generation Leaders*, March 23, 2012, 55; Vladimir Lenin, "What Is to Be Done?: Burning Questions for Our Movement," in *Lenin's Collected Works*, 1902; Daniel Tobin, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on a 'China Model'? Beijing's Promotion of Alternative Global Norms and Standards*, March 13, 2020.

[‡]While this chapter focuses on the Party-state's overseas united front work and propaganda work, it is important to note that China also conducts these activities within its borders toward its own population. Ryan Fedasiuk, "How China's United Front System Works Overseas," *Australian Strategic Policy Institute*, April 13, 2022.

overseas interests and consolidating its global influence.²⁰ Beijing lays claim to all “sons and daughters of the Chinese nation in China and abroad,” including PRC nationals overseas as well as ethnically Chinese citizens and residents of foreign countries in its expansive definition of what it means to be “Chinese.”²¹ A third target is persecuted ethnic and religious minorities whom the CCP perceives as threats to territorial integrity and social cohesion, such as but not limited to Tibetans, Uyghurs, Mongolians, and members of the outlawed Falun Gong movement.²² A fourth target is citizens of Hong Kong who have resisted Beijing’s imposition of the National Security Law and other encroachments on the formerly free territory.²³ A fifth category is citizens of Taiwan, where the Party-state’s goals include cultivating support for unification with the Mainland and opposing *de jure* independence.²⁴

Making Friends and Isolating Enemies: China’s United Front Work

United front work is a way of managing relationships with important groups and individuals outside of the CCP that is based on Russian revolutionary Vladimir Lenin’s concept of forming a “united front,” or a temporary alliance with one’s friends and lesser enemies,* to defeat greater enemies.²⁵ Contemporary united front work encapsulates the various activities of CCP organs, Chinese government agencies, and their affiliates to coopt or coerce groups outside of the CCP—including but certainly not limited to foreigners—into comporting with the Party’s demands and advancing Chinese national interests as the CCP defines them.²⁶ Chinese leaders from Mao Zedong onward have affirmed the importance of united front work, describing it as a “magic weapon” for defeating the CCP’s enemies.²⁷

Shortly after ascending to power, General Secretary Xi reemphasized the role of united front work as an increasingly important tool and a “magic weapon”† for achieving China’s national interests in a dangerous and dynamic world.²⁸ In a speech at the Central United Front Work Conference‡ in July 2022, Xi observed that the international environment was in flux and argued that united front work was now more important than before to safeguard China’s national sovereignty, security, and development interests.²⁹ United front work will be crucial to the Party-state’s efforts to become a “modern socialist country” and realize “the great rejuvenation of the Chinese

*The CCP has long divided the world into “friends” and “enemies.” Friends are those inside of China who uphold the Party’s rule and policy agenda and those outside of China who use their power and influence to advance China’s interests. The CCP’s enemies are defined as those who question its legitimacy or exercise of power. Mareike Ohlberg, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China’s Global Influence and Interference Activities*, March 23, 2023, 6; Matt Schrader, “Friends and Enemies: A Framework for Understanding Chinese Political Interference in Democratic Countries,” *German Marshall Fund*, April 22, 2022, 1–2.

†The term “magic weapon” was first coined by Mao Zedong but has been used by every Chinese leader since to describe three “weapons” or efforts necessary for the Party’s success: united front work, Party building, and the armed struggle (or military activities). Peter Mattis and Alex Joske, “The Third Magic Weapon: Reforming China’s United Front,” *War on the Rocks*, June 24, 2019.

‡The Central United Front Work Conference gathers together the country’s top leadership to discuss the state of united front work and set future priorities. *Xinhua*, “At the Central United Front Work Conference, Xi Jinping Emphasized Promoting the Unity and Struggle of Chinese Sons and Daughters at Home and Abroad to Gather Great Power for the Great Rejuvenation of the Chinese Nation” (习近平在中央统战工作会议上强调 促进海内外中华儿女团结奋斗 为中华民族伟大复兴汇聚伟力), July 30, 2022. Translation.

nation,” Xi argued, calling on officials below him to carry out united front work with “a high sense of mission and responsibility.”³⁰

The CCP has signaled that united front work is a major priority and has reformed the bureaucratic structures that implement it over the past ten years. Xi has called for strengthening united front work under the banner of his “Great United Front” concept.³¹ He has also emphasized that all CCP officials must participate in united front work and touted united front work’s importance in speeches at the last two Party congresses and national work conferences on the subject.³² Current united front regulations state that the CCP must lead united front work and that Party committees at all levels of government must play a role in united front work.³³ Major bureaucratic changes since Xi came to power include reviving a leading small group to coordinate Party activities on united front work, elevating the status of the Central United Front Work Conference, issuing two sets of regulations for united front work, and reorganizing the United Front Work Department (UFWD).³⁴

China’s System for United Front Work: A Party-State-Wide Endeavor

The “united front system” encompasses dozens of Party bodies, ministries, military organizations, and civic entities that bring different platforms, capabilities, and personnel to bear in China’s foreign influence activities.³⁵ United front work is inherent in many of the Party-state’s global activities, from its funding of Chinese-language study centers, to its diplomats’ engagement with foreign elites, to its espionage services’ collection of intelligence, to its national police force’s perpetration of transnational repression.³⁶ United front work is also carried out by a wide range of quasi-official and civil society groups that are based abroad but may nonetheless respond to CCP and ministry guidance, underscoring the fact that China’s overseas influence activities frequently involve proxies and benefit from plausible deniability.³⁷ The involvement of so many actors inside and outside of the Party-state makes the united front system a flexible and effective vehicle of influence.³⁸ Important actors within the united front system include but are not limited to the following:

- **The United Front Work Department (UFWD), the CCP Central Committee department that coordinates united front work toward the Chinese diaspora, Taiwan, Hong Kong, ethnic minorities, and religious groups.**³⁹ According to Alex Joske, a senior risk advisor at McGrathNicol who testified before the Commission, the UFWD contributes significantly to covert overseas operations involving political influence, intelligence collection, and technology transfer.⁴⁰ The UFWD does not exist at just the central level of China’s political system; rather, there are smaller, identical versions of the UFWD embedded within Party committees down to the local level that carry out united front work inside and outside of China.⁴¹ Provincial or even municipal UFWDs often supervise the quasi-governmental and civil society groups that lobby for Party-state interests overseas.⁴² Most Chinese embassies and consulates include UFWD personnel among their staff.⁴³

- **The Chinese People's Political Consultative Conference (CPPCC), which is an "advisory" body the Party-state uses to coordinate between itself and important social groups—such as leaders in business, academia, and religious organizations outside of the Party—to carry out united front work.**^{*44} CPPCC delegates attend a high-profile annual meeting to receive direction from the CCP regarding the ways its policies should be characterized to both domestic and foreign audiences.⁴⁵ Delegates to the CPPCC serve as proxies for CCP interests by virtue of their participation in this forum, and they frequently act as interlocutors with foreign government officials, businesses, and academic institutions.⁴⁶
- **The International Liaison Department, another CCP Central Committee department that engages with more than 600 foreign political parties in 160 countries or regions to facilitate united front work.**^{†47} This "party-to-party diplomacy" frequently involves conducting political training, promoting China's governance model, reinforcing China's global narratives, and increasing the number of China-friendly figures across the political spectrum in foreign countries.⁴⁸
- **Quasi-official organizations subordinate to the UFWD and related organs, which advocate for Party-state interests while appearing to be nongovernmental entities.**⁴⁹ Some of these quasi-official organizations, such as the China Council for the Promotion of Peaceful National Reunification (CCPPNR), advocate for the "peaceful reunification" of Taiwan and mainland China.⁵⁰ Others, such as the Chinese People's Association for Friendship with Foreign Countries (CPAFFC), advocate for closer bilateral ties with China and oversee major elements of China's subnational diplomacy, such as sister-city partnerships.⁵¹ Still others, such as the Western Returned Scholars Association (WRSA), encourage Chinese students and scholars who have been educated abroad to contribute scientific knowledge and technology to the cause of China's modernization.⁵²
- **Overseas Chinese community organizations whose leaders may at times be engaged by the UFWD or related organs and who may express the positions of the Party-state as the views of the communities they serve.**⁵³ Peter Mattis, then director for intelligence at the Special Competitive Studies Project, wrote in testimony before the Commission that the united front system may co-opt the leaders of some ethnic community organizations, such as chambers of commerce, hometown associations, and cultural promotion centers.⁵⁴ Notably, ordinary members of these community organizations may be unaware of the leadership's engagement with the

^{*}Both the elevation of fourth-ranking Politburo Standing Committee member Wang Huning to chairman of the CPPCC and reports that Xi has tasked him to develop a "theoretical unification strategy fit for the Xi era" indicate that united front work will likely play a greater role in China's future approach to Taiwan. Katsuji Nakazawa, "Analysis: Xi Puts Top Brain in Charge of Taiwan Unification Strategy," *Nikkei Asia*, January 26, 2023.

[†]The CCP engages with ruling, opposition, and fringe parties across the ideological spectrum in its party-to-party diplomacy. Lina Benabdallah, "Ties That Bind: China's Party-to-Party Diplomacy in Africa," *Konrad-Adenauer-Stiftung*, October 2021, 8.

united front system, and the organizations themselves may not be directly under the command of any united front-related organ.⁵⁵ Community organizations with links to the united front might receive support in the form of funding, logistical support, and advice, and they likely have varying degrees of autonomy.⁵⁶

China Leverages United Front Work for Intelligence Collection, Repression

United front work builds relationships that facilitate intelligence collection and/or repressive activities by China's Ministry of State Security (MSS) and MPS.*⁵⁷ Mr. Joske testified before the Commission that China's intelligence services have recruited united front figures in foreign countries as clandestine assets or even posed as UFWD officials themselves to facilitate intelligence operations.⁵⁸

One recent case illustrates this entanglement between united front work and China's security services. In May 2023, DOJ indicted a Massachusetts man for allegedly acting as an unregistered foreign agent of the Chinese government and accused him of providing information about Chinese dissidents and others to China's MPS and the UFWD.⁵⁹ According to DOJ, Liang Litang allegedly "provided PRC government officials with information regarding members and leaders of Boston-area, Chinese family associations and community organizations with pro-Taiwan leanings."⁶⁰ DOJ also alleged that the information Mr. Liang provided to the UFWD and MPS included the identification of an individual he believed had "sabotaged" PRC flags in Boston's Chinatown in October 2018, a video of a dissident attending the "Boston Stands with Hong Kong" march in August 2019, and photographs of anti-PRC dissidents in front of the Boston Public Library in September 2019.⁶¹ The fact pattern described by DOJ demonstrates that the UFWD and China's security services may indeed rely on the same human source to accomplish their varied objectives.

"Telling China's Story Well": CCP External Propaganda Work

External propaganda work refers to the Party-state's efforts to shape the attitudes of foreign audiences through propaganda.†⁶² Like united front work, external propaganda work is also based on Leninist principles of information control and has been practiced by the CCP since the 1920s.⁶³ The CCP leaders of the past and present have viewed external propaganda work as a means of cultivating

*The MSS maintains two front organizations, the China International Cultural Exchange Center (CICEC) and the China Institutes of Contemporary International Relations (CICIR), that engage with foreign scholars of China and think tank experts to influence foreign policy debates in a manner consistent with united front work. Alex Joske, *Spies and Lies: How China's Greatest Covert Operations Fooled the World*, Hardie Grant Books, 2022, 26; Alex Joske, "The Party Speaks for You: Foreign Interference and the Chinese Communist Party's United Front System," *Australian Strategic Policy Institute*, 2020, 15; Peter Mattis and Matthew Brazil, *Chinese Communist Espionage: An Intelligence Primer*, Naval Institute Press, 2019, 56; Larry Diamond and Orville Schell, eds., "China's Influence and American Interests: Promoting Constructive Vigilance," *Hoover Institution*, 2019, 79–80.

†Propaganda is information, especially of a biased or misleading nature, used to promote or publicize a particular political cause or point of view. European Parliament, *Understanding Propaganda and Disinformation*, November 15, 2015.

positive global attitudes toward China, countering what they view as hostile foreign propaganda about China, publicizing the CCP's stance on important issues, promoting Chinese culture abroad, and enhancing China's ability to set the global agenda.⁶⁴ External propaganda work reinforces united front work by influencing the attitudes of key overseas constituencies and is sometimes implemented by the same organizations within the Party-state bureaucracy.⁶⁵

Since coming to power in 2013, Xi has repeatedly spoken about the importance of improving China's image by breaking what he alleges is a Western, biased monopoly on international information about China.⁶⁶ Frequently, he describes the work of improving China's image through external propaganda in terms of "strengthen[ing] China's international communication capabilities" or "telling China's story well."⁶⁷ In a 2015 speech, Xi underscored the global reach of propaganda work by stating, "Wherever the readers are, wherever the viewers are, that is where propaganda reports must extend their feelers, and where the focus and foothold of propaganda and ideological work must be placed."⁶⁸ In 2022 at the 20th Party Congress, Xi made clear that the priority remains to "better tell China's stories, make China's voice heard, and present a China that is credible, appealing, and respectable."⁶⁹ He vowed to make China's external propaganda work more effective and "to strengthen China's voice in international affairs so it is commensurate with our composite national strength and international status."⁷⁰

Xi has also intensified the external propaganda drive that began under his predecessor Hu Jintao by directing changes to the way China's propaganda apparatus produces and disseminates content to foreigners.⁷¹ Since highlighting external propaganda work during a 2016 visit to the headquarters of *People's Daily*, Xinhua News Agency, and China Central Television (CCTV), Xi has spoken repeatedly about the need for China to improve the precision, salience, and efficacy of its global propaganda efforts.⁷² He also oversaw the 2018 consolidation of three state television and radio broadcasters aimed at overseas audiences—China Global Television Network (CGTN), China Radio International, and China National Radio—into a mega-broadcaster supervised by the CCP Central Propaganda Department and referred to as the "Voice of China" in media intended for foreigners.⁷³ In line with Xi's exhortations to improve external propaganda work, state media-affiliated newspapers and broadcasting platforms have increased their production of content for foreign audiences, launched new overseas bureaus,* hired large numbers of foreign journalists, and increased their social media presence.⁷⁴

*As of 2021, Xinhua has 181 overseas bureaus, while CGTN has offices in more than 70 countries. China Radio International also has a presence in at least 14 countries. By contrast, the *Associated Press* has around 250 bureaus worldwide. Both Xinhua and *China Daily* also pay for online and print inserts in U.S. news outlets. Between 2019 and 2021, *China Daily* spent more than \$7 million buying ad space in both print and online publications. Additionally, it claims to have 300 thousand copies in circulation daily in the United States and 600 thousand overseas. As a state-owned company, *China Daily* provides Beijing with a direct platform to spread propaganda in the United States, primarily reaching an older generation of readers. Alternatively, an increasing number of Americans rely on new media, like TikTok, for their news. TikTok, which is privately owned by a Chinese company but ultimately must be responsive to the demands of the Party-state, provides Beijing with a potential avenue to reach its more than 150 million users in the United States. Catherine Thorbecke, "TikTok Says It Has 150 Million US Users amid Renewed Calls for a Ban," *CNN Business*, March 21, 2023; Christopher Paul, "How China Plays by Different Rules—at Everyone Else's Expense," *RAND Corporation*, February 7, 2022; Joshua Kurlantzick, "China Wants Your Attention, Please," *Council of Foreign Relations*, December 28,

China's System for External Propaganda Work

China's external propaganda system encompasses many agencies that work to influence the international media environment on the CCP's behalf or in ways that advance its interests.⁷⁵ The government and nongovernment actors within China's propaganda system listed below engage in a mixture of propaganda, censorship, and disinformation* to shape foreign media discourse.⁷⁶ The CCP's Propaganda Department issues guidance regarding specific messages to be conveyed to foreign audiences that are then implemented by state media outlets, ministries, and Party bodies.⁷⁷ As with united front work, the top CCP leadership expects organizations at all levels within China's Party-state—and increasingly within Hong Kong—to contribute to external propaganda work.⁷⁸ Entities contributing to China's external propaganda work, officially directed or not, include:

- **Chinese state-owned media outlets, such as Xinhua News Agency, *China Daily*, China Global Television Network (CGTN), and China Radio International, which disseminate news and other programming around the world in dozens of local languages.**⁷⁹ Joshua Kurlantzick, a senior fellow for Southeast Asia at the Council on Foreign Relations, observes that CGTN, China Radio International, and most other Chinese state media outlets have struggled to grow their audience share in many regions of the world despite their efforts to replicate the sleek and professional appearance of international media counterparts.⁸⁰ An important exception is *Xinhua*, which maintains cooperation and content-sharing agreements with numerous foreign news outlets and wire services that distribute its stories or advertisements directly to local audiences.[†]⁸¹ Mr. Kurlantzick notes that in places where it has relatively more reporters, such as Africa and Southeast Asia, *Xinhua* is beating competitor wire services to stories and is not under the same pressure as its competitors to turn a profit.⁸²
- **The Ministry of Foreign Affairs, which oversees the activities of China's diplomatic corps, training programs for journalists from other countries, and the accreditation of foreign journalists working in China.**⁸³ Sarah Cook, the senior advisor for China, Hong Kong, and Taiwan at Freedom House, observed in testimony before the Commission that Chinese diplomats frequently promote falsehoods, such as conspiracies regarding the origins of COVID-19, the source of

2022; Hadas Gold, "State Department Asks Americans Working for Chinese Media to Share Personal Details," *CNN Business*, May 22, 2020.

*Censorship is the suppression of ideas and information that some individuals, groups, or government officials find objectionable or dangerous. Disinformation refers to politically motivated messaging designed to engender public cynicism, uncertainty, apathy, distrust, and paranoia for the purpose of depressing citizen engagement. *American Library Association*, "First Amendment and Censorship," October 2021; *National Endowment for Democracy*, "Issue Brief: Distinguishing Disinformation from Propaganda, Misinformation, and 'Fake News,'" October 17, 2017.

†While some major U.S. news outlets, like the *New York Times*, *Washington Post*, and *Wall Street Journal* discontinued their content-sharing agreements with *Xinhua*, as of at least 2021, others such as *USA Today*, the *Los Angeles Times*, and the *Financial Times* continue to permit inserts from *Xinhua News Agency* or *China Daily*. The paid inserts are sometimes labeled as being from *China Daily*, but they often fail to note their ties to the Chinese government. In 2022, CNN also published an advertisement for *Xinhua* advertising the Beijing Winter Olympics. *Freedom House*, "Beijing's Global Media Influence 2022," 2022.

prodemocracy protests in Hong Kong, and the atrocities committed against Uyghurs in Xinjiang.⁸⁴ Chinese diplomats have also pressured foreign media executives and journalists in private and public settings to censor critical coverage about China.⁸⁵ For example, in 2021, the Chinese embassy in Sweden sent a threatening email to Swedish journalist Jojje Olsson demanding that he stop his critical coverage of Beijing.⁸⁶

- **The Ministry of Education, which oversees the promotion of officially approved versions of Chinese history and state-sponsored educational initiatives.**⁸⁷ The Ministry of Education oversees the parent body funding Confucius Institutes, which have come under fire in the United States over concerns they facilitate censorship and promote China's worldview as well as sovereignty claims over Taiwan.⁸⁸ In fact, Politburo member Li Changchun openly described Confucius Institutes as "an important part of our country's external propaganda layout" as early as 2007, leaving no doubt as to Confucius Institutes' supportive role in China's global propaganda activities.⁸⁹ Since June 2022, 104 of 118 U.S.-based Confucius Institutes have closed, but some new programs and initiatives have already emerged to replace the closed institutes.⁹⁰ According to Ian Oxnevad, a senior fellow at the National Association of Scholars, some U.S. universities have transferred language instruction previously held at Confucius Institutes to extant partnerships with Chinese universities, while others are establishing new partnerships with the Chinese government agency responsible for administering the Confucius Institutes (previously known as the *Hanban*, but now called the Ministry of Education Center for Language Exchange and Cooperation).⁹¹
- **The Ministry of Culture and Tourism, which oversees the promotion of officially approved versions of Chinese art and culture abroad.**⁹² The Ministry of Culture and Tourism oversees multi-channel networks (MCNs), which are agencies that manage online influencers and help them produce content approved and, in some cases, directly commissioned by the Party-state.⁹³ Some of these influencers produce propaganda specifically designed for overseas audiences and post their videos on foreign platforms, such as YouTube.⁹⁴ A report by the Australian Strategic Policy Institute highlighted one set of MCN-backed YouTube accounts that publish content depicting the supposedly joyous lifestyles of residents in Xinjiang, Tibet, and Inner Mongolia, a clear effort to counter media reporting of Chinese atrocities in these regions.⁹⁵
- **The People's Liberation Army (PLA), the MSS, and other state-linked actors that conduct disinformation campaigns targeting foreign audiences.**⁹⁶ While the PLA is most likely behind many disinformation campaigns targeting Taiwan,

⁸⁷The Center for Language Exchange and Cooperation in turn oversees an organization called the Chinese International Education Foundation, which funds Confucius Institutes and their replacement programs. Rachelle Peterson, Flora Yan, and Ian Oxnevad, "After Confucius Institutes: China's Enduring Influence on American Higher Education," *National Association of Scholars*, June 2022, 8; Zhuang Pinghui, "China's Confucius Institutes rebrand after overseas propaganda rows," *South China Morning Post*, July 4, 2020.

others, such as the coordinated DRAGONBRIDGE* campaign that propagated divisive content ahead of the U.S. midterms in November 2022, are likely state-linked but difficult to attribute to a particular Chinese government agency or military unit.⁹⁷

- **Chinese law enforcement agencies, which have been linked to a massive online influence campaign targeting more than 50 platforms, including Meta, X (formerly Twitter), TikTok, YouTube, and others.**⁹⁸ In August 2023, Meta announced that it had removed 7,704 accounts, 954 pages, and 15 groups linked to a larger influence effort by Chinese law enforcement that sought to promote pro-China talking points and attack CCP critics.⁹⁹ Content included criticisms of the United States and positive commentary on China's governance of Xinjiang, among other issues related to Beijing's global interests.¹⁰⁰
- **The Hong Kong government, which has jailed local journalists, barred foreign journalists from permission to cover certain events, and forced the closure of free media in the territory.**¹⁰¹ Once a bastion of press freedom in Asia, Hong Kong plummeted from 18th place to 148th place in Reporters Without Borders' annual index on press freedom between 2002 and 2022.¹⁰²
- **Local media owners and political elites in foreign countries, who may favor closer ties with Beijing.**¹⁰³ Ms. Cook argues these local media owners and political elites have often "taken action—either at the direct behest of Chinese officials or for their own pre-emptive business interests—to suppress critical reporting or amplify pro-Beijing propaganda and falsehoods."¹⁰⁴

CCP Propaganda Pushes Tailored Messages to Global Audiences

China's external propaganda features both positive stories about China and negative stories about the United States.¹⁰⁵ Rebecca Fair, vice president of information advantage at the technology services firm Two Six Technologies, testified before the Commission that "almost 30 percent of PRC tweets in the last 12 months use cultural content to promote a positive image of China" and speculated that this positive messaging over the past year by official Chinese government accounts was intended to counter perceived bad publicity in international media.¹⁰⁶ During the same period, Ms. Fair noted, official and pro-Beijing social media accounts also spread negative narratives portraying the United States as a "global destabilizer" with severe internal problems.¹⁰⁷ Prominent topics included the United States' alleged escalation of the war in Ukraine, U.S. support for Japan's defense,

*DRAGONBRIDGE is a cyber threat group linked to China that uses an expansive network of inauthentic social media accounts to influence Hong Kong, Taiwan, and the United States. *Mandiant Intelligence*, "Pro-PRC DRAGONBRIDGE Influence Campaign Leverages New TTPs to Aggressively Target U.S. Interests, Including Midterm Elections," October 26, 2022; Andy Greenberg, "A Pro-China Disinfo Campaign Is Targeting US Elections—Badly," *WIRED*, October 26, 2022.

CCP Propaganda Pushes Tailored Messages to Global Audiences—*Continued*

and parallels between the January 8, 2023, insurrection in Brazil and the January 6, 2021, attack on the U.S. Capitol.¹⁰⁸

Chinese propaganda on social media is often tailored to audiences in different geographic regions in a variety of languages.¹⁰⁹ According to Ms. Fair, between 2022 and 2023, official Chinese government-affiliated tweets as well as inauthentic tweets likely linked to the Chinese government targeting audiences in East Asia, Southeast Asia, the Middle East, and North Africa tended to emphasize negative depictions of the United States.¹¹⁰ By contrast, Chinese government-sponsored tweets targeting audiences in Australia and Oceania, Latin America and the Caribbean, Sub-Saharan Africa, and South and Central Asia focused on Chinese infrastructure and investment.¹¹¹

More broadly, Chinese media outlets frequently amplify the Russian media's messages, a phenomenon that Caitlin Dearing Scott, a technical and team lead at the International Republican Institute's Center for Global Impact, described in her testimony before the Commission as "narrative collusion."¹¹² Chinese coverage of Russia's war in Ukraine is a clear recent example of this collusion.¹¹³ Chinese officials and state media have adopted the Kremlin's sanitized language about the war, propagated claims that the United States and NATO are to blame for tensions, and provided vastly more air time to Russian perspectives than Ukrainian ones.¹¹⁴ Chinese state media outlets have also consistently reposted social media content promoting the Kremlin's claim that the United States is running more than 30 bioweapons labs in Ukraine.¹¹⁵

China's Overseas Influence by Domain

China attempts to shape foreign media, political, economic, and academic systems abroad through a mixture of persuasive and coercive tactics inherent in united front and propaganda work. According to Ms. Cook and Mareike Ohlberg, a senior fellow in the Indo-Pacific Program at the German Marshall Fund, China's coercive tactics have become more obvious—and more prevalent—in its global activities over the past ten years, reflecting Chinese leaders' belief that a strong country cannot be seen to tolerate criticism of any kind.¹¹⁶

While it is clear that China's overseas influence activities aggressively target countries around the world, they appear to have varying degrees of success.¹¹⁷ Moreover, determining whether these efforts decisively impacted the outcome, even in particular cases, remains challenging. Nevertheless, several witnesses testified before the Commission that specific characteristics of the target country may make it more or less resistant to China's overseas influence activities. These include:

- **The presence of liberal democratic institutions.** Countries with a free press, political opposition, elections, an active civil

society, and an independent legal system are better positioned than countries without those institutions to identify and root out undue foreign influence and interference.¹¹⁸

- **The extent of economic dependence on China as well as domestic corruption.** Economic ties such as trade, infrastructure investment, and lending are often “the entry point for broader PRC political influence and interference,” Ms. Dearing Scott observed.¹¹⁹ She noted that Beijing routinely exploits corruption among local elites to “capture” their support, arguing that countries with medium to high levels of corruption are most susceptible to Chinese influence based on BRI deals or other economic inducements.¹²⁰
- **Knowledge of China within the foreign government and population.** Countries with low levels of local China expertise may struggle to identify the potential pitfalls of engagement with China, determine what types of cooperation facilitate CCP influence efforts, or implement appropriate responses to mitigate and counter the most nefarious aspects of that influence.¹²¹ According to Ms. Cook, low levels of “China literacy” were common among all of the countries Freedom House described as “vulnerable” to Chinese media influence in a recent study.¹²²

China’s Harmful Media Influence Activities

The CCP is intensifying its global campaign to shape the media environments of foreign countries, relying on more sophisticated and coercive tactics than in the past.¹²³ These efforts occur in all regions of the world but appear especially vigorous in developing countries.¹²⁴ Content sharing, media training programs, investments in local media, disinformation propagated through social media, and intimidation of media figures are five tactics that exemplify China’s efforts to influence foreign media systems.¹²⁵ Beijing’s efforts to influence global media discourse have been challenged by the resistance of local media establishments—especially in democratic countries—and the rigidity of its official messaging system, but they may become more effective if the Party-state continues to deploy narratives that resonate with local audiences and adapt to emerging social media platforms.¹²⁶

Content-Sharing Agreements Inject CCP Narratives into Mainstream Media

Content-sharing agreements and other partnerships with mainstream media are the most important way official Chinese messaging reaches large local audiences.¹²⁷ Under such agreements, Chinese state media organizations such as Xinhua and China News Service typically provide paid-for or free news stories, photos, or videos to foreign media outlets, disguising CCP propaganda as legitimate coverage for local audiences.¹²⁸ According to a 2022 Freedom House report, at least 130 news outlets in the 30 countries surveyed published Chinese state-produced content in print, on television, or on the radio between 2019 and 2021.¹²⁹ Chinese state media or other state-backed entities may also cooperate with foreign media to coproduce film and television content, sometimes presenting themselves as private media groups even as they expose foreign audienc-

es to official programming.¹³⁰ Examples of Chinese content-sharing agreements include:

- *China Daily's* previous deals with at least 30 foreign newspapers—including the *New York Times*, the *Wall Street Journal*, the *Washington Post*, the *UK Telegraph*, and the *Sydney Morning Herald*—to carry four- or eight-page propaganda inserts called *China Watch*.¹³¹ A number of media outlets later dropped *China Watch* amid the pandemic and public scrutiny.¹³² Several U.S. newspapers, such as the *Los Angeles Times*, continue to publish *China Watch*.¹³³
- Content-sharing agreements between *Xinhua* and three influential state-run media outlets in Ghana: Ghana News Agency, the *Ghanaian Times*, and *Daily Graphic*.¹³⁴
- CGTN's regular slot on public broadcaster Kenya Broadcasting Corporation's Channel 1 from 11:00 p.m. to midnight, Monday to Friday, as well as China Radio International's use of a frequency provided by the same public broadcaster to broadcast programming for 19 hours a day in English, Chinese, and Swahili.¹³⁵
- Agreements between the China International Communication Center* and media groups in the United States and Southeast Asia over the past seven years to co-produce or distribute documentaries favorably portraying China. For instance, Discovery Channel aired a documentary series called "China: Time of Xi," which presented a one-sided, positive overview of Xi Jinping's tenure.¹³⁶ In Southeast Asia, the National Television of Cambodia co-produced a documentary that discussed China-Cambodia relations and praised the CCP's response to the COVID-19 virus.¹³⁷ The Chinese Embassy in Cambodia promoted the documentary, noting that the production deal had been led by the Central Propaganda Department's Overseas Promotion office.¹³⁸

CCP Media Training Programs Encourage Foreign Journalists to "Tell China's Story Well"

The Party-state also brings foreign journalists to China for all-expenses-paid "trainings" and "exchanges" that expose them to official talking points, cultivate goodwill toward China, and promote the CCP's state-controlled model of journalism.[†]¹³⁹ Media training and exchange programs are managed jointly by China's Foreign Ministry and the China Public Diplomacy Association and coordinated by press centers for journalists from the Asia Pacific, Africa, Latin America, and the Caribbean, aligning with Beijing's efforts to expand its presence in developing countries.[‡]¹⁴⁰ Generally speaking, the programs prioritize journalists from developing or middle-in-

*The China International Communication Center is a company operated by the State Council Information Office (SCIO) that shares an address with the Central Propaganda Department's Office of Foreign Propaganda. David Bandurksi, "Co-Producing with the CCP," *China Media Project*, February 17, 2023.

†China's model of state-controlled journalism views information as a resource to be controlled by the state rather than a public good grounded in journalistic standards. Journalists are trained to cover events without criticizing domestic or Chinese officials and to portray a positive image of China. *Africa Center for Strategic Studies*, "China's Influence on African Media," May 12, 2023.

‡Similar programs exist for journalists from Europe and Central Asia. *Reporters Without Borders*, "China's Pursuit of a New World Media Order," 2019, 33.

come countries and range from four days to ten months long.¹⁴¹ Foreign journalists receive housing and a stipend for living expenses; visit or intern with Chinese media organizations; interview Chinese officials; take classes in China's politics, approach to development, and media practices; and participate in trips to popular tourist attractions.¹⁴² Anecdotal evidence suggests the programs do not give foreign journalists opportunities to ask critical questions of Chinese interlocutors, tend to restrict participants' freedom of movement within China, and sometimes provide participants with instructions on how they should report on China when they return home.¹⁴³ Interviews with former participants suggest the trips successfully influence some journalists' perceptions of China but fail with others.¹⁴⁴ More broadly, the participation of foreign journalists in these programs confers legitimacy on the Chinese media and creates the impression of widespread approval for CCP policies.¹⁴⁵

While the COVID-19 pandemic disrupted in-person international media trainings and exchanges for several years, recent evidence suggests China restarted these programs in late 2022 and that they remain global in scope.¹⁴⁶

- Prior to the pandemic, a 2019 Reporters Without Borders report estimated that about 3,400 journalists from at least 146 countries had come to China for some sort of training or exchange program, though this figure was likely an underestimate.¹⁴⁷
- In June 2022, 73 journalists from 54 countries arrived in Beijing for a six-month fellowship program during which they were told there would be ample opportunity to study and cover the upcoming 20th Party Congress.¹⁴⁸
- In early 2023, journalists from 51 countries in Africa, Southeast Asia, and Central Europe began a four-month exchange program that promised opportunities to extensively cover the meetings of China's National People's Congress and the CPPCC in March.¹⁴⁹

Ownership of Media Outlets, Digital Platforms Threatens Editorial Independence

China's Party-state also influences media coverage abroad through Chinese companies' shares in or complete ownership of media outlets.*¹⁵⁰ Even when privately owned, Chinese media and technology companies maintain close ties with the CCP and may act as "gatekeepers" that veto or otherwise influence editorial coverage of China at the outlets in which they invest.¹⁵¹ Chinese companies are also at the forefront of digital television broadcasting on the African continent and are expanding the reach of Chinese social media platforms around the world, creating new avenues through which the CCP can influence news distribution outside of China.¹⁵² There is already evidence that Chinese companies have used their control over foreign media outlets and digital platforms to suppress reporting critical of China, ensure coverage reflects CCP preferences, or crowd out

*Section 310 (a) (b) of the 1934 Communications Act prohibits the Federal Communications Commission from granting broadcast, aeronautical radio, or common carrier licenses to any U.S. entity that has more than a 25 percent investment by a foreign corporation, government, or individual. Federal Communications Commission, *Foreign Ownership Rules and Policies for Common Carrier, Aeronautical En Route and Aeronautical Fixed Radio Station Licensees*.

coverage by other international broadcasters with content produced by Chinese state media.¹⁵³ Examples of Party-state-affiliated entities seeking to influence the coverage or distribution of content in foreign media include the following:

- Journalist Azad Essa was fired by South African news outlet *Independent Online* in 2018, hours after one of his columns criticized China's persecution of Uyghurs.¹⁵⁴ Chinese investors had a 20 percent stake in *Independent Online* at the time.¹⁵⁵
- Journalists working at the Taiwan-based *China Times* and CtiTV, both owned by the pro-Beijing Want Want media group,* told the *Financial Times* in 2019 that their editors take instructions regarding coverage on cross-Straits relations directly from the Taiwan Affairs Office, the body in the Chinese government that handles Taiwan affairs.¹⁵⁶
- StarTimes, a Chinese satellite company with close ties to the CCP, provides digital television infrastructure services to Ghana, Mozambique, Nigeria, Senegal, and South Africa.¹⁵⁷ According to Freedom House, StarTimes offers access to inexpensive subscription television packages that favor Chinese state media channels over those of other international broadcasters.¹⁵⁸
- WeChat suspended several prominent U.S. accounts run by Chinese immigrants or Chinese-Americans between 2021 and 2023 for posting content that praised life in the United States or did not take an overtly pro-Beijing position on issues like the U.S.-China trade war.¹⁵⁹ WeChat is owned by the Chinese technology giant Tencent.¹⁶⁰
- TikTok, the Chinese-owned social media platform, suspended accounts and blocked content that showed or mentioned religious activities banned in China, the Tiananmen Square massacre, Tibetan independence, and other topics that Beijing regards as sensitive.¹⁶¹ (For more on TikTok's most recent efforts to block content on prodemocracy activities in Hong Kong, see Chapter 5, Section 3, "Hong Kong.")

Social Media Posts Spread CCP Propaganda and Disinformation

China's Party-state increasingly relies on social media platforms to spread propaganda and disinformation in foreign media environments.¹⁶² Chinese embassies, consulates, diplomats, and state media outlets have created hundreds of new accounts on Facebook and Twitter† since 2019, disseminating China's official views on international events in a variety of languages to millions of followers worldwide.¹⁶³ Networks of fake accounts linked to the CCP‡ frequently

*Want Want Holdings Limited is a Taiwan food and beverage manufacturer headquartered in Shanghai, China. The company makes about 90 percent of its revenue by selling its products in China, giving rise to longstanding rumors that it is closely aligned with mainland Chinese authorities. Lisa Wang, "China Times Group Is Sold to Want Want," *Taipei Times*, November 5, 2008; Nick Aspinwall, "Taiwan Shaken by Concerns over Chinese Influence in Media, Press Freedom," *Diplomat*, July 27, 2019.

†In July 2023, Twitter was rebranded as X. Wes Davis, "Twitter is being rebranded as X," *The Verge*, July 23, 2023.

‡Such as those run by OneSight Technology, which held a contract with state-owned China News Service. Jeff Kao and Mia Shuang, "How China Built a Twitter Propaganda Machine Then Let It Loose on Coronavirus," *ProPublica*, March 26, 2020.

and rapidly share posts from official Chinese accounts as well as articles containing disinformation on Facebook, Twitter, and YouTube, artificially inflating the statistics measuring engagement with these official accounts and accelerating the spread of falsehoods across the internet.¹⁶⁴ The kinds of content shared by Chinese state-affiliated media has grown more creative over time, with outlets such as the *Global Times* and *People's Daily* posting videos set to music on YouTube or posting memes that convey anti-U.S. messages with references to popular culture in a comical fashion.¹⁶⁵ State media organizations also pay Chinese and foreign social media personalities to serve as “influencers” on YouTube, Twitter, Facebook, and TikTok, promoting views sympathetic to the CCP without disclosing their state affiliation.¹⁶⁶ In 2022, the Digital Threat Analysis Center (formerly the research firm Miburo) catalogued at least 200 influencers with connections to the Chinese government or state media operating in 38 different languages.¹⁶⁷ Examples of China’s manipulation of social media include:

- Researchers’ discovery in August 2023 of networks of Chinese state-linked social media accounts spreading disinformation about the Maui wildfires, including content claiming the fires were the result of a “weather weapon” allegedly created by the U.S. government.¹⁶⁸ Reports on these disinformation activities, including from the cybersecurity firm Recorded Future and Microsoft, note that the social media networks posted in more than 25 languages and used AI-generated images to sow discord in the United States and elsewhere.¹⁶⁹
- Xinhua’s posting on Twitter of a “Tetris”-themed meme criticizing the United States’ handling of the COVID-19 virus in 2021.¹⁷⁰
- Chinese state media collaboration with an Israeli social media influencer who contradicted international reporting on China’s atrocities in Xinjiang through trips to the province in which he interviewed local cotton farmers and claimed, “It’s totally normal here.”¹⁷¹ In an interview conducted with CGTN during the visit, the influencer asserted that there was “true harmony” between the Uyghurs and Han Chinese in Xinjiang.¹⁷²
- U.S. cybersecurity firms’ discovery in 2022 of a Chinese state-linked online influence campaign called DRAGONBRIDGE, which has used massive networks of inauthentic accounts to spread false or divisive content about alleged environmental degradation by U.S. and Canadian rare earth companies, China’s COVID-19 response, the war in Ukraine, and the explosion of the Nord Stream 2 gas pipeline.¹⁷³

China’s Diplomats Pressure Foreign Journalists to Avoid Critical Coverage

Chinese diplomats routinely pressure media executives and journalists outside of China to alter coverage they view as unfavorable—behavior that Freedom House observes has become more aggressive in recent years.¹⁷⁴ This pressure typically involves demands to edit or delete unfavorable content as well as threats to pursue defamation lawsuits or withdraw advertising if the offending media outlet

or journalist does not comply.¹⁷⁵ Chinese diplomats may castigate the media outlet or journalist publicly, but Freedom House observes that more often, pressure is exerted privately in phone calls urging a retraction or apology.¹⁷⁶ Online harassment or cyberattacks by actors linked to Beijing may occur in tandem with Chinese diplomats' complaints about critical coverage.¹⁷⁷ Chinese authorities may also harass or detain the China-based relatives of foreign journalists to punish them for critical coverage.*¹⁷⁸ Examples of Chinese diplomatic pressure on foreign media include:

- Kuwaiti newspaper *Arab Times*' decision to delete an interview with Taiwan's foreign minister from its website following public condemnation by the Chinese Embassy in Kuwait in August 2021.¹⁷⁹ *Arab Times* replaced the online interview with a statement from the embassy titled "There is only one China in the world and Taiwan is an inalienable part of China's territory."¹⁸⁰
- The Chinese Embassy in Sweden's aggressive treatment of Swedish journalists during the tenure of Ambassador Gui Congyou (2017–2021), who gained notoriety as one of China's best-known "wolf warrior" diplomats.†¹⁸¹ This included threats the embassy sent to Swedish freelance journalist Jojje Olsson in 2018 and in 2021 following stories critical of the Chinese government.¹⁸²
- The intense online harassment and apparent framing of *De Volkskrant* reporter Marije Vlakamp for fake bomb threats against the Chinese embassies in Oslo and The Hague following her coverage of sensitive topics, including the activities of Chinese dissidents in the Netherlands.¹⁸³ The Netherlands' Ministry of Foreign Affairs subsequently demanded clarification from the Chinese Embassy about the origins of the intimidation campaign against Ms. Vlakamp.¹⁸⁴

According to Ms. Cook, a recent Freedom House study of Chinese influence on foreign media between 2019 and 2022 found at least one incident of censorship or intimidation aimed at suppressing reporting or viewpoints critical of the Chinese government and companies in 24 of the 30 countries assessed.¹⁸⁵ About half of these incidents involved Chinese diplomats or state-owned enterprises, Ms. Cook noted, but the other half involved "local officials or media executives from outside China who attempted to suppress the critical reporting because of their own interest[s] related to the Chinese government."¹⁸⁶

China's Harmful Political Influence Activities

The CCP attempts to shape the political ecosystems and choices of foreign countries, exploiting the porous nature of democratic systems and making use of cyber operations as well as coercion to achieve its goals.¹⁸⁷ Ms. Dearing Scott testified before the Commis-

*For instance, in 2018 Chinese authorities detained relatives of at least five U.S.-based reporters who covered the CCP's crackdown in Xinjiang for Radio Free Asia's Uyghur service. Austin Ramzy, "After U.S.-Based Reporters Exposed Abuses, China Seized Their Relatives," *New York Times*, March 1, 2018.

†Between 2017 and 2020, Ambassador Gui was reportedly summoned by Sweden's foreign ministry more than 40 times to protest his remarks. Lai Fu, "Growling Back at the West," *China Media Project*, August 8, 2021.

sion that her organization, the International Republican Institute, had “noted robust attempts by the PRC at pure political influence and interference.”¹⁸⁸ She argued that the type of political influence activity employed depends on the country China is targeting.¹⁸⁹ Ms. Dearing Scott observed that while China often prefers to “identify, empower, and occasionally fund proxies, candidates, and parties that favor cooperation with the PRC and who will not push the envelope on any of the PRC’s red lines,” it has also attempted to directly steer elections in Taiwan, Australia, and Canada.¹⁹⁰ The allegations and evidence of CCP-linked political influence efforts that do exist publicly are limited, complicating any effort to quantify the scale of these activities or to assess their efficacy on average, even if they appear to show that Beijing has generally failed to achieve its aims.¹⁹¹

Influencing Foreign Electoral Processes

There is a small but growing amount of evidence that actors associated with China’s Party-state have sought to influence electoral processes in the United States as well as in allied and partner countries, though the operations that have been exposed do not appear to have impacted the outcomes.¹⁹² Efforts to fund candidates perceived as friendly to Beijing during elections or to bombard the public with disinformation that undermines confidence in certain candidates, the government, or the integrity of the election at large are all consistent with the U.S. National Intelligence Council’s definition of election influence.*¹⁹³ Recent examples in which actors linked to China’s Party-state have attempted to influence other countries’ elections include the following:

- Prior to the November 2022 U.S. midterm elections, cybersecurity researchers discovered multiple coordinated social media campaigns in which fake online accounts potentially linked to China’s Party-state propagated content containing anti-U.S. messages, criticisms of U.S. politicians, and highly divisive political topics across a variety of social media platforms.¹⁹⁴ One social media influence campaign dubbed DRAGONBRIDGE by U.S. cybersecurity firm Mandiant aggressively sought to discredit the U.S. democratic process by posting English-language videos discouraging Americans from voting, impugning the productivity of U.S. lawmakers, and highlighting instances of politically motivated violence as evidence that U.S. democracy had purportedly failed.¹⁹⁵ Another series of campaigns discovered by Twitter spanned more than 2,000 inauthentic accounts and propagated claims that the 2020 election had been rigged, narratives favored by the U.S. political right and U.S. political left, and messages echoing the Chinese government’s rhetoric on issues like then Speaker of the U.S. House of Representatives Nancy Pelosi’s 2022 trip to Taiwan.¹⁹⁶ Yet another campaign discovered by Meta involved a series of fake accounts on Facebook and Instagram that posed as conservative and liberal

*The National Intelligence Council considers “election interference” to be a subset of election influence activities that specifically target the technical elements of an election, such as voter registration, casting and counting ballots, or reporting results. National Intelligence Council, *Foreign Threats to the 2020 US Federal Elections*, March 21, 2021.

Americans sharing content related to gun ownership and abortion access in sometimes mangled English.*¹⁹⁷ There is no evidence that these social media campaigns had any impact on the 2022 midterms' outcome, but experts assess these efforts reflect China's maturing cyber operations tradecraft and the adoption of tactics generally associated with Russian and Iranian influence campaigns.¹⁹⁸

- In March 2022, DOJ arrested a Chinese national for allegedly working on behalf of the MSS on charges related to a conspiracy to surveil and harass a candidate for U.S. Congress in New York.¹⁹⁹ The Chinese national, Lin Qiming, allegedly hired a private investigator to discover and manufacture compromising information about the candidate, whom media reporting revealed to be Yan Xiong, a military veteran and former leader of the 1989 prodemocracy protests.²⁰⁰ According to the DOJ complaint, Mr. Lin also suggested the private investigator physically attack Mr. Yan and "beat him until he cannot run for election" or arrange a car crash ahead of the election.²⁰¹ While there is no evidence the scheme had any impact on the election's outcome, Mr. Yan claims the scheme "successfully" sank his race.²⁰²
- Between November 2022 and May 2023, Canadian media published a series of reports based on leaked intelligence from the Canadian Security Intelligence Service that detailed allegations of Chinese state-sponsored influence operations during the country's 2019 and 2021 federal elections.²⁰³ The reports included claims that China funneled money through its Toronto consulate to 11 candidates who ran in the 2019 federal election and that Chinese diplomats and their united front proxies made undeclared donations to political campaigns and hired international Chinese students to volunteer for certain candidates ahead of the 2021 federal election.²⁰⁴ The leaked Canadian Security Intelligence Service documents reportedly detail efforts by several Chinese consular officials to encourage members of Chinese-Canadian organizations to rally votes for the Liberal Party and defeat Conservative Party candidates because they viewed the latter as hostile to China.²⁰⁵ There is no evidence China's state-sponsored influence operations changed either election's outcome.²⁰⁶
- In February 2022, Australian media reported that the Australian Security Intelligence Organization (ASIO), Australia's domestic counterintelligence agency, had disrupted a plot in which China-linked figures allegedly sought to fund parliamentary candidates in the New South Wales branch of the Labor Party in an upcoming federal election.²⁰⁷ ASIO chief Mike Burgess said in a speech that the plot was arranged by a wealthy individual with connections to a foreign government—a country Australian media subsequently determined was China based on interviews with multiple sources in the intelligence establishment unau-

*According to Meta's 2022 report, in at least one instance, an inauthentic account shifted from posting pro-choice content to anti-Biden content while maintaining the same user information. Ben Nimmo and Mike Torrey, "Taking Down Coordinated Inauthentic Behavior from Russia and China," *Meta*, September 2022, 9.

thorized to speak publicly.²⁰⁸ The wealthy individual allegedly hired a subordinate to identify “candidates likely to run in the election who either supported the interests of the foreign government or who were assessed as vulnerable to inducements and cultivation” and provided to that subordinate an offshore bank account with hundreds of thousands of dollars for operating expenses.²⁰⁹ Mr. Burgess said ASIO successfully prevented the wealthy individual and the subordinate from getting specific candidates preselected to stand for Labor seats, and there is no evidence the plot affected the outcome of the election.²¹⁰

Attempted Infiltration of U.S. Institutions to Violate Rights of Diaspora Communities

China’s Party-state has deployed a number of schemes to violate the rights of ethnically Chinese people and other minorities living in the United States, at times attempting to infiltrate U.S. government and civic institutions to provide cover for its egregious and illegal activities.²¹¹ Andrew Chubb, a senior lecturer at Lancaster University, argued in testimony before the Commission that “the most demonstrable overseas impact of Beijing’s interference has been on civil liberties and human rights, particularly inside diaspora communities.”²¹² He observed that Beijing’s influence activity “against dissidents and persecuted ethnic groups has severely impacted on freedoms of speech, political association and social trust in émigré communities,” an observation borne out by recent nongovernmental organization (NGO) reporting and law enforcement charges related to China’s transnational repression practices.²¹³ Recent examples in which actors linked to China’s Party-state have allegedly deployed harmful tactics and attempted to undermine civil liberties such as religious freedom, freedom of speech, and freedom of assembly by infiltrating U.S. government or civic society institutions include the following:

- In May 2023, DOJ unsealed a complaint charging a Chinese citizen and a U.S. resident with participating in a scheme to revoke a New York-based Falun Gong organization’s tax-exempt status and paying bribes to an undercover U.S. law enforcement officer posing as an Internal Revenue Service (IRS) agent.²¹⁴ DOJ’s complaint alleged that the two men filed a false complaint against a Falun Gong entity using the IRS’s Whistleblower Program at the direction of Chinese officials and then paid \$5,000 in cash bribes to the undercover law enforcement officer in order to initiate an audit of the Falun Gong entity.²¹⁵ “John Chen and Lin Feng allegedly waged a campaign at the behest of the Government of the People’s Republic of China to influence a U.S. Government official in order to further the PRC Government’s repression of practitioners of Falun Gong,” U.S. Attorney Damian Williams for the Southern District of New York said of the foiled plot.²¹⁶ He noted that Beijing’s use of illegal methods to achieve its autocratic aims are “as shocking as they are insidious.”²¹⁷
- In March 2022, DOJ charged three individuals with conspiring to act as agents of the Chinese government, commit interstate harassment, and bribe a federal official for the purpose

of discrediting Chinese prodemocracy activists residing in the United States.²¹⁸ According to DOJ, two of the defendants—Fan “Frank” Liu, the president of a purported media company, and Matthew Ziburis, a former correctional officer for the state of Florida—acted at the direction of Qiang “Jason” Sun, a PRC-based employee of an international tech company, to spy on and spread negative information about multiple Chinese dissidents living in California, Indiana, and New York City.²¹⁹ In one case, the defendants allegedly paid a private investigator to bribe an IRS employee to access the federal tax returns of a Chinese dissident, hoping to discredit him by publicly disclosing his tax liabilities.²²⁰ The private investigator cooperated with law enforcement, and no IRS employee received a bribe payment.²²¹

- In March 2022, DOJ charged a New York man with acting as an agent of China’s government and accused him of using his status within the Chinese dissident community to collect information about activists on behalf of the MSS.²²² According to DOJ, Wang Shujun—a former leader within the Chinese dissident community and founder of a prodemocracy organization serving Chinese dissidents in Queens, New York—collected information about prominent activists, dissidents, and human rights leaders made available to him in confidence as the leader of the civil society organization at the direction of MSS handlers from at least 2016 onward.²²³ Mr. Wang’s alleged victims included Hong Kong prodemocracy activists, advocates for Taiwan independence, Uyghur activists, Mongolian activists, and Tibetan activists in New York City as well as abroad.²²⁴ DOJ’s complaint stated that one Hong Kong democracy activist whom Mr. Wang reported was arrested in Hong Kong and jailed on political charges as a result.²²⁵

Intimidation of Political Figures Who Pursue Policies Unfavorable to China

China’s Party-state pressures sitting officials and other political figures in foreign countries to avoid policies it regards as unfavorable to its interests. This pressure may take the form of attacking foreign political figures’ reputations, threatening their family members, or retaliating for moves it disapproves of by cutting off exchanges with China. Examples in which China’s Party-state has pressured foreign political figures to change policies or positions it dislikes include the following:

- In May 2023, Canadian press reported that the Canadian Security Intelligence Service had produced an assessment two years prior finding that the MSS had targeted the family of Michael Chong, a Conservative Member of Parliament [MP] who sponsored a parliamentary measure to recognize China’s atrocities in Xinjiang as genocide.²²⁶ Suspected MSS officer Zhao Wei reportedly sought information on Mr. Chong’s relatives in Hong Kong while posted as a diplomat at the Toronto consulate.²²⁷ Canadian intelligence assessed this was “almost certainly meant to make an example of this MP and deter others from taking anti-PRC positions.”²²⁸

- In March 2023, outgoing President of the Federated States of Micronesia (FSM) David Panuelo described an instance of intimidation by Chinese officials in a public letter to fellow Pacific Islands leaders warning of Beijing's covert and coercive efforts to align the region with China instead of the United States.*²²⁹ "You can imagine my surprise when I was followed this past July in Fiji during the Pacific Islands Forum by two Chinese men; my further surprise when it was determined that they worked for the Chinese Embassy in Suva," then President Panuelo wrote, recalling the incident.²³⁰ "To be clear: I have had direct threats against my personal safety from PRC officials acting in an official capacity."²³¹

Incentivizing Sitting Officials to Support Policies Favorable to China

The Party-state also aggressively seeks to access and incentivize sitting officials in foreign countries to support policies that favor China, frequently relying on financial contributions distributed by its proxies to further these goals.²³² According to Mr. Mattis, wealthy individuals are a common type of proxy that work on the Party-state's behalf to "move money quickly outside of China and ... spend that money legitimately without generating the alarm that comes with more direct state activity."²³³ He notes that these funds can buy "access to the major political parties" and fund "platforms for pro-China voices."²³⁴ Examples in which individuals linked to the Party-state have attempted to cultivate sitting politicians' support for China-friendly policies through financial contributions include the following:

- In 2023, Canadian media reported that the Canadian Security Intelligence Service had uncovered evidence a decade prior of a Chinese state-backed plot to improperly influence then Liberal Party leader Justin Trudeau by directing a wealthy individual to donate to organizations affiliated with his father, former Prime Minister Pierre Trudeau.²³⁵ According to the *Globe and Mail*, the intelligence service intercepted a 2014 conversation between a Chinese consular official and Canada-based billionaire Zhang Bin in which the official instructed Mr. Zhang to donate \$1 million to the Trudeau Foundation and told him the Chinese government would reimburse him for the entire amount.²³⁶ Mr. Zhang, who is a member of several major united front organizations, subsequently joined with another wealthy Chinese businessman to donate \$1 million to the Trudeau Foundation and the University of Montreal in 2015, where the elder Trudeau had studied and later taught.²³⁷ The office of current Prime Minister Justin Trudeau stated that he was unaware of Mr. Zhang's donation and had ceased involvement with the Trudeau Foundation upon becoming leader of the Liberal Party in 2013, two years prior to the donation.²³⁸
- In 2022, UK intelligence service MI5 issued a rare "interference alert" alleging that British-Chinese lawyer Christine Ching Kui

*During his presidency, Panuelo authored several letters critical of Beijing. Cleo Paskal, "Micronesia's President Writes Bombshell Letter on China's 'Political Warfare,'" *Diplomat*, March 10, 2023.

Lee was “knowingly engaged in political interference activities on behalf of the United Front Work Department (UFWD) of the Chinese Communist party.”²³⁹ The alert stated that Ms. Lee was “engaged in the facilitation of financial donations to political parties, Parliamentarians, aspiring Parliamentarians and individuals seeking political office in the UK” on behalf of individuals based in China and Hong Kong in “covert coordination with the UFWD.”²⁴⁰ It warned anyone in contact with Ms. Lee to be “mindful of her affiliation with the Chinese state and remit to advance the CCP’s agenda in UK politics.”²⁴¹ A *Guardian* report found that Ms. Lee’s law firm had made donations to UK political figures totaling \$926,349 (£675,586), \$801,011 (£584,177) of which were “donations in kind” to the office of Labor member of Parliament and former shadow cabinet member Barry Gardiner.²⁴² Ms. Lee is known to be a member of the China Overseas Friendship Association* and the CPPCC, both of which are involved in united front work.²⁴³

China’s Harmful Economic Influence Activities

There are two key features of the Party-state’s united front strategy discussed below: the use of influence operations to advance China’s economic interests in other countries and the use of economic actors to exert influence over foreign countries in order to shape policies that suit Beijing.²⁴⁴ Chinese firms’ pervasive and systematic efforts to “capture” elites† for the purpose of achieving China’s foreign investment objectives degrade the international business environment, making it harder for firms not aligned with Beijing’s agenda to compete. These economic influence activities also deepen other countries’ dependence on China, create debt sustainability concerns, and cause harm to local populations and environments. More broadly, Beijing attempts to co-opt local organizations or establish organizations it presents as being local or joint but that actually represent its views. While such activities may not be as harmful to the international business environment and local economies as China’s elite capture, they nonetheless present a challenge for officials to identify the presence and extent of China’s foreign influence on economic policymaking.

Elite Capture Fuels Corruption and Builds Market Share for Chinese Companies

A major aspect of China’s overseas economic influence activities involves capturing foreign elites through bribery or other forms of

*The China Overseas Friendship Association is an important platform through which the UFWD co-opts and interacts with overseas united front figures. According to Mr. Joske, the association operates “like bureau-level organs of the UFWD” and has chapters around the world. Alex Joske, “The Party Speaks for You: Foreign Interference and the Chinese Communist Party’s United Front System,” *Australian Strategic Policy Institute*, 2020, 7, 12, 44; *Xinhua*, “CCP Central Committee Issues Regulations on CCP United Front Work” (中共中央印发中国共产党统一战线工作条例), September 22, 2015. Translation.

†Elite capture is a form of corruption in which public officials and national elites manage or direct government projects in a manner that enables them to misdirect resources for their own personal financial gain to the detriment of the public. Chinese influence creates a system of incentives whereby those in positions of power choose and implement policy outcomes advantageous to China but likely detrimental to public welfare because the elites will also be enriched through the outcome. *International Republican Institute*, “A World Safe for the Party China’s Authoritarian Influence and the Democratic Response: Country Case Studies from Nepal, Kenya, Montenegro, Panama, Georgia and Greece,” 2021, iii.

personal enrichment. These actions often aim to secure contracts for national projects for Chinese companies, even when the excessive cost of those contracts, the companies' poor credentials, stated rationale for those projects, or overall impact of those projects on a country's finances clearly contravene the public interest.²⁴⁵ As Ms. Dearing Scott noted in her testimony, BRI-related infrastructure financing and domestic plans for large public infrastructure projects frequently create opportunities for corruption as well as lucrative deals and greater market access for Chinese companies.²⁴⁶ Beijing's BRI projects take particular advantage of countries in which corruption is rampant and democratic institutions are weak, effectively fueling greater corruption and crony capitalism.²⁴⁷ (for more information on the status of BRI implementation, see U.S.-China Economic and Security Review Commission, Chapter 1, Section 1, "U.S.-China Bilateral and China's External Economic and Trade Relations.") Cases of elite capture are individually egregious but also are part of a larger pattern of China's economic influence.²⁴⁸ While examples of China's efforts to foster corruption in foreign countries to benefit the Party-state's interests are extensive, select examples demonstrating the Party's tactics include the following:

- Sinohydro, a Chinese state-owned hydropower engineering and construction company, allegedly paid \$76 million in bribes to Ecuadorian government officials during the bidding process and construction of the Coca Codo Sinclair hydroelectric plant, the largest hydroelectric dam project in Ecuadorian history.²⁴⁹ This infusion of bribes undermined Ecuador's government institutions and resulted in a deal that made China money but has not proven environmentally or economically fruitful for Ecuador.²⁵⁰ The dam cost more than \$2.2 billion, was built near an active volcano despite warnings by geologists that it could collapse, and now only operates at half capacity due to the strain it puts on the country's electrical grid.²⁵¹ In March 2023, Ecuadorian prosecutors charged 37 people—including a former president and a former Chinese ambassador to Ecuador—with accepting bribes between 2009 and 2018.²⁵² Ecuador's former electricity minister and the former anticorruption official monitoring the project were also sentenced on bribery charges.²⁵³
- Patrick Ho, the former head of an NGO backed by Chinese energy conglomerate CEFC China, attempted to bribe top officials in Chad and Uganda in exchange for business advantages, including valuable oil rights.*²⁵⁴ The NGO Mr. Ho oversaw was partly based in Arlington, Virginia, was registered as a charitable entity in the United States, and held "Special Consultative Status" with the UN Economic and Social Council.²⁵⁵ Mr. Ho was convicted in 2018 of violations under the Foreign Corrupt Practices Act (FCPA), sentenced to 36 months in prison, fined \$400,000, and deported to Hong Kong upon his release.²⁵⁶

*According to the U.S. Department of Justice, "CEFC China is a Shanghai-based multibillion-dollar conglomerate that operates internationally in multiple sectors, including oil, gas, and banking." U.S. Department of Justice, *Former Head of Organization Backed by Chinese Energy Conglomerate Sentenced to Three Years in Prison for International Bribery and Money Laundering Offenses*, March 25, 2019.

- In 2018, the son of a Nepali political adviser reportedly pushed for a contract to be awarded to Huawei subsidiary China Communications Services (CCS) to build a videoconferencing facility within the prime minister's office in return for financial compensation.²⁵⁷ The project was ultimately canceled after it attracted the scrutiny of Nepal's anticorruption commission, which found that the son of the president's chief political advisor had received payment and visited Huawei's headquarters while in China.²⁵⁸ While the project was eventually canceled, initial concerns from security experts regarding the cybersecurity risks of embedding Huawei technology into government communications systems were ignored, as were concerns about the government favoring a Chinese company over Nepal Telecom, which could have also built the facility.²⁵⁹ Despite the failure of the project, Beijing continues to seek advantageous relations with the Nepali government and empower pro-China political parties in the country.²⁶⁰

China Cultivates Foreign Constituencies to Support Favorable Economic Policies

A distinctive aspect of China's approach to overseas influence activities is the fact that the CCP and its united front proxies cultivate constituencies in foreign countries who lobby for Beijing's preferred economic policies even as they represent their private interests. The reliance of particular groups or industries on trade or exchanges with China, and their ability to advocate for their interests to national-level policymakers, represents a point of leverage that Chinese leaders recognize as a means of influencing economic policies.²⁶¹ United front-linked industry associations and fora facilitating outreach to government officials work to establish coalitions of local businesses that can advocate for China's policy preferences.²⁶² The Chinese organizations' role in the process may distort policymaking, as they often try to disguise their activities as organic, grassroots initiatives.²⁶³ In fact, these united front activities are sanctioned by the Chinese government and conducted via organizations with ties to key economic agencies that may seek to steer both Chinese business engagement in the country and local business toward fulfilling Chinese policy objectives.²⁶⁴ These objectives may include decisions to remove tariffs or to boost imports China depends on for food security, such as soybeans and beef.²⁶⁵ Examples of Chinese entities' efforts to cultivate domestic constituencies that further Beijing's economic agenda include:

- Chinese companies' efforts to increase trade in agricultural and mineral commodities with Brazil through engagement in the China-Brazil Business Council (CEBC), an organization with ties to China's united front that describes itself as committed to "improving the trade and investment environment between the countries."²⁶⁶ The CEBC has branches in Brazil and in China—with the latter supervised by China's Ministry of Commerce, ensuring the organization is representing the official views and policies of the government—and is part of the united front-linked China Council for the Promotion of International Investment (CCIIP).²⁶⁷ CCIIP is one of the oldest of the gov-

ernment-approved “civil society organizations,” often referred to as “people’s organizations,” administered by China’s Ministry of Civil Affairs.²⁶⁸ These organizations are specifically tasked with carrying out elements of government policy. Ms. Dearing Scott testified before the Commission that the CEBC “has become an important tool for defending Chinese interests in Brazil” and noted that the organization advocates for views held by the CCP and policies favorable to China.²⁶⁹ For example, in a 2020 report, the CEBC suggested that China has implemented most of the commitments it made at the time it acceded to the WTO, a claim the Commission determined to be false in its 2022 Annual Report to Congress.²⁷⁰ The CEBC report also warns against limiting Huawei’s participation in 5G and suggests this would hamper critical partnerships with other high-technology Chinese companies.²⁷¹ Instead, the CEBC report recommends Brazil pursue a long-term strategy toward China that deepens engagement between the two countries and avoids the supposed missteps of U.S. economic policy toward China.*²⁷² The CEBC also hosts fora that bring Chinese and Brazilian government officials together to discuss expanded trade and investment, such as a November 2021 virtual forum on China-Brazil cooperation in agricultural biotechnology geared toward increasing Brazilian agricultural exports to China, which included Ambassador Yang Wanming and president of the Chinese Academy of Agricultural Sciences Wu Kongming.²⁷³

- CCP-linked entities’ engagement with the United States Heartland China Association (USHCA), a U.S. nonprofit organization focused on agriculture that describes itself as “committed to building bridges and promoting opportunities between the peoples of the Heartland region [of the United States]... and the People’s Republic of China.”²⁷⁴ USHCA has partnered with the Chinese Embassy, the united front-linked Chinese People’s Association for Friendship with Foreign Countries (CPAFFC), and the united front-linked China-United States Exchange Foundation (CUSEF) to hold various gatherings and events, often providing a platform for the promotion of official Chinese views on agricultural trade and exchange.†²⁷⁵ USHCA also engages with subnational leaders who can influence agricultural trade policy in key U.S. states.²⁷⁶
- CCP-linked entities’ engagement with U.S. governors to facilitate trade and investment through the U.S.-China Governors Forum, which was established in 2011 but became defunct after the U.S. Department of State withdrew in 2021, citing foreign influence concerns.²⁷⁷ CPAFFC, a key organization in China’s

*The author of the CEBC’s 2020 report became Brazil’s secretary for international affairs at the Ministry of Finance in 2023, demonstrating the organization’s ties to influential members of Brazil’s government. *Wilson Center*, “U.S.-Brazil Economic Relations: New Opportunities for Trade and Investment,” March 22, 2023.

†In 2023, Luan Richeng, the CEO of state-owned grain company COFCO, delivered remarks at USCHA’s third annual Agriculture Roundtable in which he thanked Chinese government entities, including CPAFFC, for their help in facilitating the event and U.S.-China agricultural cooperation more broadly. In his remarks, Mr. Luan insinuated that U.S. policies, which he described as “anti-globalization policies,” have created greater vulnerabilities in global food supply chains. United States Heartland China Association, “Luan Richeng Remarks @USHCA 3rd Annual Agriculture Roundtable 2023,” *YouTube*, May 9, 2023.

united front network, co-organized the forum with the U.S. National Governors Association and together hosted Xi at the 2015 gathering as well as other high-ranking Chinese government officials in the following years.²⁷⁸ Addressing an audience gathered in Kentucky at the 2019 U.S.-China Governors Forum, then Chinese Ambassador to the United States Cui Tiankai noted the impact of the Trump Administration's tariffs on U.S. states and urged attendees "to pay serious attention to this, and not let some ill-informed, ill-intentioned people incite a 'new Cold War' at the expense of the people's interests."²⁷⁹ The warning was clearly intended to rally U.S. officials against the tariffs and echoed a 2018 remark by the spokesperson of the Chinese Ministry of Commerce, who called on U.S. companies importing Chinese goods to "do more to lobby the U.S. government and work hard to safeguard their own interests."²⁸⁰ Ambassador Cui also praised Kentucky, saying he always finds "true friendship, not groundless suspicions" there, and thanked the state's governor and CPAFFC for hosting the event.²⁸¹

China's Harmful Academic Influence Activities

The CCP seeks to aggressively influence research at foreign universities and think tanks.²⁸² Glenn Tiffert, a research fellow at the Hoover Institution, testified before the Commission that the CCP and affiliated actors "employ a range of overt and covert methods to manipulate the ecosystem of knowledge, the flows of information, and the source bases that inform decisionmakers and public opinion around the globe," heavily targeting academia in these efforts.²⁸³ The surveillance and intimidation of campus community members, the censorship of China-related publications and databases, and the encouragement of financial- and human capital-related dependencies on China within foreign universities and think tanks are three tactics that exemplify Beijing's efforts to take advantage of and control foreign academic discourse.

CCP Surveillance and Intimidation Undermine Academic Freedom, Student Safety

The CCP uses a variety of coercive measures to influence how members of the campus community discuss China-related issues and to deter potential critics from freely expressing themselves.²⁸⁴ One of these measures is the surveillance of Chinese students and others by Chinese diplomats and networks of informants on campus, which induces self-censorship.²⁸⁵ Campus informants are sometimes, but not always, linked to student groups that receive funding from the Chinese government, such as the Chinese Students and Scholars Association (CSSA).²⁸⁶ Another type of coercive activity involves Chinese diplomats and individual Chinese students who employ intimidating modes of conversation, make explicit threats, or otherwise harass faculty, other students, or university administrators for a view they hold or activity they undertake that contradicts Party orthodoxy.²⁸⁷ According to Dr. Tiffert, state-sponsored surveillance and intimidation "creates an atmosphere of fear, impairs the ability of PRC students to enjoy equal access to the privileges and benefits of the US education for which they are generally paying

full freight, and starves our campuses of the full range of ideas and perspectives that Chinese students can contribute to our classrooms, affecting the education that everyone receives.”²⁸⁸ A third type of coercive measure involves efforts to heckle, disrupt, or cancel speakers or events on campus that criticize or diverge from the Party’s orthodoxy—activities that clearly undermine academic freedom.²⁸⁹ Examples of campus intimidation or disruptions intended to deter or punish criticism of the CCP include the following:

- In 2022, the CSSA at George Washington University complained to university leadership about the appearance of posters on campus designed by Chinese-Australian artist Badiucuo criticizing China’s human rights abuses ahead of the 2022 Olympics in Beijing.²⁹⁰ The CSSA’s complaint alleged that the posters reflected racism toward Chinese students, constituted a “naked attack on the Chinese nation,” and called for those who had put up the posters to be “severely” punished, prompting the university to announce that it would remove the posters.²⁹¹ The university president ultimately reversed the decision after learning that the posters in question were a critique of Chinese government policies, citing the need to protect freedom of speech on campus and promising that the students who originally put up the posters would not be punished.²⁹²
- A 2021 investigation by Human Rights Watch found that pro-democracy students from mainland China and Hong Kong at Australian universities were threatened by some of their classmates with physical violence, claims they would be reported to Chinese authorities, or doxxing* online.²⁹³
- In 2020, an online panel at Brandeis University discussing China’s treatment of Muslim Uyghurs was “Zoombombed” by online participants who scrawled profanities on one of the presenter’s slides and played China’s national anthem to drown out her voice.²⁹⁴ Prior to the event, the Brandeis CSSA organized a campaign on WeChat calling for the cancelation of the panel, an entreaty that university administrators ignored.²⁹⁵

Manipulating the “Source Base” of Foreign Knowledge about China

The CCP regularly censors authoritative sources of China-related knowledge in order to distort the types of conclusions foreigners can draw about the country from publicly available information.²⁹⁶ This practice is evident in the systematic deletion from Chinese academic databases of articles touching on topics the CCP regards as sensitive or as challenging Party orthodoxy; it is also evident in the reduction of foreigners’ access to such databases.²⁹⁷ Similarly, articles published jointly by Western and Chinese academic presses are often unilaterally edited by the PRC side to comport with the CCP’s political preferences, and they may revise map and place names to confer legitimacy on Chinese territorial claims.²⁹⁸ The CCP has also

*“Doxxing” is the intentional revelation of a person’s private information online without their consent, often with malicious intent. This includes sharing phone numbers, home addresses, identification numbers, and any sensitive and previously private information such as personal photos that could make the victim identifiable and potentially exposed to further harassment. Sen Nguyen, “What Is Doxxing and What Can You Do If You Are Doxxed?” *CNN*, February 7, 2023.

considerably restricted the participation of Chinese academics and scientists in international conferences, depriving foreign audiences of access to a diversity of perspectives and providing grounds for the Party to dismiss academic assessments that challenge its official positions as “ill-informed” attacks on China.²⁹⁹ “By tampering with the source base we use in ways that are invisible to the end user or difficult to detect,” Dr. Tiffert observes, “these measures corrupt our scholarship and hijack our tongues with the aim of enlisting them to inadvertently propagate official narratives.”³⁰⁰ Examples of China’s censorship of the “source base” include the following:

- In July 2023, regulations on China’s genetic databases went into effect, providing the government with additional oversight of the country’s vast biobanks* while restricting foreign countries’ access.³⁰¹ While the United States and other countries maintain an open environment for sharing scientific discoveries and data, China continues to resist reciprocity in this area.³⁰² As Anna Puglisi, director of biotechnology programs at Georgetown’s Center for Security and Emerging Technology, noted in testimony before the Commission, the Chinese government is “not adhering to the global norms of collaboration” by restricting the export of its own genomic data.³⁰³
- In March 2023, the Chinese government announced new restrictions on international access to the China National Knowledge Infrastructure Database (CNKI),† the academic database most heavily used by foreign scholars of China.³⁰⁴ According to notices sent to foreign universities and libraries that subscribe to CNKI, access to four databases containing PhD dissertations and masters theses, conference proceedings, the National Population Census of China, and statistical yearbooks was temporarily suspended as of April 1 pending “regulatory review” of CNKI’s cross-border services.³⁰⁵ The move followed a June 2022 announcement by the Cyberspace Administration of China that CNKI would undergo a “cybersecurity review” for the stated purpose of “preventing national data security risks, maintaining national security and protecting the public interest,” a measure foreign observers assessed would lead to the removal of many valuable sources from CNKI.³⁰⁶
- In March 2022, Chinese security services prevented at least five Chinese scholars based in the PRC from virtually attending the annual gathering of the Association for Asian Studies, one of the most important international conferences for scholars in the Asian studies field.³⁰⁷

*Biobanks are collections of human biological samples linked to personal genetic and health information. Laura Annaratone et al., “Basic Principles of Biobanking: From Biological Samples to Precision Medicine for Patients,” *Virchows Archiv: An International Journal of Pathology* 479:2 (2021): 233–246.

†CNKI is a multidisciplinary database of over 8,500 periodic titles published in China that hosts about 95 percent of all academic literature written in Chinese as well as government reports and yearbooks with key statistical datasets such as yearly census numbers by city and province, economic data, and health data. As Ruby MacDougall, an analyst at Ithaka S+R, observes, “Scholars from across disciplines who work on China regularly turn to CNKI journals and datasets for research, and unrestricted access to information contained in CNKI is widely viewed as a crucial tool for sustaining a deep understanding of China.” Ruby MacDougall, “Reflecting on Restricted Access to a Chinese Research Lifeline,” *Ithaka S+R*, April 25, 2023.

- In late 2020 or early 2021, verdicts and other judicial decisions began disappearing from China Judgments Online, a web portal-based database run by China's Supreme People's Court that had provided foreign legal scholars with some insight into the country's judicial system since 2013.³⁰⁸
- In 2019, two professors at the University of Otago in New Zealand discovered that their Chinese press partner had censored one of the essays in the special issue submitted to the journal *Frontiers of Literary Studies in China*, which is jointly published by the Netherlands-based company Brill and Higher Education Press, an organization subordinate to China's Ministry of Education.³⁰⁹

Chinese Funding of Foreign Universities and Think Tanks May Influence Research Activities

Foreign universities and think tanks' dependence on Chinese sources for funds may undermine the academic freedom, integrity, and activities of these institutions.³¹⁰ For example, funding provided by China-based partners in the form of donations, grants, research partnerships, and agreements to establish Confucius Institutes with universities and think tanks has raised concerns in the United States* and elsewhere that the arrangements could disincentivize rigorous or critical research about China, especially when the Chinese partners are companies or universities with close ties to the CCP.³¹¹ U.S. institutions of higher education frequently accept gifts, donations, and contracts from China, and despite federal requirements to disclose† to the U.S. Department of Education any foreign gifts or contracts that exceed \$250,000, noncompliance is widespread.³¹² A 2020 report by the Department of Education found that in 2020 alone, colleges and universities retroactively reported more than \$6.5 billion in foreign funding, including from China.³¹³ The fact that universities often retroactively disclose foreign funding complicates efforts to ascertain the full amount of funding received from China in a given year, meaning the total number of China-origin gifts and contracts U.S. universities receive likely exceeds that reflected in publicly available data. For example, between January and halfway through October 2022, U.S. universities and colleges reported \$31.8 million from China, but this number may increase as additional gifts and contracts are retroactively reported in the coming months and years.³¹⁴ Examples in which foreign academic institutions' acceptance of Chinese funding either plausibly

*Policymakers and analysts in the United States have expressed concerns about the lack of transparency surrounding these donations, the dependencies on China they create, and the fact that some of the Chinese entities that have provided funding are on the U.S. Department of Defense's Communist Chinese Military Companies (CCMC) List or the U.S. Department of Commerce's Military End-User List. A *Bloomberg* analysis of data collected by the U.S. Department of Education between 2013 and 2020 concluded that 115 U.S. colleges received almost a billion dollars in gifts and contracts from Chinese sources during this period. Daniel Currell, "Foreign Money in U.S. Universities, Part VI — A Guided Tour of Chinese Money in U.S. Universities," *National Security Institute*, October 6, 2021; Janet Lorin and Brandon Kochkodin, "Harvard Leads U.S. Colleges That Received \$1 Billion from China," *Bloomberg*, February 6, 2020.

†Section 117 of the Higher Education Act of 1965 requires universities and colleges that receive federal financial assistance to disclose to the U.S. Department of Education contracts with or gifts from a foreign entity. The threshold for reporting is currently \$250,000 or more in one calendar year. U.S. Department of Education Office of Federal Student Aid, *Section 117 Foreign Gift and Contract Reporting*, 2023.

influenced their operations or created the risk of improper influence in the future include the following:

- In 2023, University of California Berkeley failed to report a \$220 million investment from the Chinese city of Shenzhen's municipal government.³¹⁵ The money was intended to finance a research campus in China.³¹⁶ Berkeley's partnership with the Shenzhen municipal government was announced in 2018 but was not reported despite the Department of Education's requirement to disclose foreign gifts or contracts within six months of signing a deal and the university's own policy of protecting academic freedom and U.S. national security.³¹⁷ According to media reporting, after the contract was signed, "Berkeley researchers granted Chinese officials private tours of their cutting-edge U.S. semiconductor facilities and gave 'priority commercialization rights' for intellectual properties they produced to Chinese government-backed funds."³¹⁸
- In 2021, a professor at the University of Cambridge who directs one of its colleges' China-focused research centers reportedly advised colleagues to avoid discussing contentious issues on China's human rights record so as not to be seen as "campaigning... for freedom for Hong Kong, [or] freedom for the Uyghurs."³¹⁹ According to the British newspaper *Sunday Times*, this professor's position was funded by a £3.7 million (\$4.6 million) donation to the university from the Chong Hua foundation, a trust allegedly controlled by the daughter of former Chinese Premier Wen Jiabao.³²⁰ The professor also reportedly sat on the board of China International Capital Corporation, a Chinese investment bank that is partially state owned.³²¹
- In 2020, media reports revealed that Vrije Universiteit, the Netherlands' fourth-largest university, had accepted hundreds of millions of euros' worth of funding from a Chinese university to support its Cross Cultural Human Rights Center, which espoused views on China's treatment of Uyghurs and human rights record effectively echoing those of the Chinese government.³²² One post on the center's website, for example, stated that several of its Dutch academics had visited Xinjiang and concluded that there was "definitely no discrimination of Uyghurs or other minorities in the region."³²³ Following a public outcry and a statement from the Netherlands' education minister expressing concerns about academic freedom, Vrije Universiteit announced that it would refuse further funding from the Chinese university and repay any money it had received.³²⁴

Some universities have decided to forgo Chinese funding to protect academic freedom, however. In 2023, Friedrich Alexander University of Erlangen Nuremberg (FAU), one of Germany's largest universities, suspended its collaboration with students funded by the China Scholarship Council (CSC), a Chinese-government backed organization that administers study abroad programs for Chinese nationals, including students sponsored by institutions tied to China's military, defense industry conglomerates, and other government agencies to

study scientific disciplines relevant to defense modernization.*³²⁵ The FAU executive committee expressed concerns with the contract CSC students are required by the Chinese government to sign prior to their studies in Germany, which includes a pledge to remain in communication with the Chinese embassy, maintain allegiance to the Party, and return to China after completing their scholarship.³²⁶ The executive committee explained that “under these contracts CSC scholarship holders will be unable to fully exercise their academic freedom and freedom of expression as stipulated under the Germany Basic Law.”³²⁷

Implications for the United States

China’s brazen, egregious, and increasingly aggressive overseas influence activities present a diverse set of risks to the United States and fellow liberal democracies.³²⁸ At the same time, they create opportunities for Congress to strengthen U.S. institutions, work closely with other countries that face similar challenges, and develop mitigation efforts that other democracies around the world can emulate.³²⁹ Many of the Party-state’s attempts to influence political and social life in the United States as well as allied and partner countries have been exposed by media reporting or disrupted by law enforcement, suggesting that democratic countries have the capacity to cope with many of these challenges, even if further public scrutiny, new laws, and more robust safeguards against coercion are required.³³⁰

First, China’s overseas influence activities challenge U.S. national security as well as international conventions and norms. The Party-state’s efforts to unduly influence elections by flooding social media with divisive and false content threaten the integrity of the U.S. political system and its decision-making processes.³³¹ There is no public evidence that Beijing has funded networks of candidates to win races in the United States, but recent allegations of such activity in Canada suggest that heightened vigilance around future U.S. elections is warranted.³³² Similarly, the Party-state’s attempts to influence every level of government raise legitimate questions about

*The China Scholarship Council (CSC) describes itself as a nonprofit organization affiliated with China’s Ministry of Education that administers a variety of study abroad funds and programs for Chinese nationals, including some designed to cultivate human talent for China’s industrial and defense aims. The CSC’s website indicates that its advisory board includes ten ministries and academies, at least eight of which are known to be involved in talent recruitment or technology transfer activities. One of its programs, the National Study Abroad Fund, requires recipients to study scientific fields prioritized by the state, support the CCP’s leadership, and return to China for a two-year work commitment. Another CSC scholarship, the National Government-Sponsored Graduate Student Program for the Building of Top Universities, targets doctoral students who are already affiliated with universities belonging to China’s military-industrial complex. Like the National Study Abroad Fund, this scholarship requires political loyalty and a two-year service commitment upon returning to China but also emphasizes that applicants must secure admission to well-known universities in technologically advanced countries. The list of “accepting units” approved to solicit and sponsor applications on the scholarship’s behalf includes a host of institutions tied to China’s military, defense industry conglomerates, state-owned enterprises, and other government agencies. A final CSC scholarship, the National Government-Sponsored Program for Senior Research Scholars, Visiting Scholars, and Postdoctoral Students, targets S&T researchers who are advanced in their careers and already work for an employer linked to the Chinese government, like state-owned enterprises. This scholarship’s 2020 selection guidelines indicate that recipients must follow the study plan agreed upon with their employer, regularly submit “training reports” on their progress to the Chinese consulate while abroad, and communicate the results of their study upon returning home. For more, see Anastasya Lloyd-Damjanovic and Alexander Bowe, “Overseas Chinese Students and Scholars in China’s Drive for Innovation,” *U.S.-China Economic and Security Review Commission*, October 7, 2020, 12–13.

whether state and local leaders have the knowledge, support, and resources they need to properly evaluate outreach from China. China's deliberate integration of united front work with the activities of its security services also means united front activities may conceal dangerous espionage and harassment.³³³

Second, China's overseas influence activities often violate U.S. law and threaten the civil liberties of U.S. persons* and others wishing to exercise their rights freely within the United States. The Party-state's surveillance and intimidation of U.S. persons and others has impacted freedom of speech, freedom of political association, and social trust.³³⁴ At the same time, the Party-state frames U.S. government and law enforcement responses to its overseas influence activities as racist. Given the Party-state's weaponization of race, an effective policy approach should avoid alarmist rhetoric, clearly establish the involvement of the Party-state in harmful activities, and take steps to protect people of Asian descent from unwarranted political suspicion and violence.³³⁵

Third, China's economic influence undermines the integrity of global markets and U.S. policymaking. Elite capture and other influence activities in foreign markets could create a tilted playing field, encouraging foreign governments and businesses to favor Chinese companies in awarding contracts, for instance. In cultivating deep ties to state and municipal governments, Chinese united front organizations may also effectively build constituencies that advocate for policy choices favored by the CCP, without a clear connection to China. Additionally, Chinese companies may seek to establish deals with key U.S. firms that align the commercial objectives of U.S. industry with the strategic objectives of the CCP. This places U.S. policymakers in the difficult position of evaluating whether U.S. firms are making investment decisions and supporting policies that privilege their short-term business interests at the expense of U.S. competitiveness, supply chain security, and national security more broadly.

Finally, China's overseas influence activities endanger the independence of media and academic institutions that U.S. policymakers rely on to make sound foreign policy decisions. The Party-state's efforts to covertly manipulate research and publications by universities, think tanks, and media organizations is prompting self-censorship by institutions meant to provide transparency and fora for public debate.³³⁶ In addition to grappling with Beijing's assault on the "knowledge base," U.S. policymakers face substantial limitations in the data available to establish the extent of some institutions' dependencies on entities connected with the Party-state. For example, it remains difficult to grasp the full extent of China-origin donations to U.S. universities even though such disclosures are required under section 117 of the Higher Education Act, partly because universities' compliance with the law is uneven, partly because entities' ties to the Party-state are not always obvious, and partly because the Federal Government does not make this information public in an accessible format.³³⁷

*U.S. Code defines a "United States person" as "any U.S. citizen or alien admitted for permanent residence in the United States, and any corporation, partnership, or other organization organized under the laws of the United States," Cornell Law School, "22 U.S. Code §6010—"United States person" defined."

Without greater transparency, U.S. policymakers will struggle to formulate policies that appropriately gauge and mitigate the risks stemming from China's overseas influence activities in the academic and media spheres.

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CHAPTER 3

POTENTIAL RISKS TO CHINA'S FUTURE ECONOMIC COMPETITIVENESS

SECTION 1: CHINA EDUCATING AND TRAINING ITS NEXT GENERATION WORKFORCE

Abstract

Stark contrasts define China's education system, which contains some of the world's most highly rated universities within a broader landscape beset by widespread, systemic weaknesses. These contrasts contribute to and reflect a more general divergence between China's increasing ability to compete with the United States in cutting-edge innovation and its deteriorating productivity growth. Unequal access to quality education, particularly noticeable between urban and rural areas, undermines the country's capacity to cultivate a nationwide skilled workforce. The implications for the United States are mixed: Party-state-led initiatives that funnel resources into strategic sectors such as artificial intelligence (AI) and semiconductors may generate near-term challenges for the United States, while China's broader educational deficiencies may hamper its long-term economic and technological competitiveness.

Key Findings

- China's continued economic growth depends on the country's ability to cultivate talent, but its education system faces acute challenges. China's primary, secondary, vocational, and higher education suffer from weak curricula and instruction that leave some graduates poorly trained to enter the workforce, particularly in rural areas.
- The quantitative expansion in China's education system has not been matched by qualitative improvement. Large swaths of high school and vocational students receive low-quality education, leaving them unprepared to join an increasingly knowledge-intensive economy; at the same time, colleges outside of a top few fail to develop students' cognitive or technical skills. These structural issues are one factor that has contributed to China's soaring official youth unemployment rate, which was above 21 percent in June 2023 before the Party-state abruptly stopped reporting it.
- Despite major challenges facing China's education system, a relatively small number of universities have emerged as world-class institutions that drive global innovation, posing a critical

challenge to U.S. security. Research centers at these universities often serve as platforms to advance industrial policy objectives and further China's development of dual-use technologies, such as AI and semiconductors.

- Concentration of resources in a few of China's top universities and select schools in the wealthiest metropolitan areas has come at the expense of broad-based investments in the country's educational system. Even if top universities train scientists and engineers who can develop world-leading technologies, the workforce may lack the technical proficiency to adapt and deploy these innovations.
- The national college entrance exam, the *gaokao*, is the centerpiece of China's education system and is both a key to success for some and a source of mounting challenges. Its focus on intensive memorization inhibits development of critical thinking skills. Despite drawbacks, the Chinese public views the exam as the primary route to upward mobility and a great equalizer in a system that otherwise privileges wealth and connections, making it a bulwark of social stability. Still, this social contract is under stress. University graduates confront a difficult job market in a decelerating economy. Fewer opportunities have led some students to question the system's meritocracy, challenging an idea central to the Chinese Communist Party's (CCP) legitimacy.

Recommendations

The Commission recommends:

- Congress request a Government Accountability Office report assessing the reciprocal nature of information sharing, including access to databases, and scientific collaboration between the United States and the People's Republic of China. Such a report shall include information on access by U.S. academics and experts to ongoing research activities, projects, symposia, and other scientific and technology activities in China. It should also assess whether such collaboration and activities provide comparable information and value to that which is available to researchers from China at international conferences and venues or in the United States.

Introduction

According to General Secretary of the CCP Xi Jinping, competition in today's world is essentially competition in talent and education. An assessment of China's education system, its curriculum, instruction, and achievements is compromised by a lack of qualitative research. Nevertheless, there are indicators that call into question China's ability to engage in breakthrough technological innovation and at the same time sustain training and skills to serve economic productivity and growth. This section explores key features of China's education system. The context, however, is as important as the quantitative measures of students, teachers, programs, and government investment and guidance. While China has increased the number of students attending college, evidence suggests many grad-

uates face limited success and opportunities. Moreover, there is an ongoing tension in the system characterized by education experts as involution, where it is harder and harder to succeed in China. The rural population endures educational disadvantages described as learning little at a lower level. In contrast, a select few universities are driving China's AI chip and quantum research, although these centers are largely staffed by researchers returning from abroad. Education in China continues to be affected by a tension between the CCP's interests and the nation's educational needs. The creative thinking skills key to technological breakthroughs are seen by the Party as a threat to ideological rigor. Years of rote memorization to pass the national college entrance exam stands in tension to the need for technological innovation. Even as these weaknesses remain unaddressed, China's government is focusing its educational system on securing a lead in emerging technology areas, and the potential of breakthrough success in China's science and technology (S&T) research may pose a significant threat to the United States and its allies.

This section begins with an overview of the key features of China's education system. It then examines the critical role the education system plays in supporting Party-state ambitions in indigenous technological development. Augmenting quantitative measures with qualitative analysis, the section then delves into the mounting challenges in labor market outcomes and their interconnection with educational quality in China. Finally, the section identifies implications for the United States. The section draws on the Commission's 2023 hearing on "China's Challenges and Capabilities in Educating and Training the Next Generation Workforce," the Commission's staff and contracted research, consultations with policy experts, and open source research and analysis.

Education and China's Economic, Technological, and Military Objectives

The Party-state sees China's education system as an essential tool for its economic growth, technological development, and military modernization ambitions. At the most basic level, the CCP leverages this system to develop its workforce and enable both economic development and industrial upgrading. China's education system is also a core component of its S&T ecosystem as it builds a knowledgeable workforce and facilitates translation of research into commercial and military technology. But as China's economic activity shifts toward knowledge and skill-intensive work, sustained economic growth is at risk of being undermined by the large portion of China's workforce that still lacks sufficient cognitive skills. Foundational skills in math and creative thinking, increasingly critical for adapting to technology-induced changes in the economy, are not broadly supported. In testimony before the Commission, Stanford education economist Scott Rozelle estimated that roughly "500 million people, almost all poor, rural individuals, have no skills that allow them to participate in the high-skill, high-wage economy."¹

Though China has committed immense resources into growing and training its talent base, government expenditure as a share of gross domestic product (GDP)—3.3 percent in 2021—is less than

the average of 5.2 percent among high-income countries and the 4.3 percent expended by the United States for the same year.*² This spending even lags behind the middle-income country average of 4.1 percent of GDP.³ China's relative underinvestment in education partially reflects a highly unequal distribution of resources between rural and urban education systems, with local governments bearing over 90 percent of these funding responsibilities.⁴ Evidence shows that wealthier cities can allocate more funding to support students and attract talented teachers, which exacerbates a rural-urban divide in education outcomes.⁵

Education is a key pillar of China's military-civil fusion strategy, particularly leveraging civilian innovation to drive military modernization (for more on China's strategy to align its commercial and military industries into an integrated system, see Chapter 4, Section 2, "Weapons, Technology, and Export Controls").† In practice, the Party-state implements this component of the strategy by mobilizing nonstate actors to support military development objectives through a thick web of linkages between state and nonstate entities that blurs the lines between civilian and military realms. Universities are key actors within this military-industrial ecosystem: the CCP controls funding and administrative levers across all universities to direct research activities toward advancing the national S&T agenda. According to the Australian Strategic Policy Institute, over 60 public universities are explicitly involved in defense-related research and training in defense technology.⁶ This number includes the group of schools known as the Seven Sons of National Defense, which have historic roots in China's defense industry.‡ This poses a challenge for U.S.-China research collaboration, as ostensibly civilian universities seek to establish partnerships aiming to acquire specific capabilities.⁷ A 2020 report by the Hoover Institution identified 254 scientific publications coauthored by researchers at U.S. institutions with researchers affiliated with the Seven Sons universities between January 2013 and March 2019.⁸ Numerous universities and affiliated research institutes have been added to the Entity List for their role in military-civil fusion and acquiring technology and knowhow for the People's Liberation Army (PLA).⁹ China's publicly declared commitment to promote transnational cooperation in

*In 2021, China's Ministry of Finance reported that government expenditure across all levels of education totaled \$591 billion (renminbi [RMB] 3.8 trillion). However, China's educational expenditure data quality are poor and inconsistent, as most funding occurs at local levels. The Ministry of Education, in contrast, suggests that China spent \$902 billion (RMB 5.8 trillion) on education in 2021, or 5 percent of GDP. China Ministry of Education, *Statistical Report on the Implementation of National Education Funding in 2021* [2021年全国教育经费执行情况统计快报], December 30, 2022. Translation; China Ministry of Finance, *Fiscal Revenue and Expenditure in 2021* [2021年财政收支情况], January 29, 2022. Translation.

†As articulated in many speeches, General Secretary Xi's vision for military-civil fusion aims to facilitate transfers between the defense and civilian sectors to improve the sophistication of China's military, creating cohesion in Chinese industry and academia working with and in support of military objectives so that the entire system can be effectively mobilized to support the military in the future and to drive technological innovation and economic growth. Greg Levesque, written testimony for the U.S.-China Economic and Security Review Commission, *Hearing on What Keeps Xi Up at Night: Beijing's Internal and External Challenges*, February 7, 2019, 10–16.

‡The Seven Sons of National Defense is a group of universities deeply integrated with China's defense industry that are subordinate to the Ministry of Industry and Information Technology. The universities include Beijing Institute of Technology, Beihang University (previously named Beijing University of Aeronautics and Astronautics), Harbin Engineering University, Harbin Institute of Technology, Nanjing University of Aeronautics and Astronautics, Nanjing University of Science and Technology, and Northwestern Polytechnical University. Alex Joske, "The China Defense Universities Tracker," *Australian Strategic Policy Institute*, November 25, 2019.

S&T may instead be aimed at accelerating these actors' technology acquisition efforts, meaning the research output of such collaboration primarily benefits China, with little reciprocated to the United States. The U.S.-China Agreement on Cooperation in Science and Technology, a bilateral agreement to facilitate scientific interaction that was renewed for six months in August 2023, has limitations in safeguarding against the transfer of critical capabilities to China's defense research ecosystem.*¹⁰

Education System and the Pursuit of Technological Development

Evaluating the ability of China's education system to contribute to economic development and innovation requires a holistic assessment. While universities are widely recognized as ecosystems that drive an economy's innovation output, all tiers of an education system factor into an economy's capacity to develop and adapt new technology. Educational outcomes support technological development and economic growth in three key ways: supporting breakthrough innovation, diffusing knowledge and technological knowhow to industry, and training a workforce that can promote production, manufacturing, and technological upgrading. China's education system is relatively strong in the first area but struggling in the latter two.

- *Innovation:* Education systems train scientists and engineers while providing them access to facilities and resources, supporting both foundational research and applied research and development (R&D). Universities draw in funding from various sources to advance promising frontier research areas with limited commercial viability (e.g., for many applications of quantum physics at present).
- *Diffusion to industry:* Linkages between university research hubs, government agencies, and industry facilitate economic upgrading via knowledge and technological diffusion. University-industry linkages include commercialization via licensing and academic startups as well as conferences and consulting.
- *Training and development:* Robust technical education supports the development of cognitive skills within and upstream from the leading technology sectors, creating a workforce capable of adapting and adopting innovations throughout the economy. Since a trained workforce promotes technology diffusion by adapting innovations, spillover benefits accrue as industry builds on developments across adjacent fields (e.g., biotech researchers using AI to identify cancer in X-rays), increasing labor productivity and stimulating market demand.

*The U.S.-China Agreement on Cooperation in Science and Technology was originally signed in 1979 and last extended for five years in 2018. The agreement promotes bilateral science and technology exchanges and has fostered cooperative research across a range of fields, including between government agencies. Some argue that the agreement contains outdated and insufficient provisions. Director and distinguished senior fellow at the Berkeley Center for Law and Technology Mark Cohen noted that the agreement's provisions on intellectual property date back to 1967. Professor Emeritus at the University of Oregon Richard P. Suttmeier argued that the agreement was first negotiated at a time when the United States vastly outmatched China in S&T capabilities, although the gap has since narrowed. Mark Cohen, "Renewing the U.S.-China STA Is Not the Question," *ChinaIPR*, August 13, 2023; Richard P. Suttmeier, "Trends in U.S.-China Science and Technological Cooperation: Collaborative Knowledge Production for the Twenty-First Century?" (prepared for the U.S.-China Economic and Security Review Commission), September 11, 2014, 4.

Key Features of China's Education System

China's education system is defined by sharp contrasts between high-quality schools and universities in China's most populous and prosperous cities and generally mediocre institutions everywhere else, substantial reliance on foreign-trained faculty, and a high degree of CCP control throughout. Despite a massive quantitative expansion over the last several decades and pointed areas of success, the vast majority of China's education system still suffers from major deficiencies. Weak vocational education, deep inequalities in educational outcomes for rural versus urban students, poor teacher quality, and limited integration with industry outside of the most elite institutions compromise China's ability to cultivate a workforce capable of sustaining productivity-based economic growth. Moreover, underinvestment and insufficient support for early childhood development inhibits the cognitive development of millions of rural Chinese infants, planting the seeds of a rural human capital crisis even before children reach school age. Despite these challenges, roughly two dozen of China's top universities rival peer institutions in the United States in terms of research and education quality, particularly in science, technology, mathematics, and engineering (STEM) fields. Their research output, steered by China's government toward meeting national technology development goals, facilitates challenges to U.S. security and economic competitiveness. A pattern of select pockets of excellence amid broader weakness replicates at each level of China's education system.

China's education system has expanded rapidly since the 1986 passage of the Compulsory Education Law, which requires all children to receive nine years of basic education.¹¹ Continued education after junior high school is optional for students. Nationwide exams at the end of junior high school filter those that complete nine years of school into either academic or vocational schools (see Figure 1). Another nationwide exam in the final year of senior high school determines students' qualification for university. As there are few other avenues to attend elite universities outside of a high score, students and families view the college entrance exam, or *gaokao*, as the pivotal opportunity for upward mobility (see textbox "The *Gaokao*: China's All-Consuming Exam" below). Students consequently devote tremendous effort toward this goal, and many students begin preparing for the *gaokao* as early as primary school.*¹² Actual learning outcomes are difficult to measure, a challenge compounded by China's manipulation of standardized international test score data (see textbox "China's Problematic Participation in the Program for International Student Assessment (PISA)" below).

Quantity Outpaces Quality across China's Primary, Secondary, and University Education

Compulsory Education

In 2021, there were 158 million students in the compulsory education system (grades 1–9), with 107.8 million in elementary

*Teachers' evaluations, as well as school administrator bonuses, are based in large part on students' *gaokao* scores. Zachary Howlett, *Meritocracy and Its Discontents*, Cornell University Press, 2021, 93–94.

school and another 50.2 million in junior high school.*¹³ China's government deploys considerable resources to support this student population, with 154,279 elementary schools across the country employing 6.2 million teachers in 2021.¹⁴ As of 2020, 93.8 percent of the compulsory school-age population completed all nine years; however, this is a recent development.[†]¹⁵ School attainment grew rapidly over the past three decades, meaning older generations received fewer years of education.[‡] As a result, nearly one in five adults aged 25–64 years old have completed fewer than nine years of schooling as of 2020.¹⁶ Educational attainment is even lower within China's rural resident population, where over two in five adults aged 25 and over have never completed junior high school.¹⁷ This rural-urban gap in education is a substantial threat to China's economic development.

China's Problematic Participation in the Program for International Student Assessment (PISA)

The performance of China's education system garnered international attention after a select number of schools ranked at the top of the Organization for Economic Cooperation and Development's (OECD) Program for International Student Assessment (PISA) despite the controversial administration of the assessment in China.¹⁸ PISA aims to provide comparable data about the relative performance of education systems across countries by assessing the knowledge and cognitive abilities of 15-year-old students in reading, mathematics, and science.¹⁹ The program is administered by the OECD every three years across more than 80 economies. PISA scores have become a widely recognized and influential metric in the field of education assessment. Because China has controlled how PISA tests are administered and limited the availability of results, it is

*In 2020, China's government claimed that 99.96 percent of all school-aged children were actually enrolled in schools (i.e., the net enrollment rate was nearly 100 percent). Emily Hannum, "Educational Development in China: Progress, Challenges, and Outlook" (prepared for the U.S.-China Economic and Security Review Commission), February 23, 2023, 9; China Ministry of Education, *Major Educational Achievements in China in 2020*, February 28, 2021.

†In 2021, China's Ministry of Education stated that the completion rate for compulsory education—calculated as the ratio of graduates from ninth grade to the number of students enrolled in that cohort during first grade—was 95.4 percent. However, this methodology overstates the number of students who graduate "on-time," as it includes over-age students who did not graduate at the intended age. In 2020, 9.8 percent of all junior high students were aged 16 years or above, compared to an intended graduation age of 14. Under the definition of junior high school completion used for the UN Sustainable Development Goals—the education attainment rate among all people aged three to five years above the intended age for the last grade of junior high school (in China's case, the reference age group is 17 to 19 years old)—China's compulsory completion rate was 93.8 percent. UN Children's Fund, China National Bureau of Statistics, UN Population Fund, "What the 2020 Census Can Tell Us about Children in China: Facts and Figures," April 2023, 16–17; China Ministry of Education, *Statistical Report on China's Educational Achievements in 2021*, September 23, 2022.

‡Gross enrollment in junior high education grew from 66.7 percent in 1990 to near-universal enrollment in 2020. The gross enrollment ratio is calculated by dividing the total enrollment in schooling by the population of school-aged children. This can lead to gross enrollment overstating the size of the cohort in grades appropriate for their age, as it reflects both overage and underage students. UN Children's Fund, China National Bureau of Statistics, and UN Population Fund, "What the 2020 Census Can Tell Us about Children in China: Facts and Figures," April 2023, 16; Emily Hannum, "Educational Development in China: Progress, Challenges, and Outlook" (prepared for the U.S.-China Economic and Security Review Commission), February 23, 2023, 9; Organization for Economic Cooperation and Development, "Benchmarking the Performance of China's Education System," October 2020, 40.

China's Problematic Participation in the Program for International Student Assessment (PISA)—*Continued*

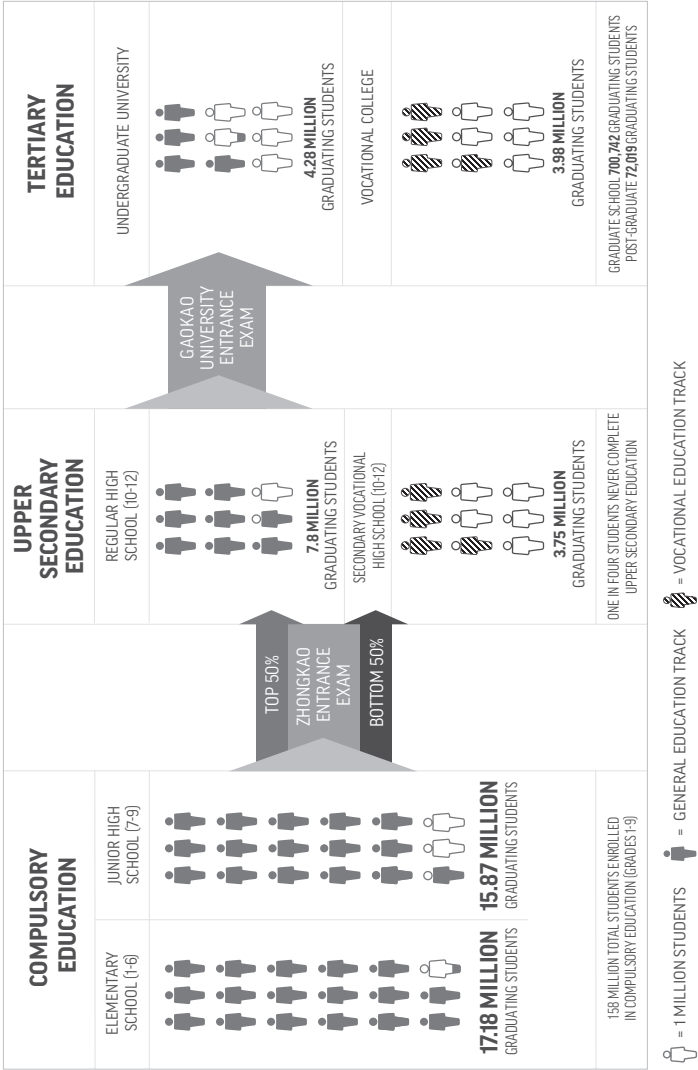
impossible to use PISA as a representation of the country's educational quality.

Major problems with China's participation in 2009 and 2012: China has participated in PISA testing four times, the first two in 2009 and 2012, respectively, under the heading "Shanghai-China." By restricting participation to its wealthiest metropolitan area, the country managed to rank first in the world across reading, mathematics, and science. Notably, in 2009, PISA tests were actually administered in 12 Chinese provinces, including several rural areas, but only scores from Shanghai were released and "the Chinese government has so far not allowed the OECD to publish the actual data," which remains the case to this day.²⁰ Close analysis of the number of 15-year-old test takers in Shanghai, moreover, revealed systematic exclusion of approximately two-thirds of the testing age population.* Less-privileged children of migrant workers with rural household registration, or *hukou*, were excluded from PISA assessments, along with students with special needs, leaving only the most privileged to take the test.²¹ Furthermore, unlike most other participating economies, the Shanghai municipal government explicitly prioritized PISA performance for schools, influencing results.²² Despite the systematic manipulation on multiple fronts, Shanghai's results were credulously celebrated internationally.

Problems with China's participation in 2015 and 2018: In 2015, China allowed four of its wealthiest provincial-level territories—Beijing, Shanghai, Jiangsu, and Guangdong—to participate in the assessment. China's ranking slipped to the sixth spot in math, tenth spot in science, and 27th spot in reading.²³ Realizing that Guangdong, a province of over 100 million people with a substantial rural population, was dragging down the results, the Party decided to substitute in the smaller, richer, and more urbanized province of Zhejiang in the 2018 assessment. The country's rankings duly skyrocketed back to first across all subjects.²⁴ China will likely include Zhejiang in lieu of Guangdong again in the 2022 assessment, which will be released in late 2023.

*Based on other population figures in other countries, "one would expect about 300,000 15-year-olds in Shanghai" to have participated. "Instead, only about one-third of that amount, 108,056, is reported by PISA." Sean Coughlan, "China: The World's Cleverest Country?" *BBC News*, May 12, 2012.

Figure 1: Overview of China's Education System and 2021 Graduation Statistics



Note: The number of students graduating from each level and education track reflects the number of students completing their final year in each tier in 2021. The proportion of students who never complete upper secondary education is calculated using the rate of upper secondary school completion among adults aged 20–22 in China's 2020 census, the closest available year. The majority of university entrants come from regular high schools, although secondary vocational graduates can also take the *gaokao*.
Source: Various.²⁵

Secondary and Vocational Education

After completing the mandatory nine years of basic education, around age 15, students are tested and filtered into either an academic or vocational educational track based on their performance on the senior high school entrance exam. Those students who score in roughly the top 50 percent, the vast majority of whom are urban *hukou* holders, enter general high schools and will study core, transferable skills in math, science, computers, and language.²⁶ As with China's primary schools, general high schools are massively stratified in quality. Students in China's wealthiest urban areas undergo rigorous coursework to prepare for testing into an elite university.²⁷ The quality of senior high school education, however, drops off precipitously outside of these urban centers.²⁸ Most students at China's first-tier universities come from urban school districts, while less than 1 percent of students from underperforming urban high schools or the countryside test into a top university.²⁹

Students who score in the bottom half of the high school entrance exam can attend vocational high school, though many choose to stop schooling instead.* China's vocational education system has largely been neglected over the past three decades, and recent efforts to shore up technical training have delivered poor results. As Dr. Rozelle summarizes, "Studies have shown that vocational schooling has failed to instill either general learning or even specific vocational skills, and even induces drop out."³⁰ Many students end up in the low-wage factory workforce, and in some cases vocational schools explicitly act as labor dispatch agencies to provide cheap labor for the manufacturing sector.³¹ In turn, vocational education is widely stigmatized, with many considering attendance of vocational school a personal and academic failure.[†]³²

The Gaokao: China's All-Consuming Exam

A record 12.9 million students took the *gaokao* in 2023.[‡]³³ Buttressed by "the cultural importance attached to educational credentials," the *gaokao* serves as "the conducting baton of the Chinese education system," according to Zachary Howlett, sociologist at the Yale-National University of Singapore.³⁴ The *gaokao* is effectively the sole determinant of the caliber of university high school students can attend, which in turn has outsized bearing

*In 2021, 15.9 million students graduated from junior high school, whereas general high schools and vocational high schools admitted just 9 million and 4.9 million students, respectively. While China's Ministry of Education does not provide data on the percentage of students that fail to complete 12 years of school, these figures suggest more than 10 percent drop out after junior high school. China National Bureau of Statistics, "21–2 Number of Students of Formal Education by Type and Level," 2022 *Statistical Yearbook*.

†In 2022, the Chinese government revised the Vocational Education Law for the first time in 26 years, formally declaring vocational and general education of equal importance in an attempt to dispel the stigma, in addition to other measures aimed at increasing overall vocational education. The extent to which the changes will be effective remains to be seen. Li Yulan, "The First Revision after 26 Years—Where Is the 'New' in the New Vocational Education Law" (时隔26年首次修订—新职业教育法“新”在哪儿), *Guangming Daily*, April 28, 2022.

‡In 2019, China allowed secondary vocational students to take the exam and have a pathway into a nonvocational college. This change undergirds the record *gaokao* participation in 2023. Zhao Yusha, "Record 12.91 Million Sit amid Popularization of Higher Education," *Global Times*, June 7, 2023.

The Gaokao: China's All-Consuming Exam—Continued

on career prospects.*³⁵ Studying for the exam is consequently an all-consuming undertaking, with students across China spending up to 14 hours a day of their senior high school years becoming “test-taking machines” at the expense of other pursuits, passions, and extracurriculars.³⁶ As an indicator of how seriously the exam is taken, police in one city during the 2023 exam even deployed a magnetic pulse gun to prevent drones from potentially facilitating cheating.³⁷ The gravity of the exam exacts a heavy toll on China's youth. As one student laments: “Our final purpose, our whole life before 18, is for the *gaokao*. Every teacher says, ‘If you don’t pass the *gaokao*, and you don’t go to college, your life is ruined.’”[†]³⁸ Many worry that the intensive, memorization-heavy nature of test-taking in China stifles development of skills needed for innovative and critical thinking.³⁹

The exam is nonetheless a cornerstone of the Party-state's legitimacy, giving many in China hope that they can improve their life circumstances.[‡]⁴⁰ The *gaokao*, as Dr. Howlett notes, takes on special gravity because it is widely perceived as China's “only relatively fair competition” within a broader “system rife with corruption and backroom dealing.”⁴¹ As one rural high school principal put it to Dr. Howlett, “Without the *gaokao*, there would be a social revolution.”⁴² The all-out scramble to succeed in China's high-stakes examination system can also serve the Party-state's pursuit of political stability in an indirect way. As author Peter Hessler wrote of his experience teaching in China's Sichuan Province in 2022: “There's a point at which competition becomes a highly effective distraction. For most of my students, the greatest worry didn't seem to be classroom security cameras or other instruments of state control—it was the thought of all those talented young people around them.”⁴³

Unequal Access to Education Undermines China's Talent Base

Learning inequities and barriers confronting rural students cascade throughout the education system, leaving many without the necessary skills to contribute to China's modernizing economy. Rural schools have historically been underfunded, under-resourced, and understaffed rela-

* Each year, the Ministry of Education determines two cutoff scores for the *gaokao* based on the number of university spots available, one being a minimum score for entry into any university and the second for entry to elite universities. Emily Hannum, Xuehui An, and Hua-Yu Sebastian Cherng, “Examinations and Educational Opportunity in China: Mobility and Bottlenecks for the Rural Poor,” *Oxford Review of Education* 37:2 (2011): 270–275.

† Students routinely characterized their experience finishing the *gaokao* as one of “breaking out of prison” or “ending captivity.” Shuyi Guo, “Gaokao Examination Influences Senior High School Education to Some Extent, Resulting in the Senior High School Education Bringing Many Negative Effects to Its Students,” *Atlantis Press*, December 30, 2022, 1980.

‡ Dr. Howlett argues that China watchers' understanding of Chinese political legitimacy is wrong. Rather than resting on a tacit performance of legitimacy wherein “people acquiesce to Party-state rule in exchange for wealth,” people instead “expect to have opportunities to improve their [own] lives. In other words, people expect the state to guarantee the conditions for the meritorious to advance. At minimum, it must ensure the perception that such conditions exist. Like the imperial exams of old, the *gaokao* reinforces this perception because it forms a national fateful rite of passage that is open, anonymous, and competitive.” Zachary Howlett, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China's Challenges and Capabilities in Educating and Training the Next Generation Workforce*, February 24, 2023, 8–9.

tive to urban areas.*⁴⁴ China's government enforces an internal passport system that limits individuals' access to public services, including education, outside of their place of "household registration," or *hukou*.⁴⁵ Over 60 percent of students hold rural *hukou* and are restricted from accessing urban schools, even though their parents often move to cities as migrant workers.†⁴⁶ The consequence is that rural students are often shut out of superior urban schools. While rural children complete the mandatory nine years of education at approximately the same rate as urban residents, they are much less prepared to succeed in senior high school. In 2020, just 56.7 percent of rural residents completed senior high school by the time they turned 20, compared to 82.3 percent among urban residents.‡⁴⁷

Relative to urban students, rural students are falling short on assessments of math and language achievement, which are significant correlates with a worker's ability to acquire new skills and competitiveness in the job market.⁴⁸ Many rural families lack the resources to support further education after junior high school. Although China's Compulsory Education Law provides tuition-free education for the first nine years of school, students must pay tuition to attend senior secondary school, with fees ranging from \$138 (RMB 1,000) to \$690 (RMB 5,000) per year—a sizeable burden relative to a rural household's meager wages.§⁴⁹ As a result, a rural *hukou* is a barrier to higher educational attainment, and only a small fraction of rural residents ever attend university.**

*Over the past decade, government investment and programs have targeted some of the most consequential barriers to learning in rural areas, including problems common to developing economy contexts that were widespread in China's countryside. As Dr. Rozelle and author Natalie Hell detail in their 2020 book *Invisible China*, basic, untreated health issues hindered students' ability to learn, despite the availability of low-cost treatments. Through field work conducted between 2013 and 2016, they found that around 60 percent of rural children suffered from anemia, uncorrected poor vision, and/or intestinal worm infection. More recent statistics suggest that government programs have begun to have a positive impact in improving widespread health problems among rural children. Education scholars visiting rural schools over the past decade also found that basic education infrastructure remained lacking, finding inadequate facilities, equipment, and materials, including insufficient numbers of desks and textbooks. Dr. Rozelle nonetheless indicates this situation is also starting to improve, writing, "China has invested enormously into improving school infrastructure; teachers are now paid by the central government on a timely basis; most schools have computer rooms and libraries and good quality equipment for teaching." Despite China's progress, the low rate of rural students who continue to high school and university reflects the systemic challenges that persist. Scott Rozelle, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China's Challenges and Capabilities in Educating and Training the Next Generation Workforce*, February 24, 2023, 4; Scott Rozelle and Natalie Hell, *Invisible China: How the Urban-Rural Divide Threatens China's Rise*, University of Chicago Press, 2020, 109.

†Parents in China's nearly 300-million-strong migrant workforce who bring their children with them to cities face limited access to public services and a near-absent social support network, meaning babies receive little to no individualized care while their parents work ten- to 12-hour days. *China Labor Bulletin*, "Migrant Workers and Their Children," May 26, 2022; McKinsey Global Institute, "Reskilling China: Transforming the World's Largest Workforce into Lifelong Learners," 2021, 62.

‡The completion rate for urban residents includes both urban *hukou* holders and internal migrant students with rural *hukou*, but the completion rate for urban *hukou* holders alone is likely higher. Children in China's migrant floating population have limited access to urban public schools, gated by onerous application requirements. Private schools provide another option for migrant families that are willing to pay the relatively modest tuition; however, these schools are frequently overcrowded and provide an inferior education. *China Labor Bulletin*, "Migrant Workers and Their Children," May 26, 2022.

§Unless noted otherwise, this section uses the following exchange rate throughout: \$1 = RMB 7.25.

¶In 2021, the average disposable income of rural households was \$2,994 (RMB 18,931), just under 40 percent of the \$7,374 (RMB 47,412) earned by the average urban *hukou* holder. China National Bureau of Statistics, "6–6 Per Capital Income and Consumption Expenditure of Urban Households," 2022 *Statistical Yearbook*; China National Bureau of Statistics, "6–11 Per Capital Income and Consumption Expenditure of Rural Households," 2022 *Statistical Yearbook*.

**For example, in Central and Western China, where much of the rural population resides, only 10 percent of rural students attend university. Scott Rozelle, written testimony for U.S.-China

These learning challenges are exacerbated by widespread delays in infants' basic cognitive development across rural China. Tens of millions of rural children are behind before they even start school, as many rural areas face an "invisible crisis" in early childhood development. As many as 45 percent of rural babies are at risk of delayed cognitive development in the first three years of childhood.⁵⁰ Dr. Rozelle states that a primary cause of delayed cognitive development is insufficient stimulation from caregivers.* Widespread separation of rural children from parents working in cities is a major contributor to this challenge.⁵¹

The rural human capital crisis threatens to undermine China's productivity growth, and barriers to rural education may contribute to the economy becoming stuck in a middle-income trap.† As Dr. Rozelle states, "An educated labor force can more easily shift into higher value-added (or "white collar") jobs, facilitating the national transition from a low-skill, low-wage economy to a high-skill, high-wage economy."⁵² Workers who are unable to make the transition face being marginalized in the labor market. Already, less-educated workers face declining wages as China's manufacturing sector becomes less labor-intensive and more automated, with low-skill workers being forced to find work in China's informal services sector.⁵³ As Dr. Rozelle argues, "There has never been a nation in past decades that has moved from middle income to high income (and stayed at high income) when their labor force has had such low levels of human capital" as China has today.⁵⁴ A stagnant economy and hundreds of millions of low-skilled workers harbor the potential for immense costs to China's economic and social landscape. Structurally unemployable workers may view the prospect of upward mobility as increasingly remote, and broad malaise may lead to declining welfare and social unrest.⁵⁵

University Education

The Party-state views higher education as crucial to China's competitiveness and has invested in a quantitatively astounding expansion of China's higher education system over the last three decades. Enrollment has expanded 22 times over from roughly two million enrolled students in higher education in 1990 to 44 million in 2021.⁵⁶ China's postgraduate enrollment (masters and PhDs) is even more impressive, ballooning 36 times from 93,100 in 1990 to 3.33 million in 2021.‡⁵⁷ In 2010, only 3 percent of China's adult

Economic and Security Review Commission, *Hearing on China's Challenges and Capabilities in Educating and Training the Next Generation Workforce*, February 24, 2023, 3.

*As Dr. Rozelle explains, "The main problem is rooted in insufficient stimulation of infants from caregivers. Studies in China show that close to half of rural caregivers rarely read, sing, or talk to their babies, either because they are out of the village working (as a migrant and have left their children behind with grandparents) or do not realize how important such engagement is." Scott Rozelle, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China's Challenges and Capabilities in Educating and Training the Next Generation Workforce*, February 24, 2023, 4.

†Many economies that have achieved middle-income status faced a stagnation in growth and productivity—often due to an aging population and rising labor costs for labor-intensive industries—before they could "graduate" to high-income status. By "growing old before growing rich," this "trapped" group of economies is unable to establish sustainable drivers of economic growth, and such economic distress generates political and social unrest. Pierre-Richard Agénor, "Caught in the Middle? The Economics of Middle-Income Traps," *Journal of Economic Surveys* 31:3 (2017): 771–791.

‡Over the past two decades, the number of degree-granting higher education institutions has also grown rapidly from 1,041 universities in 2000 to 2,738 in 2020. China's tertiary education

population (ages 25–64) held at least an undergraduate degree. As of 2020, 9 percent of China's adult population held at least an undergraduate degree.⁵⁸ By comparison, 39 percent of U.S. adults held a bachelor's degree or higher in 2020.⁵⁹

In strictly quantitative terms, China's higher education system is now larger than that of the United States. In 2021, China matriculated 4.3 million undergraduates (equivalent to 0.3 percent of China's population) compared to the United States' 2.1 million (equivalent to 0.63 percent of the United States' population).^{*60} Similarly, China appears to be catching up quickly to the United States in human capital in STEM disciplines. In 2020, over 1.7 million students completed bachelor's degrees at Chinese universities in science and engineering,[†] compared to 437,000 STEM bachelor's degree graduates in the United States (including approximately 15,870 Chinese nationals enrolled at U.S. institutions).[‡]⁶¹ By 2025, Chinese universities are projected to graduate over 77,000 STEM PhDs, twice as many as the United States.⁶²

The quantitative expansion of higher education institutions has not been met with equal qualitative improvements in faculty or learning outcomes. In a 2021 study comparing the U.S. and Chinese education systems' cultivation of cognitive abilities and workforce skills, Stanford associate education professor Prashant Loyalka and a team of researchers found that high school graduates from both countries entered undergraduate programs with nearly equivalent critical thinking skills. Chinese students, however, left university having regressed drastically in academic and critical thinking skills, not only relative to peers in the United States (who, in contrast, made significant gains) but also in absolute terms over the course of college education.[§]⁶³ In a separate

system includes higher vocational or technical education institutions as well, and there were 1,468 of these schools in 2020. China National Bureau of Statistics, "21–6 Number of Schools by Type and Level," 2022 *Statistical Yearbook*.

*In 2021, 4.43 million students graduated from tertiary (or college) institutions in the United States, with 24.6 percent receiving associate's degrees and 49.9 percent receiving bachelor's degrees. China, meanwhile, graduated 9.09 million college graduates overall, with 47.2 percent receiving bachelor's degrees. Meanwhile, in 2021 in China, there were 1,238 bachelor's degree-granting institutions, with a combined enrollment of 18.9 million undergraduates. Melanie Hanson, "College Enrollment & Student Demographic Statistics," *Education Data Initiative*, July 26, 2022; *Guangming Daily*, "The Employment Situation of 9.09 Million College Graduates Is Generally Stable" (909万高校毕业生就业局势总体稳定), December 29, 2021. Translation; China National Bureau of Statistics, "21–1 Number of Schools and Educational Personnel by Type and Level (2021)," 2022 *Statistical Yearbook*; China National Bureau of Statistics, "21–2 Number of Students of Formal Education by Type and Level (2021)," 2022 *Statistical Yearbook*.

†China's STEM graduates are concentrated in the engineering field, and 1.4 million students graduated in 2020 with an undergraduate degree in engineering, which also includes computer science under the Ministry of Education's classification of degrees. In the United States, 148,000 students graduated in engineering and 97,000 in computer science. China Ministry of Education, *Number of Regular Students for Normal Courses in HEIs by Discipline*, 2020; China Ministry of Education, *Catalogue of Undergraduate Majors for Regular Higher Education Institutions* (普通高等雪娇本科专业目录), 2020; National Center for Education Statistics, *Degrees in Engineering and Engineering Technologies Conferred by Postsecondary Institutions, by Level of Degree and Sex of Student: Selected Years, 1949–50 through 2019–20*.

‡In the closest comparable year for which there are data, 2018, the National Science Foundation estimated 63,480 Chinese nationals were enrolled in science and engineering undergraduate programs. A quarter of that number, 15,870, is the graduating class. This number is roughly consistent with research from Georgetown's Center for Security and Emerging Technology, which estimated that roughly 2 percent of all U.S. STEM undergraduates are Chinese nationals. Jacob Feldgoise and Remco Zwetsloot, "Estimating the Number of Chinese STEM Students in the United States," *Center for Security and Emerging Technology*, October 2020, 3; Josh Trapani and Katherine Hale, "Higher Education in Science and Engineering," *U.S. National Science Foundation*, September 4, 2019.

§These results are based on math and physics exams as well as a critical thinking exam given to the same students at multiple points. The critical thinking exam "reflects the ability to develop sound and valid arguments, evaluate evidence and its use, understand implications and

2019 study, Dr. Loyalka found that computer science students in their senior year at Chinese universities significantly underperformed compared to their U.S. counterparts.⁶⁴ Computer science graduates from China's top-tier institutions had skill levels more akin to those of U.S. students graduating from nonelite institutions, with the average U.S. computer science major even outperforming the average elite computer science major in China.⁶⁵ Dr. Loyalka attributes the regression in critical thinking among Chinese students to a lack of incentive to study hard, as they are all but guaranteed to graduate in four years.⁶⁶ In most universities across China, professors are not allowed to fail students, grades count for little, and there are few incentives for teachers to teach well.⁶⁷

Dr. Howlett attributes Chinese students' lagging performance to weak curricula and poor instruction and evaluation.⁶⁸ "Many college majors and programs in China, particularly at elite universities, provide excellent training," Dr. Howlett wrote in testimony for the Commission, "but students in ordinary universities often say that the knowledge their professors teach is out of date and disconnected with the realities of the employment market."⁶⁹ Many students, especially at lower-tier universities, spend their time at university preparing for examinations to attain a higher degree from a more prestigious university, which has increasingly become a prerequisite for competitiveness in the job market.⁷⁰

As Denis Simon, former vice chancellor of Duke Kunshan University, noted during testimony before the Commission, "[Y]ou have to ask yourself if the enrollments in universities are increasing so rapidly, who is teaching these kids? That's a really big question."⁷¹ China's own assessments of weaknesses in the education system routinely point to teacher quality as among the biggest challenges, and evidence strongly suggests that the country has not trained qualified faculty at a pace equivalent to the expansion in enrollment.⁷² In 2018, China's Ministry of Education (MOE) reported that only 38.2 percent of university professors held doctoral degrees.⁷³ While the ratio is much higher at China's top universities—a survey of 731 STEM faculty at China's top 25 universities found that 96 percent held a PhD—the MOE's statistics overstate the number of high-caliber educators due to variation in the quality of Chinese PhD programs.⁷⁴ Additionally, professors are disproportionately recruited from their alma maters; in 2009, some 57 percent of faculty worked at the institution where they studied.⁷⁵ In testimony, Dr. Simon suggested the "incestuousness in the system" remains a major issue, with universities facing a shallow labor pool and forced to retain low-performing teachers due to a lack of suitable candidates.⁷⁶

Foreign Talent and Resources Fill Shortfalls in China's Education System

Because the expansion of China's university enrollment has outpaced the country's ability to train faculty, China has sought to rely

consequences, and differentiate between causation and explanation.... The exam was designed to be culturally neutral, so that it could be given to students in different national contexts. The same critical thinking exam was given to first- and third-year students in the baseline. It was also given, almost two years later, to the same students in the follow-up." Prashant Loyalka et al., "Skill Levels and Gains in University STEM Education in China, India, Russia and the United States," *Nature Human Behavior* 5 (2021): 11.

on overseas training and foreign talent to fill the vacuum. Many of China's most internationally cited professors and researchers hold degrees from foreign institutions.⁷⁷ In research tracking the top-cited authors in 44 critical technology areas by their country of residence, the Australian Strategic Policy Institute estimated that roughly one-third of all authors in China who rank at the top of citation indices completed their graduate studies at an overseas university.⁷⁸ The trend is set to continue with foreign-trained Chinese scholars returning at higher rates. According to one estimate, over 1,400 Chinese scientists and researchers left posts at U.S. universities and joined universities in China in 2021 alone.⁷⁹ Nonetheless, hundreds of thousands of Chinese students still aspire to study outside of China, with a large proportion intending to remain overseas after graduation (for more, see textbox below).

Foreign Universities Attract Promising Chinese Students

Because of the intense competition for spots in China's top universities and because foreign universities are perceived as higher quality and more prestigious, many talented Chinese students aspire to study overseas, particularly in the United States.⁸⁰ In the 2021 academic year, 290,086 Chinese students were enrolled at U.S. universities.^{*81} A large proportion of these students seek to remain in the United States after graduation. In one survey of Chinese nationals at 50 U.S. four-year universities, roughly 40 percent indicated intent to remain permanently in the United States after graduation, with many more planning to stay in the United States for another one to five years.⁸² The stay rates are even higher among Chinese nationals who earned a STEM PhD at a U.S. institution. According to a study by the Center for Security and Emerging Technology, over 90 percent of students who earned their doctoral degree between 2000 and 2015 remained in the United States as of 2017, reflecting the demand for STEM talent within the United States.⁸³ Though there has not been as systematic a study on stay rates of Chinese graduates after 2015, the stay rates of Chinese students may have started to decline amid growing U.S.-China tensions, particularly since 2018.⁸⁴ Similar factors may be driving an uptick in Chinese studying overseas in other countries, particularly the United Kingdom (UK). In a survey by a Chinese education company, the proportion of Chinese students wanting to study in the United States declined from roughly 50 percent in 2015 to 30 percent in 2022, while the share wishing to study in the UK rose from 32 percent to 41 percent.⁸⁵

To shore up its faculty and researcher pool, reverse a brain drain from top Chinese students staying abroad after completing their degrees, and attract leading foreign researchers, China has launched a number of recruitment initiatives, most famously the Thousand Talents program (for a catalogue of China's recruitment initiatives, see Appen-

*The student body has declined during the course of the pandemic. In 2019, 372,532 students were enrolled at U.S. universities.

dix I, “List of China’s Talent Programs”).* These initiatives have pulled a large cohort of well-qualified academics into China’s S&T ecosystem, rewarding over 16,000 scientists for working in China through 2018.⁸⁶ Talent recruitment initiatives have nonetheless had clear limitations. Many recruited under such programs are only willing to work part of the year in China, splitting their affiliation between their overseas and Chinese institutions.⁸⁷ Returnee researchers employed fulltime in China are generally less accomplished.⁸⁸ Moreover, one study found that young Chinese academics who rejected China’s talent recruitment rewards were more productive researchers, while those who accepted the offer won fewer and smaller research grants and were unlikely to hold a faculty appointment outside of China.⁸⁹ In spite of these limitations to date, academics may yet be drawn to China by increased funding opportunities and state-of-the-art facilities offered by China’s extensive state-led research programs.⁹⁰ Other factors cited by academics returning to China from the United States include U.S. scrutiny of Chinese researchers and increased violence targeting Asian-Americans.⁹¹

China’s Education System Is a Policy Tool

China’s leadership views education as both a primary means to attain the Party’s great power aspirations and a tool that must be strictly controlled. To steer curricula and research, particularly in higher education, the Party oversees a centralized state administrative structure (see Appendix II, “Major Agencies Involved in the State Direction of Research”). National education objectives are predominantly defined by the MOE, which guides China’s education system via five- to 15-year policy roadmaps and closely manages China’s top 75 universities.⁹² Established in 2018 and housed within the MOE, the CCP Central Education Work Leading Small Group coordinates across education policy and ensures implementation follows the Party’s objectives.⁹³ The minister of education also runs the Small Group’s day-to-day management, reflecting the politicization of education in China.⁹⁴

The Party-state exerts tremendous operational control and influence within the university system in particular. As a Center for Strategic and Emerging Technology (CSET) study notes, “Universities in China differ significantly from those in the United States, with the most glaring difference being that the CCP exercises extensive control over university administration, staffing, and research priorities. University presidents, for example, are typically not se-

*China’s overseas talent recruitment ecosystem rests on three mutually reinforcing pillars. First, the government operates scholarship programs to fund Chinese students to study STEM fields at foreign universities in exchange for an obligation to return home immediately and complete a national service work requirement lasting several years. In the second pillar, programs offer robust incentives to Chinese students who are studying or working abroad to return to China at some point in the future. These incentives include perks associated with talent programs, like the opportunity to conduct research at prestigious institutions, employment in specialized entrepreneurship parks, and special government subsidies to start their own businesses. Third, networks of transnational technology transfer organizations target Chinese students and scholars who have permanently settled in other countries. These transnational organizations are part of the CCP’s united front system, which is tasked with mobilizing Chinese citizens and ethnic Chinese in pursuit of the Party’s goals. Such transnational organizations incentivize Chinese students and scholars to contribute to China’s national rejuvenation through appeals to national pride, ethnic identity, or desire for financial reward. Despite the considerable resources deployed to attract high-performing researchers, the programs are still only attracting second-tier researchers. For more on these programs, see Anastasya Lloyd-Damjanovic and Alexander Bowe, “Overseas Chinese Students and Scholars in China’s Drive for Innovation,” *U.S.-China Economic and Security Review Commission*, October 7, 2020.

lected by search committees comprised of senior faculty, but by the Organization Department of the university's CCP committee."⁹⁵ More broadly, the university governance structure is characterized by a dual control system, with a formal university administration shadowed at every level by the Party's own structures: a Party secretary at the top who outranks the president; Party groups and cells within university departments; and Communist Youth League organizations that recruit, train, and mobilize young people on campus. Furthermore, CCP control within universities can be especially granular, with professors even given quotas for the number of graduate students they may supervise.⁹⁶ In a series of interviews with Chinese academics published in 2021, the Institute for Defense Analysis Science and Technology Policy Institute, a U.S. federally funded research and development center, found that the most common complaint was bureaucratic control over China's academic S&T research ecosystem.^{*97}

Higher Education Is a Tool in China's Quest for National Security

The CCP's emphasis on education facilitating technological advancement is further driven by the Party's vision of a world increasingly hostile to its great power aspirations.† Concerned that access to overseas research, training, and talent may be cut off, the CCP sees improving domestic foundational research capabilities as a vital component of economic and national security, enabling China to achieve self-sufficiency in critical domains, move up value chains, and shore up identified supply chain vulnerabilities. Urgent calls to overcome "chokepoints" over key technologies and avoid what General Secretary Xi has referred to as "technological vassaldom" animate China's quest to foster innovative universities.⁹⁸ At the same time, China's S&T education goals are driven by Xi's belief that the global power dynamics are undergoing "great changes unseen in a century," and China must take advantage of the strategic moment to build prowess in emerging

*In 2015 and 2016, Science and Technology Policy Institute researchers interviewed 40 academics in China. Of those, 21 commented on political control and 18 agreed the control was excessive and harmful. Sixteen also commented on the rigidly bureaucratic graduate student quota, explaining that "the quota on the number of graduate students is first dictated by MOE, providing a quota to each university; universities then dictate quotas for each department; and department leaders then dictate quotas for each professor." Xueying Han et al., "Challenges to China's Academic STEM Research Ecosystem," *Institute for Defense Analysis' Science and Technology Policy Institute*, July 2021.

†In his 20th Party Congress report, General Secretary Xi starkly described the world as undergoing a "new period of turmoil and change" wherein "external suppression and containment may escalate at any time." In a speech in March 2023, Xi made a rare and uniquely direct move by explicitly calling out the United States, saying: "Western countries led by the United States have implemented all-around containment, encirclement and suppression of China, which has brought unprecedented severe challenges to our country's development" and went on to emphasize that "in the coming period, the risks and challenges we face will only increase and become more severe." *Xinhua*, "Xi Jinping: Hold High the Great Banner of Socialism with Chinese Characteristics and Work Together to Build a Modern Socialist Country in an All-Round Way—Report at the Twentieth National Congress of the Communist Party of China" (习近平: 高举中国特色社会主义伟大旗帜 为全面建设社会主义现代化国家而团结奋斗——在中国共产党第二十次全国代表大会上的报告), October 25, 2022. Translation; *Xinhua*, "(Published under the authority of the Two Sessions) When Xi Jinping Visited the Members of the Civil Construction Industry and Commerce Federation Who Participated in the CPPCC Meeting, He Emphasized Correct Guidance for the Healthy and High-Quality Development of the Private Economy, Wang Huning Cai Qi, and Ding Xuexiang Participated in the Visit and Discussion" ((两会受权发布) 习近平在看望参加政协会议的民建工商联界委员时强调 正确引导民营经济健康发展高质量发展 王沪宁蔡奇丁薛祥参加看望和讨论), March 6, 2023. Translation.

fields and disruptive technologies like AI to overtake the United States.⁹⁹ China's domestic innovation system with universities as the linchpin will be called upon to fulfill the CCP's technological aspirations. China's military-civil fusion initiative will in turn leverage the technological prowess nurtured in Chinese universities to rapidly advance its military capabilities, potentially posing significant challenges to U.S. interests and security.

The CCP's Political Indoctrination and Control Now Permeates Chinese Education

China's surge in university enrollment in the 1980s produced a tension between two competing objectives: promoting education for greater economic growth and increasing political control of the population.¹⁰⁰ Following the 1989 Tiananmen Square massacre, the Party executed a draconian crackdown on the education system in the 1990s, labeling its efforts a "patriotic education campaign." While this indoctrination campaign saw a brief period of laxity in the 2000s, an inflection point occurred in 2013 when the MOE initiated a new patriotic education campaign it referred to as "My Chinese Dream," altering textbooks to "guide young students to feel the superiority of the road and system of socialism with Chinese characteristics."¹⁰¹ This trend has intensified since Xi came to power, with the ministry releasing a guiding opinion in 2016 to "integrate patriotic education into all aspects of education and teaching."¹⁰² In 2019, the Central Committee and State Council issued a lengthy notice explicitly placing Xi Jinping Thought at the core of patriotic education at all levels.¹⁰³ Textbooks introduced at the start of the 2021 school year were fully inundated with these references.¹⁰⁴ CCP indoctrination today now extends even to preschool students.¹⁰⁵ Additionally, the *gaokao* has begun incorporating elements of Xi Jinping Thought into essay questions.¹⁰⁶ Suisheng Zhao, a political scientist at Denver University, argues this has "created a new generation of nationalists who are more fiercely patriotic and loyal to the party than those of the older generations."¹⁰⁷

Education and Cultural Genocide in Tibet and Xinjiang

In its darkest guises, education in China goes beyond indoctrination to serve as a tool for the Party's campaign of cultural genocide against ethnic minorities in Tibet and Xinjiang that has seen hundreds of thousands of students removed from their families and forced into boarding schools.¹⁰⁸ While roughly 20 percent of children study at boarding schools in China, in areas populated by Tibetans the share approaches 100 percent, according to the UN High Commissioner for Human Rights.¹⁰⁹ Nearly one million Tibetan children are forced into "residential schools" wherein they receive education solely in Mandarin as part of an intentional program to separate them from their roots and eradicate their culture.¹¹⁰ In Xinjiang, up to half a million young children have been placed in boarding schools, while many parents have been sent to concentration camps, which the Party refers to as "educational facilities," where they undergo so-called "transformation through education."¹¹¹ The Education Bureau in Xinjiang's

Education and Cultural Genocide in Tibet and Xinjiang— *Continued*

capital Urumqi, in an open announcement calling forth a cadre of local teachers to implement the Party's indoctrination, paraphrased Stalin by reminding would-be recruits that "teachers are the engineers of the human soul."¹¹²

China's Education System in Technological Competition

China's education system is facilitating breakthrough innovations that contribute to both economic and national security challenges for the United States. Many of these innovations are in dual-use technologies, such as AI and semiconductors—fields in which a small number of highly trained scientists and engineers can make major strides in advancing the technological frontier. Understanding this, the Party has concentrated resources in its elite institutions and is building a network of dedicated national laboratories with deep connections to government agencies leading industrial policy initiatives and developing defense technology. China's strategy, while posing acute risks to the United States, also comes at a cost to its long-term material development: fewer resources are directed toward fostering broad increases in workforce productivity.

China's Higher Education System Focuses on Improving Domestic Innovation

Beijing has intentionally concentrated resources into a select number of elite institutions, enacting a series of initiatives aimed at developing globally competitive universities over the past three decades. Most recently, the Party-state's 2015 "Double First-Class University" initiative seeks to develop "first-class" universities and "first-class" academic disciplines, aiming to elevate 147 higher education institutions to world-class status (see Table 1 for an overview of China's efforts to develop world-class universities).¹¹³ Within this cohort of Double First-Class institutions, as noted previously, the MOE directly oversees 75 of the most elite universities, providing them the bulk of centrally allocated funding for higher education. Direct funding of these universities is the single largest publicly known line item provided for by the State Council, at \$50.9 billion (RMB 327.1 billion) in 2021.*¹¹⁴ In large part due to this concentration of resources at the top, several of China's universities have climbed global ranking tables of higher education institutions, with a few now arguably among the best in the world. The 2023 edition of the *Times Higher Education World University Rankings* has seven Chinese universities among the top 100 institutions worldwide and

*This number, derived from CSET's recent report on Chinese universities, is recalculated here using a market exchange rate of 6.76 rather than via the Purchasing Power Parity (PPP) methodology used in CSET's report. The MOE's budget is the largest of any ministry with publicly disclosed figures, and direct funding of these universities takes up 85 percent of its budget. Ryan Fedasiuk, Alam Omar Loera Martinez, and Anna Puglisi, "A Competitive Era for China's Universities," *Center for Security and Emerging Technology*, March 2022, 1; Dahlia Peterson, Kayla Goode, and Diana Gehlhaus, "Education in China and the United States: A Comparative System Overview," *Center for Strategic and Emerging Technology*, September 2021, 17–18.

27 among the top 500, with Tsinghua and Peking ranking highest at 16th and 17th, respectively.*¹¹⁵ The United States, according to the same rankings, has seven of the top ten universities globally, 34 in the top 100, and 105 in the top 500.¹¹⁶ Thirty percent of the *Times Higher Education* ranking is citations by faculty and researchers, likely skewing results in Chinese universities' favor, as the Chinese academic system has long incentivized high citation rates in academic promotion.[†]¹¹⁷

Table 1: Comparison of China's Universities of Excellence Initiatives

Program	Timeline	Description
Project 211	1995–2017	Project 211 provided funding to around 100 top universities to foster the development of elite institutions that can compete in the 21st century. Universities applied for inclusion in the program by outlining their plans to become high-quality research institutions and centers of teaching excellence, and they were selected for inclusion by an interministerial working group. In addition to billions of dollars in funding directly associated with the program, inclusion in Project 211 also catalyzed investment from provincial and local governments where the university was located.
Project 985	1998–2017	Project 985, named after the year and month it launched in May 1998, initially provided a large pool of funds to nine universities chosen by the central government as flagship institutions. These universities would become known as the C9 group, China's Ivy League equivalent. The initiative formalized the goal of developing world-class universities. It was later expanded to fund 30 additional universities.
Double First-Class	2015–present	The Double First-Class initiative replaced the 211 and 985 projects between 2015 and 2017. It initially provided funding to a core group of 42 universities, which were deemed to have potential as world-class institutions and leading centers of science-based innovation. Another 95 high-performing universities were selected to excel in specific disciplines. The second phase of the initiative, launched in 2022, expanded the number of member universities to 147 and removed the distinction between core and discipline-focused universities. These universities are granted access to additional funding based on the government's evaluation of its performance in particular disciplines as well as overall international ranking.

Source: Various.¹¹⁸

*The other universities are all members of the so-called C9 League in China, an association established in 2009 that receives lavish government funding. The C9 universities ranked in the top 100 consist of Tsinghua University, Peking University, Fudan University, Shanghai Jiao Tong University, Zhejiang University, University of Science and Technology of China, and Nanjing University. The two other C9 universities are Harbin Institute of Technology and Xi'an Jiaotong University. Emily Hannum, "Educational Development in China: Progress, Challenges, and Outlook" (prepared for the U.S.-China Economic and Security Review Commission), February 23, 2023, 18.

†Chinese universities offer substantial cash rewards for publication in prestigious journals. A review of such awards offered by 40 Chinese universities between 2008 and 2016 found that authors published in *Nature* or *Science* received an average of \$43,783 in 2016. Wei Quan, Bikun

In first-tier cities,* China's elite universities anchor the technology ecosystem and play a fundamental role in China's efforts to dominate every part of what it calls "the innovation chain."¹¹⁹ While focusing on basic research, such universities are also integrated closely with China's many state-managed laboratories, research institutes, and funded research projects.¹²⁰ As CSET researchers note in a study on China's state key labs,[†] they are "evolving to be one of the most important building blocks in China's innovation base," are at the forefront of China's efforts to reduce dependence on foreign technology, and are key contributors to military-civil fusion.¹²¹ These 533 laboratories are overseen by the MOE as well as China's Ministry of Science and Technology (MOST) and tend to be organized around a specific discipline.¹²² The labs are often co-located with elite universities (those counted in the Double First-Class program), and university faculty are frequently the investigators on research grants awarded to the state key labs.¹²³ MOST also oversees thousands of national-level R&D projects, known as National Key Projects (5,262 launched between 2016 and 2021), as well as the National Natural Science Foundation, with the majority of funding going to elite universities and research labs.¹²⁴

Specific Disciplines at the Frontier

Resource concentration is also directed into specific disciplines selected by the central government. Currently, 465 disciplines from 147 universities are being targeted and supported under the premise that they have "the potential to become world class."¹²⁵ Notably, whereas universities such as Peking and Tsinghua have roughly 30 disciplines that will qualify for promotion, lesser institutions tend to have only a few and are disproportionately concentrated in "hard" technology and science areas, such as the Wuhan University of Technology, whose only supported discipline will be materials science and engineering.¹²⁶ As Emily Hannum, professor of sociology and education at the University of Pennsylvania, notes in a report prepared for the Commission, "unlike the earlier projects, the Double First Class project supported not only 'the already established universities' but also universities 'with urgent needs, distinctive features, and new disciplines.'"¹²⁷ In spite of this, as Dr. Hannum notes, the "majority of disciplines to be developed are still clustered

Chen, and Fei Shu, "Publish or Impoverish: An Investigation of the Monetary Reward System of Science in China (1999–2016)," *arXiv*, July 2017.

*Chinese cities are unofficially but widely grouped into four "tiers" based on population, affluence, and whether they are governed at a provincial level (e.g., Shanghai, Chongqing, Beijing, and Tianjin are provincial-level municipalities), as provincial capitals, or at lower echelons of administrative hierarchy. For example, Shanghai is a first-tier city; Chengdu, the populous capital of Sichuan and a regional hub in the southwest, is a second-tier city; Wenzhou, a prefecture-level port city and tourist destination on the coast of Zhejiang Province, is a third-tier city; and Xiangcheng, a county-level city in Henan Province famous foremost as the birthplace of the first president of the Republic of China, Yuan Shikai, is a fourth-tier city. Dorcas Wong, "China's City-Tier Classification: How Does It Work?" *China Briefing*, February 27, 2019.

†State key labs are subordinate to—but far more numerous than—the 20 national-level labs. The Party-state also operates 191 National Engineering Research Centers, differing from state-key labs in being more focused on commercialization of technology. Previously, these research centers were far greater in number but have been scaled back due to the current widespread quality issues, failing to actually promote commercialization while building up debt and wasting resources. Jeroen Groenewegen-Lau and Michael Laha, "Controlling the Innovation Chain: China's Strategy to Become a Science and Technology Superpower," *Mercator Institute for China Studies*, February 2, 2022; Michael Laha, "How China Plans to Engineer Its Way Out of Technology 'Strangleholds,'" *Australian Strategic Policy Institute*, September 26, 2022.

in major cosmopolitan areas in the eastern region of China,” and for most of China’s provinces, the only institution selected into the Double First-Class project is the strongest university in the provincial capital.¹²⁸

Promoting Semiconductor and AI Development in Higher Education

Promoted areas of study are disproportionately in the Party’s priority S&T areas, including semiconductors and AI. Since 2015, the Party-state has selected 28 schools to build out microelectronics colleges. In 2020, China separated integrated circuit science and engineering from the broader category of electronic S&T and made it a first-level discipline.¹²⁹ Also in 2020, the National Development and Reform Commission and the MOE moved forward on implementing “national integrated circuit industry-education integrated innovation platforms” at specific universities to increase university-industry collaboration. According to Dr. Simon, each “has a specialized mandate, e.g. Tsinghua is focused on CMOS* logic devices and circuits, memory, and sensors,” and each receives hundreds of millions of RMB from the government in support.¹³⁰ In 2021, 18 universities were selected to begin offering doctoral programs in integrated circuit science and engineering, nearly all of them elite universities on China’s coast.¹³¹ Efforts in AI mirror these trends in semiconductors, according to Dahlia Peterson, a research analyst at CSET.¹³² More elite locales have established AI institutes, which by Ms. Peterson’s calculations currently include at least 36 AI colleges and 18 AI research institutes.¹³³ More broadly, in 2019 the MOE standardized an AI major that has now been taken up by 440 universities. Initial uptake was strongest at elite institutions but has now spread to lower-tier universities, raising concerns about quality.¹³⁴ These initiatives are a clear response to Beijing’s calls to the higher education system to target “stranglehold” technology areas as well as areas critical to the Party-state’s industrial policy ambitions.

Concentration of Resources at the Top Is Growing China’s Innovation Capacity

A wide array of organizations and analysts find that China’s overall innovation capacity has expanded sizably over the last several decades, in line with China’s massive expenditure on its leading universities. The World Intellectual Property Organization’s Global Innovation Index, one of the most frequently cited metrics, found that from 2010 to 2022 China advanced from the 43rd to the 11th ranked country in terms of innovation capacity.¹³⁵ Two recent reports buttress this finding with a broad set of quantitative indicators. In late 2022, the Information Technology and Innovation Foundation (ITIF), a U.S. nonprofit public policy think tank, created a proprietary index summing together a range of innovation inputs, outputs,

*CMOS stands for Complementary Metal-Oxide-Semiconductor and refers to the physical layering of a semiconductor: a metal (used for the transistor gate) is deposited on top of a layer of silicon dioxide (the “oxide”), which in turn is on top of a silicon semiconductor substrate. CMOS is the most common method for constructing integrated circuits.

and outcomes (e.g., R&D spending, science and engineering articles, and value added in advanced industries) to calculate China's overall innovation capacity, finding that it has ballooned from 77.8 percent of the United States' capacity in 2010 to exceed the United States at 139.2 percent as of 2020.¹³⁶ In early 2023, meanwhile, the Australian Strategic Policy Institute (ASPI), based on research that looked at academic publications related to specific technologies, concluded that "China has built the foundations to position itself as the world's leading science and technology superpower, by establishing a sometimes stunning lead in high-impact research across the majority of critical and emerging technology domains."¹³⁷ The authors note that "China's global lead extends to 37 out of 44 technologies that ASPI is now tracking, covering a range of crucial technology fields spanning defense, space, robotics, energy, the environment, biotechnology, AI, advanced materials and key quantum technology areas" (see Table 2).¹³⁸ As portrayed in the figure below, the technology monopoly risk score developed by ASPI is derived by considering two factors: (1) the top country's share of the world's top ten institutions in the specific technology and (2) the top country's research lead over the closest competitor, based on the ratio of publications in the top 10 percent most cited for that technology. "High risk" means eight or more of the top ten institutions are in the top country, and that country also commands at least three times the share of publications in the top 10 percent relative to the next closest country.*¹³⁹ Publications, however, are a second order measure and may not necessarily be indicative of underlying technological deployment. Chinese policy incentives, which reward metrics like patenting and citations, may also lead the study to overstate the actual progress of Chinese scientific research.¹⁴⁰

Table 2: Research Areas China Appears to Lead

Selected Technologies	Lead Country	Technology Monopoly Risk
Advanced materials and manufacturing		
Nanoscale materials and manufacturing	China	high
Coatings	China	high
Smart materials	China	medium
Advanced composite materials	China	medium
Novel metamaterials	China	medium
High-specification machining processes	China	medium
Advanced explosives and energetic materials	China	medium
AI, computing, and communications		
Advanced radiofrequency communications (incl. 5G and 6G)	China	high

*Medium risk in turn means five out of the top ten institutions are in the first-ranked country, which also commands at least two times the share of publications in the top 10 percent relative to the next-closest country. Low risk simply means the medium-risk criteria were not met. Jamie Gaida et al., "ASPI's Critical Technology Tracker: The Global Race for Future Power," *Australian Strategic Policy Institute*, February 2023, 13.

Table 2: Research Areas China Appears to Lead—Continued

Selected Technologies	Lead Country	Technology Monopoly Risk
Advanced optical communications	China	medium
AI algorithms and hardware accelerators	China	medium
Distributed ledgers	China	medium
Advanced data analytics	China	medium
Energy and environment		
Hydrogen and ammonia for power	China	high
Supercapacitors	China	high
Electric batteries	China	high
Photovoltaics	China	medium
Nuclear waste management and recycling	China	medium
Directed energy technologies	China	medium
Biotechnology, gene technology, and vaccines		
Synthetic biology	China	high
Biological manufacturing	China	medium
Sensing, timing, and navigation		
Photonic sensors	China	high
Defense, space, robotics, and transportation		
Advanced aircraft engineers (incl. hypersonics)	China	medium
Drones, swarming, and collaborative robots	China	medium

Source: Jamie Gaida et al., “ASPI’s Critical Technology Tracker: The Global Race for Future Power,” *Australian Strategic Policy Institute*, February 2023, 8.

China Limits Academic Sharing of Research and Data

As China expands its presence in academic research in biotechnology and other cutting-edge domains, the Party-state is also increasingly enforcing restrictions on data sharing and research transparency. According to Anna Puglisi, director for biotechnology at Georgetown’s Center for Security and Emerging Technology, “China has amassed the largest genomic holdings of anywhere in the world.”¹⁴¹ Beijing views these resources as a strategic advantage and is increasingly protective of them. In July 2023, the Party-state issued new regulations on foreign access that add onto 2019 laws already restricting foreign entities’ ability to collect genetic material in China or disseminate it abroad.¹⁴² The new regulations further increase scrutiny of collaboration in clinical studies and restrict outflows of information, creating an environment so stringently controlled that one specialist described it as “basically grant[ing] exclusive access to Chinese nationals based in China to conduct this research.”¹⁴³ Chinese publications in Western journals have begun omitting data on genomic sequences, including a disclaimer stating that—due to restrictions im-

China Limits Academic Sharing of Research and Data— Continued

posed by the Chinese government on the export of genomic data and certain sequencing information—they are unable to share the complete data, instead providing a mere summary of the underlying data.¹⁴⁴ Such practices deviate from the global norms of research collaboration and create a slippery slope with regard to data transparency in the scientific community.¹⁴⁵ The greater scrutiny over academic information sharing comes after several databases were restricted on CNKI, the top portal for academic papers in China, reflecting the tightening grip over information as the Party-state prioritizes national security and control.¹⁴⁶

China's Innovation Emphasis May Fuel a Technology "Diffusion Deficit"

As demonstrated above, assessments of China's science, technology, and education capacity often rely heavily on quantitative metrics such as research publications, R&D expenditures, and patents. Such traditional innovation metrics, however, often overlook the issue of "technology diffusion," or the process by which innovations, technological knowledge, and new production processes spread across an economy.* Scholars have emphasized the importance of technological diffusion in economic and technological development for decades.†¹⁴⁷ Particularly important is the potential relationship between diffusion capacity and a country's growth in productivity, or the amount of output that can be produced from a given amount of inputs, such as labor and capital. China's declining productivity growth since at least 2007‡ may owe in part to barriers to diffusing technology and knowhow throughout its economy, particularly educational barriers.¹⁴⁸ George Washington University political scientist Jeffrey Ding disaggregated the 2020 Global Innovation Index into subindices that align with innovation and diffusion, respectively, in order to highlight an apparent differential between the two. Where China registers an impressive performance on the former subindex, ranking on average 13.8, Dr. Ding describes China's relatively poor performance on the latter, ranking on average 47.2, as a "diffusion deficit" (see Table 3).¹⁴⁹

*This is partly because diffusion is much harder to measure at a national level. Aggregate data for innovation inputs (e.g., R&D) and outputs (e.g., patents) are readily available. By contrast, data on the extent and intensity of diffusion, or for instance how many firms adopt a new technology and how frequently they use it, tend to only be available in small, firm-level datasets and are often not readily comparable between sectors or technologies. Jeffrey Ding, "The U.S. May Be Overstating China's Technological Prowess," *China File*, June 7, 2023; Diego A. Comin and Martí Mestieri, "Technology Diffusion: Measurement, Causes and Consequences," *National Bureau of Economic Research*, May 8, 2013.

†The most widely referenced study on diffusion of innovations—with over 150,000 citations, according to Google Scholar—was first written in 1962. That study was itself a synthesis of research across hundreds of studies on diffusion undertaken in the decades prior, building in particular on studies looking at technology adoption among farmers in the American Midwest. Everett Rogers, "Diffusion of Innovations," *Free Press of Glencoe*, 1962.

‡Since 2007, China's GDP growth has mostly been driven by state-directed investment in infrastructure and housing projects, where for the prior three decades it was driven upward of 70 percent of GDP growth due to reallocation of resources from low- to high-efficiency sectors and firms. For more background on the decrease in China's productivity, see Loren Brandt, written testimony for the U.S.-China Economic and Security Review Commission, *Hearing on An Assessment of the CCP's Economic Ambitions, Plans, and Metrics of Success*, April 15, 2021.

Table 3: China's Innovation vs. Diffusion Capacity, 2020

<i>Innovation Capacity Subindex</i>		<i>Diffusion Capacity Subindex</i>	
Indicator	China's Global Rank	Indicator	China's Global Rank
QS University Rankings	3	ICT Access	71
Gross Expenditures on R&D	13	ICT Use	53
Global R&D Companies	3	University/Industry Research Collaboration	29
Researchers, Fulltime Equiv/ mn pop	48	State of Cluster Development	25
R&D Performed by Business	12	Gross Domestic Expenditure on Research and Development Financed by Abroad	81
R&D Finance by Business	4	JV Strategic Alliance Deals/ Bn	76
Patents by Origin	1	Patent Families 2+ Offices/ Bn PPP% GDP	27
Patent Cooperation, Treaty Patents by Origin	15	Intellectual Property Receipts, % Total Trade	44
Utility Models by Origin/Bn PPP\$ GDP	1	High-tech Net Exports, % Total Trade	5
Scientific and Technical Articles	39	Information and communications technology (ICT) Services Exports, % Total Trade	61
Citable Documents H-Index	13		
Average Ranking	13.8	Average Ranking	47.2

Source: Adapted from Jeffrey Ding, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China's Challenges and Capabilities in Educating and Training the Next Generation Workforce*, February 24, 2023, 7.

The stark decline in quality outside China's top universities may contribute to China's apparent diffusion deficit. Beyond the select universities directly managed by the MOE and other state agencies, most institutions are funded by cash-strapped city and provincial governments.* Dr. Simon explains that for higher education institutions, "after you go beyond the first 25, 30, at least on the civilian universities, the drop-off [in quality] is very, very sharp."¹⁵⁰ Cross-country comparisons focused on number of graduates and

*Although Chinese universities charge tuition, fees are maintained at low levels by the MOE and provincial governments in order to promote universal access to education. As a consequence, universities rely on government appropriations to finance operations. Increasingly, universities have diversified their funding sources by soliciting donations from the nonstate sector, but these remain a small portion of their revenue sources. An expanding number of private colleges operate outside the government funding structure, charging tuition fees many times higher than public universities. William B. Kirby, *Empire of Ideas: Creating the Modern University from Germany to America to China*, Harvard University Press and Belknap Press, 2022, 254, 261; Gerard A. Postiglione, "Expanding Higher Education: China's Precarious Balance," *China Quarterly* 244 (2020): 922–923; *Guangming Daily*, "How Universities Can Make Up for Fundraising" (中国大学如何补上“募款”课), January 13, 2016. Translation.

publications often do not capture this drop-off. If, as most research on the issue suggests, a crucial aspect of effective diffusion of innovations is absorptive capability, then diffusion in China is likely hampered by the extent of the drop-off in educational provision outside of China's well-off urban areas.¹⁵¹ Additionally, even among firms that do ostensibly adopt new innovations, the ability to fully utilize and assimilate such technologies and processes is constrained by internal competencies, such as skilled and knowledgeable managers and employees.¹⁵² With severe constraints on talent development outside well-off urban areas, firms in poorer regions will struggle to effectively benefit from innovations. Despite China's rapid development over the last several years, across information and communications technology broadly, "China lags behind the U.S. in penetration rates of many digital technologies across industrial applications, including digital factories, industrial robots, smart sensors, key industrial software, and cloud computing."¹⁵³

China's innovation and technological diffusion capacities each pose unique challenges. On the one hand, China's intensive concentration of resources into innovations in critical and emerging technology sectors could lead to asymmetrical payoffs, giving the Party-state power, challenging U.S. technology leadership in new domains, and creating potential threats. China's evolving strategies for concentrating resources to solve key technology challenges is improving and should not be underestimated, as Dr. Puglisi assessed in testimony before the Commission.¹⁵⁴ Development of dual-use technologies in domains like biotechnology and AI may possess "first mover" advantages that could confer impactful and lasting benefits, particularly relevant to the Party-state's military-civil fusion strategy.¹⁵⁵ Beijing-based venture capitalist Kai Fu Lee argues that critics of China's resource concentration strategy fail to appreciate the asymmetrical upside potential:

*What these critics miss is that this process can be both highly inefficient and extraordinarily effective. When the long-term upside is so monumental, overpaying in the short term can be the right thing to do. The Chinese government wanted to engineer a fundamental shift in the Chinese economy, from manufacturing-led growth to innovation led growth, and it wanted to do that in a hurry and the process of pure force was often locally inefficient—incubators that went unoccupied and innovation avenues that never paid off—but on a national scale, the impact was tremendous.*¹⁵⁶

At the same time, a number of analysts believe that China's inefficient allocation will be a severe constraint on the country's further development. As Loren Brandt and Thomas Rawski wrote in a 2020 research paper published by the IZA Institute of Labor Economics,

*Assigning vast resources to a talented and highly motivated corps of domestic researchers will surely deliver successes.... When measured against the enormity of the world's largest economy, however, even considerable numbers of isolated breakthroughs may fail to deliver economy-wide productivity increases, leading to a Soviet-style outcome in which the occasional Sputnik illuminates galaxies of mediocrity.*¹⁵⁷

Similarly, Doug Fuller, associate professor at Copenhagen Business School and an expert on China's S&T ecosystem, argues that for "the needs of a developing country like China ... knowledge diffusion should take precedence over knowledge generation."^{*158}

China's Education System Struggles to Promote Diffusion via Industry Linkages

While universities in China's wealthy coastal cities have strong ties to industry, producing startups from research labs and licensing technology to businesses, most of China has weak university-industry linkages. Richer locales such as Shenzhen and Kunshan (where Duke University's China campus is located) have benefited from attracting national and international elite universities to set up satellite campuses, often covering large portions of their costs. By contrast, most areas in China have had to create and fund their own institutions.^{†159} Since 2000, nearly 700 universities were created by local governments with a primary aim of fostering cooperation between academia and local industry, with 196 out of China's 339 cities, or 57.8 percent, establishing their own university.¹⁶⁰ Hundreds of so-called "university towns" in turn were brought forth by government investment around these universities.¹⁶¹ The results have been poor, with most institutions low in quality and failing to spur technological diffusion. As of 2021, 802 colleges and universities had established an in-house technology transfer institution, yet only 12 had technology development, consulting, and service contracts valued at more than \$138 million (RMB 1 billion).¹⁶² Further, research from Qiang Zha, associate professor of education at York University, has shown that local institutions have been plagued by bad incentives and limited expertise, fatally undermining integration with industry.[‡] China's local universities face major "constraints in the strength and availability of their teaching staff" and operate under top-down incentives that encourage engaging in publication and metric chasing.¹⁶³ Dr. Zha notes that rather than work closely with local industry, they "mimic elite universities through increasing research activities and adding graduate programs."¹⁶⁴ Industry, in turn, has had little incentive to collaborate substantively with China's nonelite universities.

^{*}Dr. Ding also noted a historical parallel between China today and the former Soviet Union, when innovation-oriented assessments overstated that nation's prowess. Dr. Ding, for example, writes that "the notion of a 'scientific manpower gap' — specifically, that the Soviet Union was graduating two to three times as many scientists and engineers than the U.S. — took hold in U.S. discourse" and that "[t]hroughout the 1950s, this figure was 'repeated ad infinitum' by analysts and politicians." Jeffrey Ding, "The Diffusion Deficit in Scientific and Technological Power: Re-assessing China's Rise," *Review of International Political Economy* (2023): 12.

[†]Duke's deal with Kunshan, a wealthy city in coastal Jiangsu, for example, entailed the Municipality of Kunshan providing and leasing 200 acres of land to Duke for ten years at no cost as well as paying for construction. Operational costs were split between Kunshan and Duke for the first six years. Duke's Kunshan campus is one of 16 U.S. branch campuses in China, according to March 2023 data from the Cross-Border Education Research Team. Ian Wilhelm, "Duke's China Plan Sparks Doubts on Campus," *Chronicle of Higher Education*, May 25, 2011; Cross-Border Education Research Team, "List of International Branch Campuses."

[‡]Dr. Zha also notes that local universities are driven by an overwhelming imperative to raise funds, and thus "they tend to offer more 'soft' programs; those do not require expensive resource inputs, such as business administration, foreign languages, economics, management, Chinese language and literature, and media studies. Such programs do not cost much, while the enrollment pool is relatively large and steady, which in turn helps secure government appropriations and student fee revenues. After all, local governments' appropriations and students' contributions constitute almost the entire revenue stream of those universities." Qiang Zha, "Newly Founded Local Universities: 'Land-Grant Colleges' on Chinese Soil?" in Ceren Ergenc and David S.G. Goodman, eds., *Handbook on Local Governance in China: Structures, Variations, and Innovations*, Edward Elgar Publishing, 2023, 4.

Limited Industry-Education Linkages Threaten Beijing's Industrial Policy Aims

The disconnect between education and industry is hindering Beijing's progress in the competitive race for the industries of the future. China's research landscape has become dotted with many government-created "science parks" and "development zones" that focus in part on promoting education-industry collaboration on specific technologies.¹⁶⁵ Outside of a few high-performing zones, such as Beijing's Zhongguancun, local governments have accumulated an extensive amount of debt to promote such university-industry collaboration with little to show.* While a coordination body exists in the semiconductor industry to promote industry-education linkages (known as the Semiconductor Industry & Education Integration Development Alliance),† substantive collaboration is rare and partnerships are largely limited to naming and donations, serving as a form of corporate brand promotion and a method to acquire tax breaks and subsidies.¹⁶⁶ The central government has effectively acknowledged the overextension and waste set off by "zone fever," reducing the number of existing zones and dramatically slowing approval of new ones such that only five new high-technology zones were approved between 2018 and 2023.‡¹⁶⁷ The Party-state's own 2023 assessment of China's innovation ecosystem, produced by the Chinese Academy of Sciences, warned of the continuing lack of education and industry collaboration:

In comparison to the world's S&T superpowers, China's innovation and development in S&T has no shortage of issues, such as deficiencies in foundational and critical technologies, a lack of interaction between the educational and technical industries, and a shortage of industry

*There are 140 national-level science parks as of 2021 and, per China's most recent audit in 2018, there were 552 national-level development zones, which included 219 "economic and technology development zones" and 156 "high-technology industrial development zones." Below the national level, zones have proliferated to 1,991 at the provincial level and, though not tabulated by the audit, tens of thousands more below the provincial level. The results are a select few zones of excellence, such as Beijing's Zhongguancun, but many more have failed to develop or diffuse technology while incurring massive debt. Creating these zones is the primary undertaking of local government financing vehicles, involving major expenditure on infrastructure and accounting for a large portion of China's recent debt accumulation. China Ministry of Science and Technology, *The Ministry of Science and Technology and the Ministry of Education Identified the Eleventh Batch of National University Science and Technology Parks* (科技部 教育部认定第十一批国家大学科技园), June 3, 2021. Translation; National Development and Reform Commission et al., *Catalogue of China Development Zone Audit Announcements (2018 edition)* (中国开发区审核公告目录(2018年版)), February 26, 2018. Translation.

†The alliance was jointly initiated and established by 73 leading education and industry organizations, including Tsinghua Unigroup, SMIC, Huahong Group, Tsinghua University, Peking University, Xidian University, and Institute of Microelectronics, and Chinese Academy of Sciences. Industrial Culture Development Center of the Ministry of Industry and Information Technology, "Wang Zhijun Attended the Founding Meeting of the Integrated Circuit Industry-Education Integration Development Alliance and the 2nd Semiconductor Wisdom Conference in 2019" (王志军出席集成电路产教融合发展联盟成立大会暨2019第二届半导体才智大会), December 23, 2019. Translation.

‡According to analysis by the Mercator Institute for China Studies (MERICS), this led MOST, which at the time managed high-technology zones under its Torch Program, to miss its target of 240 high-technology zones by 2020. Following Party-state restructuring in 2023, however, MOST's management of these zones has now been moved to Ministry of Industry and Information Technology. Similar trends hold for the Economic and Technological Development Zones, which are overseen by the Ministry of Commerce. Jeroen Groenewegen-Lau and Michael Laha, "Controlling the Innovation Chain: China's Strategy to Become a Science and Technology Superpower," *Mercator Institute for China Studies*, February 2, 2022, 13.

Limited Industry-Education Linkages Threaten Beijing's Industrial Policy Aims—*Continued*

*members in the community for S&T innovation. These issues have severely restricted the overall effectiveness of the innovation system. In the face of deep and complex changes occurring both within China and abroad, the national innovation system urgently needs to undergo a systematic transformation.*¹⁶⁸

Labor Market Outcomes and Educational Quality

Despite its growing strengths in fostering innovation, China's education system is failing to meet the economy's demand for skilled workers, posing an immense challenge to China's continued economic growth.¹⁶⁹ Analyses of China's labor force indicate major skills gaps and shortfalls of workers with needed skills. The education system's challenges in developing a nationwide skilled workforce could slow the development of knowledge-intensive sectors and deepen China's "diffusion deficit." A recent spike in the youth unemployment rate has put a spotlight on the limited training and development provided by China's education system. The high youth unemployment situation is also attributable to the Party-state's missteps in Zero-COVID and its regulatory crackdown on nonstate businesses. At the same time, despite efforts to reform and promote vocational education, vocational schools almost uniformly fail to instill work-relevant skills let alone develop students' broader cognitive abilities, hindering the development of a technically skilled workforce and fostering a societal bias against such schooling.

China's Education System Struggles to Meet Labor Market Demand

China's government is grappling with looming talent shortages as it struggles to expand training capacity and guide students to pursue careers in sectors targeted by government industrial policies. In 2016, China's MOE, Ministry of Human Resources and Social Security, and Ministry of Industry and Information Technology forecasted that ten key industrial sectors will face a shortfall of nearly 30 million skilled workers by 2025, with huge gaps in new-generation information technology (IT), power equipment, and new materials.¹⁷⁰ McKinsey Global Institute similarly projects that by 2030, up to 220 million Chinese workers will lack the skills needed to contribute to the economy, meaning 30 percent of the workforce will be forced to reskill, retrain, or languish in unemployment.¹⁷¹ In reporting by independent Chinese economic media outlet Caixin, a senior executive of a leading Chinese recruitment service provider stated that the driving factor in China's unemployment is a mismatch between the skills of graduates and the demands of the labor market. The current unemployment situation "doesn't reflect insufficient job offerings so much as a structural mismatch between supply and demand," the executive said.¹⁷² The prospects of a high-paying career

weigh heavily in students' decision on what discipline to study.*¹⁷³ This dynamic has led to an oversupply of graduates in the information and communications technology sector, with 43 percent of job applicants pursuing IT positions.¹⁷⁴ With roughly one-third of university graduates failing to find work in a field related to what they studied at school, there is some evidence for this structural mismatch hypothesis, as companies are forced to compete over a sparse pool of individuals with appropriate experience.¹⁷⁵

Evidence from AI and semiconductors suggests Chinese industry faces challenges in filling vacant roles due to inadequately trained talent, in spite of the Party-state's efforts to train microelectronics and AI specialists. Multiple AI subsectors suffer from "critical shortages," with fewer than four workers for every ten open positions, calculated as a labor supply-demand ratio below 0.4. The ratios range from 0.37 for AI chip engineers to 0.23 for machine learning engineers, 0.20 for natural language engineers, and 0.09 for computer vision engineers, among other shortages.¹⁷⁶ Meanwhile, according to a major mainland research report on China's semiconductor talent ecosystem covering 2020–2021, the semiconductor industry is expecting a shortfall in talent of 200,000–300,000 trained personnel, with 541,000 estimated to be employed in the industry in 2021 (about double the U.S. number) compared to an estimated need for 740,000–760,000 by the end of 2023.[†]¹⁷⁷ While China's top microelectronics colleges graduate roughly 180,000 people, nearly enough to fill the gap, only 13.8 percent funnel into the industry.[‡]¹⁷⁸ The underlying reason for this, Dr. Simon explained in his testimony, is that a large portion of graduates from these programs "simply do not possess the right sets of skills and experience needed by the industry."¹⁷⁹ This deficit reflects the fact that faculty often lack engagement with industry, institutions lack pilot research equipment or production lines for students to train on, and many schools do not even possess up-to-date textbooks.¹⁸⁰

Demographic Decline Increases China's Need for Skilled Workers to Sustain Growth

China's workforce is shrinking as the population ages, deepening the necessity for human capital improvement to sustain economic growth. According to UN modeling, China's working-age population (those aged 15–64) is projected to decline from 986 million in 2021 to 767 million by 2050.§¹⁸¹ This shrinking workforce will be forced

*Universities and their provincial education authorities negotiate each year on the number of students to admit by major. This grants the MOE a degree of control over the allocation of majors across the higher education system; however, student applicants retain discretion over what major they study. After receiving their score on the *gaokao*, students rank their top choice schools as well as the specific majors they wish to apply to, with the highest-scoring students generally able to self-select into their preferred programs. Ruixue Jia and Hongbin Li, "Just Above the Exam Cutoff Score: Elite College Admission and Wages in China," *Journal of Public Economics* 196 (2021): 3; Organization for Economic Cooperation and Development, "Education in China: A Snapshot," 2016, 12.

†Across the semiconductor ecosystem's three segments of design, manufacturing, and packaging and testing, there are— respectively—199,600, 181,200, and 160,200 employees in China as of 2021. Li Pei, "[Chip Vision] Discussion on Semiconductor Talent Shortage, Vocational Education Should Not Be Absent" (芯视野|半导体人才荒的讨论, 职业教育不应缺席), *Aijiwei*, April 18, 2022.

‡These data reflect graduates from 20 of the 28 microelectronic colleges in China that had available data.

§In 2021, out of the total working-age population of 986 million, China's workforce had 780 million workers based on data from the International Labor Organization and the UN Popula-

Demographic Decline Increases China's Need for Skilled Workers to Sustain Growth—*Continued*

to support a massive dependent population. By 2050, the UN projects that there will be one old-age dependent (over 65) for every two working-age individuals, an increase from one senior for every five workers in 2021.¹⁸² Continued growth in per capita income will require each worker to become more productive.

High Youth Unemployment Creates Potential for Unrest

After averaging 17.5 percent in 2022, China's unemployment rate for 16- to 24-year-old urbanites had climbed to an all-time high of 21.3 percent by June 2023, a stark contrast with the highly stable and managed unemployment rate for 25- to 59-year-old urbanites (see Figure 2).¹⁸³ China's national statistics agency subsequently ceased releasing the youth unemployment data series, a decision likely made due to increasingly dismal data.¹⁸⁴ The sharp rise in unemployment coincided with the largest ever cohort of graduates from China's higher education system—11.58 million—who entered a slowing job market in the summer of 2023.¹⁸⁵ While these unemployment figures comprise more than just college graduates, new graduates appear to face the weakest job prospects. In 2022, unemployment for college graduates in 2022 was estimated at 24.5 percent* in what was then characterized as the “hardest employment season in history.”¹⁸⁶ The climbing youth unemployment rate in 2023 likely reflects even dimmer job prospects for university degree holders.¹⁸⁷

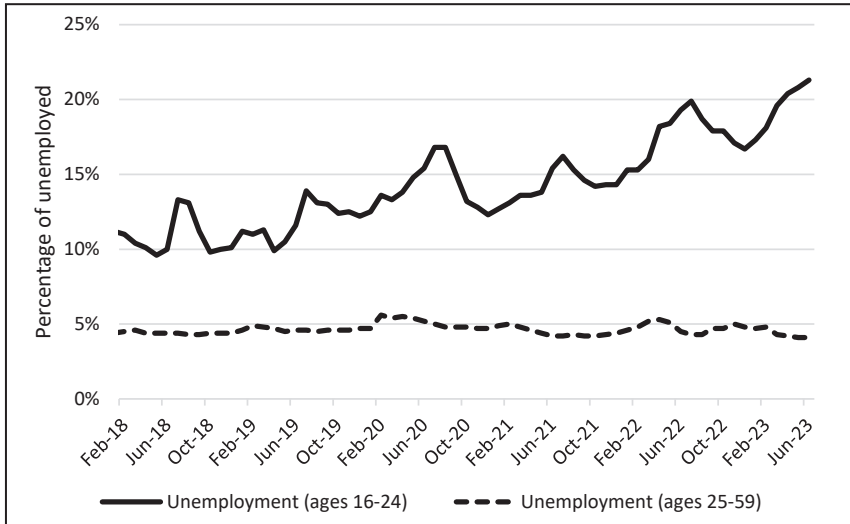
Analysts disagree on the extent to which shortcomings in China's education system are to blame for high youth unemployment, with some citing a weak economy, interventionist government policies, and even underlying statistical issues as primary factors.¹⁸⁸ The foremost cause may be lingering economic weakness from China's drastic Zero-COVID campaign. Labor-intensive jobs in the services industries are disproportionately filled by young people, especially those without an undergraduate degree, and the fall in retail spending under strict lockdowns in 2022 contributed to significant job losses.[†]¹⁸⁹ Job creation in the services sector remained weak in 2023 due to a sluggish recovery in household consumption.¹⁹⁰ Meanwhile, in addition to Zero-COVID, the Chinese Party-state's efforts to engineer the economy have contributed to labor market problems for new graduates. The tutoring, real estate, and commercial internet industries, which absorbed a substantial and growing share of new graduates up until 2020, each experienced a Party-state-led “rectification” campaign that severely depressed new hiring.¹⁹¹ Finally, China uses a looser definition of unemployment that

tion Division. World Bank, “Labor Force, Total—China,” 2022; UN Department of Economic and Social Affairs, Population Division, “World Population Prospects 2022: Population by Select Age Groups—Both Sexes,” 2022.

*According to Caixin and Nikkei Asia, Zhuo Xian, vice department director at the State Council's Development Research Center, stated that the unemployment rate was estimated at 1.4 times that of youth as a whole, which would put the number at 24.5 percent in 2022. Huang Huizhao et al., “Solving China's Soaring Youth Unemployment,” *Nikkei Asia*, March 16, 2023.

†Employment in the services sector fell by 12.9 million workers between 2021 and 2022, a decline of 3.6 percent. China Ministry of Human Resources and Social Security via CEIC database.

Figure 2: China's Increasing Urban Youth Unemployment, January 2018–June 2023



Note: Like China's official overall unemployment indicator, the officially reported youth unemployment rate tracks registered unemployment in China's urban areas.

Source: China National Bureau of Statistics via CEIC database.

may inflate numbers, especially in the youth category with the highest labor market frictions.* In contrast to these explanations, meanwhile, the Party-state has used its propaganda channels to play up the less credible notion that unemployment owes to students being unwilling to take certain jobs because of their “expectations getting higher.”¹⁹²

China's Tutoring Crackdown May Worsen Inequality

As part of a sweeping regulatory clampdown across several sectors dubbed the “common prosperity” campaign in 2021,[†] the Chinese government introduced a series of tightening measures on the once booming for-profit tutoring industry. Among other changes, the new regulations require all companies offering tutoring services in the compulsory education (grades 1–9) curricula to become nonprofits, prohibit them from going public, and force

*In China, unemployment data include jobless individuals in urban areas who have sought employment in the preceding three months and are able to start work within two weeks. The primary unemployment metric in the United States, by contrast, only includes those who have pursued employment within the most recent four weeks and are capable of starting immediately. Adam Wolfe, “China counts anyone living in an urban area without a job that has looked for work in the past 3 months and can start work within 2 weeks as unemployed. The US only counts as unemployed those that have looked for work in the past 4 weeks and can start immediately,” X, formerly known as Twitter, June 6, 2023.

[†]The campaign also included a prominent crackdown on consumer-facing internet firms and fintech firms as well as high-level rhetoric about expanding the middle class, with General Secretary Xi suggesting that China create an “olive-shaped [income] distribution, where the middle is large and the two ends are small” in an August 2021 speech at Central Commission for Financial and Economic Affairs, one of China's top economic deliberation bodies. For more on the campaign, see Chapter 2, Section 1, “Year in Review: Economics and Trade,” in U.S.-China Economic and Security Review Commission, *2021 Annual Report to Congress*, November 2021, 119–164; Trivium China, “Soaking the Rich,” *China Markets Dispatch*, August 18, 2021.

China's Tutoring Crackdown May Worsen Inequality— *Continued*

all online tutoring companies to register with regulators for approval to operate.¹⁹³ The move devastated the industry overnight. The largest private tutoring company, New Oriental, which once enrolled some ten million students, lost 80 percent of its revenue and 90 percent of its market value and laid off more than half of its roughly 110,000 employees.¹⁹⁴ Prior to the crackdown, total employment estimates for the industry were in the millions, with hundreds of private companies operating in the space.¹⁹⁵ The Party's regulations were ostensibly intended to reduce inequality in educational access generally as a part of General Secretary Xi's so-called common prosperity campaign as well as—analysts believe—Party-state efforts to counteract China's demographic decline by making it less expensive for families to raise children.¹⁹⁶ Many, however, view the afterschool tutoring crackdown as off the mark and counterproductive, attacking a mere symptom of the underlying problem, which is the hypercompetitive college entrance system.¹⁹⁷

Ironically, the crackdown may even be exacerbating the inequality it set out to ameliorate. Middle class Chinese parents complain that in order to secure a future for their child, they must now surreptitiously hire private tutors that are 50 percent more expensive—an expense wealthier families can much more easily afford.¹⁹⁸ Worse, underserved rural areas have seen shutdowns of crucial learning centers that provided online access to learning opportunities that otherwise are not available.¹⁹⁹ The Party-state's intervention has contributed to China's rising youth unemployment while creating unintended side effects that may have made the original problem of inequity in the education system worse.

Economic uncertainty and limited job prospects are nonetheless leading students into suboptimal pathways as the Party-state responds to ward off any potential social unrest. Record numbers of Chinese graduates are opting to either take the civil service exam for a government job or try to pursue additional education.²⁰⁰ Others, meanwhile, are looking to the safety net of state-owned enterprises (SOEs), with 39 percent of students from China's top-ranked universities stating in 2021 that they most prefer employment at SOEs.²⁰¹ In April 2023, Beijing announced an employment promotion campaign that will see central and local levels mobilize SOEs and government offices to hire additional graduates as well as subsidize various firms to hire fresh graduates to limit youth unemployment.²⁰² In the short run, such efforts threaten to exacerbate inefficient resource allocation issues, when only a consumer-led economic recovery is likely to stimulate aggregate demand and promote employment. Over the long term, the Party-state continues to indicate that it is focused on remediating quality issues, issuing directives, and working with higher education institutions to reform curriculum, improve teacher quality, and promote better integration with industry needs (see Appendix III, "Selected Education System

Guidance Documents since 2019"). Major funding shortfalls at local levels, pervasive incentive problems, ongoing discrimination against rural migrant populations, and increasing resources directed at political indoctrination call into question the efficacy of these long-term reforms.

Vocational Training in China Does Not Teach Transferrable Skills

Central planners intend for China's vocational education system to meet labor market demand for technical skills, but poor learning outcomes prevail across vocational schools, potentially endangering China's advantages in manufacturing. As a result of a lack of coordination between industry and vocational schools, course content is often outdated and out of step with modern production techniques. As wages rise in China, factories are turning to automation and pivoting to higher-value-added stages of production to stay competitive.²⁰³ Without robust technical skills training, however, highly automated factories are struggling to find workers capable of operating advanced equipment.²⁰⁴ According to a 2020 Peking University study, only 35 percent of students found a job upon graduating from a vocational high school, reflecting the extent of a mismatch between skills and job requirements.²⁰⁵

Chinese policymakers are attempting to reform the underdeveloped vocational education system to meet the needs of China's changing economy; however, the problems lie beyond vocational school campuses. In 2020, nine ministries jointly released an action plan to reform the apprenticeship system, which imitates the German apprenticeship system where schools and enterprises have co-equal responsibilities for developing training programs.²⁰⁶ While some vocational schools have partnered with domestic and foreign multinational enterprises* to improve the quality of their curricula and provide apprenticeships, these partnerships tend to overemphasize techniques specific to those firms; furthermore, these firms seek to deemphasize skills that are potentially transferable to other businesses.²⁰⁷ As Dr. Rozelle and author Natalie Hell document in their book *Invisible China*, 56 percent of vocational education students spent their internships doing manufacturing work that required no specialized skillset, such as graphic design students who spent their internships assembling smartphones on a factory line.²⁰⁸

Even with local governments providing substantial monetary incentives for firms to shift part of their internal training to vocational schools, firms report that establishing these partnerships is highly costly while still generating suboptimal outcomes.²⁰⁹ Chinese policymakers are nonetheless doubling down on facilitating firm-school linkages to overcome the market failure in training technical skills.

*Foreign multinational companies have participated extensively in developing local apprenticeship and training programs to support their operations in China, often in return for substantial government subsidies. These companies include major carmakers—Germany's VW, the UK's Jaguar-Land Rover, and Japan's Toyota—as well as South Korea's Samsung and the German machine tooling giant Bosch. In total, over 200 companies have developed partnerships with leading vocational schools across China. Asian Development Bank, "Crossing the River by Touching the Stones: Alternative Approaches in Technical and Vocational Education and Training in the People's Republic of China and the Republic of Korea," 2022, 65; Hao Zhang, "An Institutional Dilemma in China's Skills-Development System: Evidence from Two Apprenticeship Reforms," *China Quarterly* 248:1 (2021): 1116–1117, 1120–1121; McKinsey Global Institute, "Reskilling China: Transforming the World's Largest Workforce into Lifelong Learners," 2021, 11.

In pursuing this avenue, China risks a miss-skilled workforce if future technological disruptions render some skillsets obsolete. Further elevating this risk is the fact that schools are not simultaneously emphasizing foundational skills such as math, science, English, and computers, which enable workers to learn new things over a lifetime of employment.²¹⁰

Vocational Education in Semiconductors and AI

China faces talent shortages at every level of the semiconductor and AI industries, but challenges at the vocational level may be as acute as those at the top.²¹¹ When it comes to running semiconductor fabrication facilities, operating manufacturing equipment lines, and undertaking packaging and testing, for instance, higher education qualifications are often unnecessary and some of the largest limitations are in technical and vocational-level talent.²¹² In 2016, China's Party-state established the China Vocational Education and Microelectronics Industry Alliance to attempt to resolve shortcomings.²¹³ The 2020 State Council notice on promoting the integrated circuit and software industry further incentivized a number of vocational and technical schools to set up majors in integrated circuit production to train technicians; it also strove to get buy-in from industry via tax breaks.²¹⁴ In AI, meanwhile, as competition shifts toward identifying industrial-level applications, China is trying to shift toward an education approach that blends technical expertise with fluency in AI.²¹⁵ In 2017, China's State Council launched the New Generation AI Development Plan, which called for implementing AI training at every level of education.²¹⁶ Hundreds of higher vocational colleges responded to the directive by establishing professional AI courses that include training in coding, machine learning, computer vision, and natural language processing.²¹⁷ China's AI industry giants have established partnerships with vocational colleges and deployed online training courses.²¹⁸ A core issue remains the shortage of qualified teachers. As Ms. Peterson assessed in testimony before the Commission, the massive expansion of AI education "runs the risk that China's centralized push could lead to widespread integration of AI education, but with poorly designed curricula and insufficient instructional resources."²¹⁹

Implications for the United States

The strengths and weaknesses in China's education system have significant implications for China's economic and technological competitiveness with the United States. Overall, the uneven distribution of educational excellence in China, predominantly concentrated in select urban regions, calls into question China's ability to escape the middle-income trap in the medium- to long-term future. Despite China's vast size, the prevailing weaknesses in its education system are inhibiting the development of a skilled labor force necessary for sustained economic advancement. The associated diffusion deficit leaves China's education system struggling to upgrade its economy and cultivate an environment of innovation outside of its metro-

politan areas, thus constraining the country's ability to translate technological advancements into employment and broad, productivity-based growth. This systemic weakness could impede China's ability to establish a comprehensive, nationwide knowledge economy and sustain robust economic competition with the United States into the future.

Despite overall systemic limitations, localized pockets of excellence in China have the potential to pose significant challenges for the United States. These can emanate from strategic industries that compete with their counterparts in the U.S. economy or through the creation and application of advanced technologies and weaponry systems. Even a small proportion of high-performing institutions and individuals in China's large population can have a significant global impact. China's government is strategically employing education policies to bolster its industrial policy ambitions in areas like AI and semiconductors, and with sufficient resources such policies may facilitate breakthroughs in targeted domains. Despite overall educational limitations, China's state-led research system could promote integration of research breakthroughs into defense applications, threatening U.S. national security.

Ultimately, there are clear strengths to the U.S. model that China is far from matching. Foremost, these include the education system's ability to train a workforce that can widely and quickly adopt technology, as well as strong ties between education institutions and industry. Challenges from China present opportunities for the United States to maintain and potentially strengthen its competitive position. Despite China's advancements over the past several decades, the United States' broad-based educational capabilities remain far superior.*

*Such a conclusion is confirmed by the MOE's own think tank, the Chinese Academy of Educational Science. The think tank created an index ranking each country's "educational power," which concluded that the United States ranks first at 0.89, way ahead of second-place UK at 0.76 and 23rd-ranked China at 0.62. Xi specifically cited this ranking during a collective study session in May 2023. CCTV, "[Video] During the Fifth Collective Study of the Political Bureau of the Central Committee of the Communist Party of China, Xi Jinping Emphasized Accelerating the Construction of an Educational Powerhouse to Provide Strong Support for the Great Rejuvenation of the Chinese Nation" ([视频]习近平在中共中央政治局第五次集体学习时强调 加快建设教育强国 为中华民族伟大复兴提供有力支撑), May 29, 2023. Translation; China National Academy of Educational Science, *Building an Educational Power by the Research Group of the Chinese Academy of Education: China in the World* (中国教科院课题组 建设教育强国: 世界中的中国), May 12, 2023. Translation.

Appendix I: List of China's Talent Programs

Table 4: Programs Related to Talent Attraction, Retention, and Utilization as of 2018

Program	Agency in Charge	Target of the Program	Year Initiated	Number of Researchers Involved
Hundred Talents Program	Chinese Academy of Sciences	Scientists under 45 years old	1994	n.a.
National Science Fund for Distinguished Young Scholars	National Natural Sciences Foundation of China	Academic leaders under 45 years old; frontier sciences and technology	1994	3,454
Chunhui Program	MOE	Chinese expatriates for short-term services	1996	n.a.
Cheung Kong/Changjiang Scholar Program	MOE	Endowed professorships for under 45 years old; extended to 55 years old in social sciences and humanities	1998	2,948
111 Program	MOE and State Administration of Foreign Expert Affairs	1,000 foreign scholars from the top 100 universities and research institutions	2005	n.a.
Thousand Talents Program	Central Leading Group for the Coordination of Talent Work	1,000 academics, corporate executives, and entrepreneurs under 55 years old to return from overseas	2008	n.a.
Young Thousand Talents Program	Central Leading Group for the Coordination of Talent Work	Academics under 40 years old with three plus years of postdoctoral research	2010	3,535
Science Fund for Emerging Distinguished Young Scholars	National Natural Sciences Foundation of China	Researchers under 38 years old to work in academia	2011	2,398
Ten Thousand Talents Program	Central Leading Group for the Coordination of Talent Work	To support high-end talent residing in China	2012	3,454

Table 4: Programs Related to Talent Attraction, Retention, and Utilization as of 2018—*Continued*

Program	Agency in Charge	Target of the Program	Year Initiated	Number of Researchers Involved
New Hundred Talents Program	Chinese Academy of Sciences	Renewal of Hundred Talents Program	2014	n.a.
Young Cheung Kong Scholar Program	MOE	Endowed professorships for young scholars at Chinese universities	2015	440

Source: Cong Cao, “Returning Scientists and the Emergence of China’s Science System,” *Science and Public Policy* 47:2 (2020): 176.

Appendix II: Major Agencies Involved in the State Direction of Research

This appendix looks at the ministries and policy instruments within the Party-state that steer research and teaching activities at China's higher education institutions. Although only a select number of universities are directly administered by the central government, multiple agencies within the Party-state control powerful levers to influence the research decisions of academics and administrators. These mechanisms include conducting grant approvals and research funding, administering the state key laboratories system, and setting high-level guidelines. Aside from the MOE, three organizations, namely China's Ministry of Science and Technology (MOST), the Ministry of Industry and Information Technology (MIIT), and the Chinese Academy of Sciences (CAS), have critical equities and roles in China's higher education ecosystem. MOST is responsible for overseeing basic R&D and has become more focused on this central task following the 2023 Party-state restructuring wherein it became a "leaner but more powerful R&D-focused institution" (see textbox below for more information).²²⁰ Most significantly, MOST is the largest government funder of R&D and also oversees the National Natural Sciences Foundation, which is the major funding agent for research projects in the natural sciences in China.²²¹ Universities and faculty thus look not only to the MOE but also to MOST to guide and coordinate their research capacities. MIIT, meanwhile, oversees industrial policy implementation and high-technology development zones, which often draw in and facilitate university-industry research collaboration, diffusion, and interconnection with fundamental research and the education ecosystem. MIIT also manages China's most important defense-focused universities, known as the Seven Sons of National Defense. CAS, the largest research institution in China, is responsible for a substantial portion of China's broader innovation and education ecosystem, including running hundreds of research institutes and state key laboratories, which are often co-located with universities, as well as directly overseeing two of China's most prestigious research universities.

Ministry of Science and Technology (MOST)	MOST sets the top-level goals and long-term plans for the entire civilian-focused S&T research system. ²²² It also manages China's state-run system of basic and applied science laboratories, and it is responsible for designating laboratories as state key laboratories, which gives a laboratory access to consistent annual funding rather than having to compete for grants. ²²³ MOST operates the Torch Center, the government agency that creates the infrastructure for China's 173 high-tech industrial development zones and oversees their operation. ²²⁴ Over 80 percent of the state key labs are located in these industrial clusters. ²²⁵ MOST has shifted its approach to funding science, increasingly focusing on the quality of research over the quantity of research centers. In particular, MOST announced in August 2022 that it will focus support into state key laboratories that are producing research "deemed useful" for the nation and will restructure or withdraw support from those that are not directly supporting its techno-industrial plans. ²²⁶
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Ministry of Science and Technology (MOST)— <i>Continued</i>	MOST also absorbed the National Natural Science Foundation of China (see below) and the State Administration of Foreign Experts Affairs, giving it direct control over much of the funding for science research and China's talent recruitment policies, respectively.* ²²⁷
National Natural Sciences Foundation of China (NSFC)	The NSFC is the major funding agent for research projects in natural sciences. ²²⁸ It evaluates research proposals and awards grant money to researchers at universities and research institutes. ²²⁹ In 2021, the NSFC provided \$4.8 billion (RMB 30.8 billion) in funding to around 20,000 research projects in basic science, accounting for 16.9 percent of China's total basic research expenditure. ²³⁰ In 2017, 64.5 percent of papers published by Chinese researchers in journals included in the Science Citations Index noted the NSFC as a funding provider. ²³¹ In 2018, the NSFC was placed directly under MOST, which gives MOST control over 45 percent of the government's funding for R&D. ²³²
National Social Science Fund (NSSF)	The NSSF is the main source of funding for social sciences research at Chinese universities. ²³³ The NSSF is a research funding body under the CCP's Leading Group for Philosophy and Social Sciences that provides grants to research projects in the social sciences. [†] ²³⁴ Through the NSSF, the CCP uses grant funding to control the direction of social science research. Since 2012, NSSF funding has increasingly skewed toward proposals tied to Xi Jinping's ideology or the development of Marxism. ²³⁵ In 2022, the NSSF had a budget of \$433 million (RMB 2.9 billion) for funding research. ²³⁶
State Administration for Science, Technology, and Industry for National Defense (SASTIND)	SASTIND is an agency under MIIT that sets top-level policies for China's defense-focused innovation ecosystem. SASTIND oversees China's 56 defense S&T key laboratories, which focus on defense R&D. [‡] ²³⁷ SASTIND also directly administers the Seven Sons of National Defense, a group of universities tied to China's defense industry.§ The agency has also reached agreements with other state agencies, including the Ministry of Education, to jointly supervise 61 additional universities and boost defense-related research activity at those institutions. ²³⁸

*As part of a major restructuring of MOST announced in March 2023, the State Administration of Foreign Expert Affairs will be transferred to China's Ministry of Human Resources and Social Security. For more on MOST's changing role in managing China's industrial policy, see Chapter 3, Section 2, "Fiscal, Financial, and Debt Problems Weigh Down Beijing's Ambitions."

†The NSSF is directly run by the National Office for Philosophy and Social Sciences under the State Council, which handles the daily work of the CCP leading group of the same name. National Office for Philosophy and Social Sciences, *Departmental Budget 2022*, March 2022, 3. Translation.

‡These laboratories are likely comanaged by the CCP's Central Military Commission Equipment Development Department. Alex Stone and Ma Xiu, "The PRC State & Defense Laboratory System: An Overview," *China Aerospace Studies Institute*, April 2022, 1.

§These universities are Beijing Institute of Technology, Beihang University, Harbin Engineering University, Nanjing University of Aeronautics and Astronautics, Nanjing University of Science and Technology, and Northwestern Polytechnical University.

Ministry of Education (MOE)	<p>The MOE oversees the entire higher education system. Its main responsibilities include:</p> <ul style="list-style-type: none"> • Managing and funding the 75 universities under its direct administration • Administering the <i>gaokao</i> • Jointly managing the Double First-Class University program alongside the Ministry of Finance and National Development and Reform Commission • Accrediting degree-granting programs and assessing quality of universities • Publishing guidelines on teaching academic subjects • Approving Sino-foreign joint universities and education programs²³⁹ <p>In addition, the MOE manages 450 MOE key laboratories, 149 of which are also designated as state key laboratories, making it the largest administrator of these laboratories in China.²⁴⁰</p>
Chinese Academy of Sciences (CAS)	<p>CAS is the largest research institution in China and is directly under the State Council.²⁴¹ In addition to research conducted at its more than 100 institutes, CAS also operates the University of Science and Technology and the University of Chinese Academy of Sciences, two of China's leading research universities.²⁴² CAS runs 153 key laboratories, many of which are designated state key labs.²⁴³</p>

Geopolitical Impetus behind 2023 Party-State Restructuring of the Research Ecosystem

China's Party-state is proactively implementing reforms in its S&T institutions to surmount technological limitations and bolster domestic innovation capabilities amid intensifying geopolitical rivalry. As part of the most recent Party and state reorganization in March 2023, the Party-led Central Science and Technology Commission was established, becoming the highest-ranked authority over the entire S&T research ecosystem, surpassing the State Council's National Science and Technology Leading Group, which previously held the top position. The office for this new S&T commission will be housed within MOST, greatly increasing the ministry's bureaucratic sway. At the same time, however, MOST had substantial responsibilities removed from it and distributed to other agencies. This is apparently intended to increase the ministries' role in macro-level direction rather than micro-level implementation. State Councilor Xiao Jie said that restructuring MOST was specifically motivated by the "severe situation" of "international technology competition, containment, and suppression."²⁴⁴ There also appears to be a comprehensive effort underway to distinguish basic science and research from applied industrial policy and commercialization. The most notable bureaucratic change involves transferring MOST's responsibilities for high-tech development zones to MIIT.²⁴⁵ Likewise, while then Vice Premier Liu He previously oversaw both industrial policy and S&T, these responsibilities have now been divided between Premier Li Qiang and a vice premier. Premier Li will be responsible for a basic research portfolio that includes education, science, and technology issues, while the vice premier will be responsible for industrial policy, market reform, and state-owned enterprises.²⁴⁶

Appendix III: Selected Education System Guidance Documents since 2019

These top-level documents provide guidance to the rest of the Party-state system. These documents are akin to “wish lists” that are aspirational and broad. Nonetheless, they point to areas wherein the Party-state perceives weaknesses in its educational system.

State Council and Central Committee (2019): “China’s Educational Modernization 2035.”²⁴⁷ This is the highest-level guidance document on China’s education system produced by the Party-state. The document emphasizes being both “red and expert,”* but overall it evinces an understanding of the key challenges facing China’s education system.

Overarching Priorities:

- (1) Thoroughly study and implement Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, (2) develop high-quality education with Chinese characteristics to the world’s leading edge, (3) promote the popularization of high-level and high-quality education at all levels (e.g., provide quality preschool, compulsory, high school; improve vocational capabilities), (4) realize the equalization of basic public education services, (5) build a lifelong learning system for all, (6) enhance the cultivation and innovation capabilities of first-class talents (e.g., significantly improve the competitiveness of higher education), (7) build a team of high-quality professional and innovative teachers, (8) accelerate the reform of education in the information age, (9) create a new pattern of opening up education internationally, and (10) promote the modernization and enhance the capabilities of the education governance system.

14th Five-Year Plan Outline (2020):²⁴⁸ This document provides shorter-term overarching guidance based on the Party’s recognition of ambitions and challenges, per the 2035 outline above.

Overarching Priorities:

- “Construct a high-quality education system”: (1) promote equitable basic public education, (2) enhance the adaptability of vocational and technical education, (3) increase the quality of higher education, (4) build teams of high-quality professional teachers, and (5) deepen education reform (i.e., focus on quality and create evaluation systems).
- “Advancing socialist culture”: (1) promote Xi Jinping Thought and (2) develop philosophy and social sciences with Chinese characteristics.

*In 1963, the CCP introduced the “red and expert” policy to control access to higher education, requiring that applicants excel in both technocratic and ideological elements. “Red and expert” has reemerged in higher education in recent years as universities incorporate Xi Jinping Thought into their curricula. University Heidelberg, “Red and Expert—Negotiating Academic Freedom in China,” October 28, 2022.

Selected Specific Goals (these goals speak to the increasing recognition, at the highest levels of the Party, of vocational education's importance):

- Enhance the adaptability of vocational and technical education ... deepen the integration of production and education and school-enterprise cooperation, encourage enterprises to conduct high-quality vocational and technical education, and explore an apprenticeship system with Chinese characteristics ... build a number of high-level vocational technical colleges and majors, and steadily develop vocational undergraduate education ... support high-level engineering universities in organizing vocational and technical teaching majors and establishing a mechanism for the joint training of “double-qualified” (i.e., academic and business qualifications) teachers by colleges and universities, vocational schools, and industry enterprises.
- Accelerate the training of talents in higher education that are in short supply: science, engineering, agriculture, and medical majors.
- Increase the gross enrollment rate of higher education to 60 percent ... increase the gross enrollment rate in high school education to 92 percent or higher ... increase the gross enrollment rate in preschool education to over 90 percent.

Ministry of Education 14th Five-Year Plan (2021): “Implementation Plan for Promoting an Educational Powerhouse during the 14th Five-Year Plan Period.”²⁴⁹ This document was produced following the outline of the 14th Five-Year Plan document.

Overarching Priorities:

- (1) Consolidate the achievements of basic education in poverty alleviation, (2) integrate production and education in vocational education, and (3) develop well-rounded higher education.

Selected Specific Goals:

- Accelerate the construction of “double first-class” universities and majors and vigorously strengthen disciplines and majors in urgently needed fields ... significantly improve the ability to cultivate talents, and speed up the cracking of the “stranglehold” over key core technologies. In key fields such as integrated circuit and energy storage technology, a number of national industry-education integration innovation platforms will be constructed; build a joint training base for graduate students with industry-education integration.
- In terms of specific project planning and arrangement, priority should be given to the construction of teaching and scientific research facilities for integrated circuits, AI, energy storage technology, quantum technology, high-end equipment, smart manufacturing, biotechnology, medical research, digital economy (including blockchain), and other related disciplines.

General Office of the CCP's Central Committee (2021): Opinions on Promoting the High-Quality Development of Modern Vocational Education.²⁵⁰ This document further outlines the growing recognition the Party places on vocational education.

Overarching Priorities:

- By 2025, establish a “modern vocational education system”; by 2035, ensure the overall level of vocational education is at the forefront of the world.
- Enhance the adaptability of vocational education; build a skill-based society; cultivate more high-quality technical and skilled personnel to “comprehensively construct a modern socialist country.”

Selected Specific Goals:

- Better integrate production and education, giving priority to the development of strategic emerging industries such as advanced manufacturing, new energy, new materials, modern agriculture, modern information technology, biotechnology, and AI.
- For vocational schools, work with leading enterprises to participate deeply in vocational education professional planning, curriculum setting, teaching material development, teaching design, and teaching implementation and cooperate to build new majors and develop new courses; implement financing, land, credit, and tax policies to enterprises integrating production and education; and accelerate the establishment of the “vocational education college entrance examination” system.
- Comprehensively improve the quality of teachers; design and develop courses according to actual production and job needs; update the teaching standards in a timely manner; and incorporate new technologies, new processes, new norms, and typical production cases into the teaching content in a timely manner.
- Explore the international development model of “Chinese + vocational skills” and promote vocational schools to follow Chinese companies to go out; actively create a number of high-level international vocational schools; and launch a number of internationally influential professional standards, curriculum standards, and teaching resources.

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SECTION 2: FISCAL, FINANCIAL, AND DEBT PROBLEMS WEIGH DOWN BEIJING'S AMBITIONS

Abstract

Optimism surrounding China's post-COVID economy at the beginning of 2023 has all but vanished. For two decades, this growth model has relied on debt-fueled investment in both commercial and residential real estate and infrastructure, which combined, have generated employment and revenue, and routinely accounted for 40–45 percent of China's gross domestic product (GDP). Chinese Communist Party (CCP) policy decisions have contributed directly to weaknesses and the collapse in the real estate and infrastructure sectors. The CCP's approach has left the country encumbered with an unsustainable debt burden and a deeply imbalanced economy, with China unable to consume what it produces and reliant on export-led growth. These structural problems have become acute, posing significant political and economic challenges to the Party-state. Confident that its strong central government balance sheet can prevent systemic instability, the CCP is focused on constraining the rapid growth in debt at the local levels where some of the largest economic challenges are concentrated. Beijing intends to grapple with structural issues by asserting more top-down control, aiming to defuse debt risks while steering more resources into the Party's technology ambitions.

Key Findings

- China has relied upon investment in real estate and infrastructure to create employment, generate revenue for local and central government coffers, support upstream industries like steel and cement, and broadly drive its domestic economy. This decades-old debt-fueled model is now facing its most severe challenge. A crisis in China's real estate sector, which accounts for 25–30 percent of the country's GDP, has cascaded through the economy. Property developers have lost capacity to buy land, purchase construction materials, make payments to contractors, and deliver housing units. Thirty-four of fifty developers have defaulted at some point on dollar-denominated bonds, with the two largest companies in—or at risk of—bankruptcy. Infrastructure construction, which accounts for another 15 percent of GDP, is experiencing similar pressures.
- The property crisis has had a severe impact on local government revenue. Real estate developers' purchase of new land plots has collapsed. Land sales have previously provided roughly one-third of local government revenue essential to education, health, municipal services, and general welfare.

- With roughly 70 percent of household wealth tied up in real estate, falling property sales and prices have shifted consumer focus to reducing existing household debt. This, in turn, is contributing to risks of deflation.
- Despite over two decades of official statements emphasizing the importance of boosting consumption, in 2022, household consumption as a share of GDP dropped to its lowest level in nearly a decade, followed by a slight 2023 rebound. As a result, China will continue to rely on exports to sustain growth, distorting markets and leaning on the rest of the world to absorb its excess production.
- The failure of the real estate model is systemic, and the financing mechanism that underpins it is in acute stress. Rising property loan defaults with falling asset sales and prices have created the conditions for broader instability in the financial system. Bank profit margins are declining and consumer deposit rates are shrinking, while bank balance sheets are carrying an increasing load of undeclared nonperforming loans. These financial strains are occurring at a time when the CCP is opening the sector to foreign investment, raising risks for U.S. citizens invested in pension and wealth management products.
- In addition to the pressures of the pandemic, misguided policy choices by the CCP have contributed to the country's overall debt-to-GDP ratio, which has more than doubled since 2008. In 2023 it passed 300 percent. Much of this debt is passed between one state-owned entity and another to hide the volume of debt and the impact of risk. As an example, 80 percent of local government bonds are purchased by state-owned commercial banks.
- Beijing has stated its intention to address the accumulation in local debt; however, policy choices may be constrained by the financial risks and destabilizing impact on households, foreign investor sentiment, and state and non-state-owned enterprise revenue.

Recommendations

The Commission recommends:

- To combat tariff evasion by Chinese exporters, Congress amend the procedures for investigating claims of trade remedy laws in the Enforce and Protect Act of 2015 to include merchandise subject to tariffs under the findings of the 2018 Section 301 investigation into China's acts, policies, and practices of related to technology transfer, intellectual property, and innovation.
- Congress consider legislation establishing a framework for corporate disclosure requirements to provide investors greater transparency into risks from publicly traded companies' exposure to China. Factors encompassed within the framework may include but not be limited to the percentage of companies' total assets in China, their joint ventures with Chinese firms, the amount and nature of research and development they undertake in China, and the influence of any company personnel

associated with the Chinese Communist Party in corporate decision-making.

- The Joint Economic Committee should consider resuming production of an annual unclassified report on the state of the Chinese economy and economic policy decisions of the Chinese Communist Party. The report would analyze open source and classified data and analysis, leveraging expertise from across the U.S. government, including analysts and economists from the relevant agencies of the intelligence community.
- Congress consider legislation requiring federal financial authorities, including the Federal Reserve, to seek specific information from bank and investment institutions regarding their exposure to, and involvement in, the People's Republic of China. Such information shall include any wealth management products they offer within China and any Chinese investment vehicles they may sell to citizens of the United States directly or indirectly.

Introduction

China's economic landscape in 2023 is impaired by intensifying challenges, many of which are not new but have grown in magnitude over the past three years. Central to these issues is the real estate sector, a cornerstone of China's economy. Its substantial contraction since Beijing imposed austerity measures on lending to developers in 2020 has had a cascading effect, driving the broader economy toward deflation and diminishing household wealth as property sales and prices have dropped. The CCP's public push for Chinese households and nonstate businesses to drive the recovery in 2023 met a muted response. China's soaring official youth unemployment rate in 2023 became the most cited data point in evidence of economic weakness. Consistent with past practice, the Party did not address the concerns, rather it stopped releasing the data after it passed 21 percent in June. The CCP's efforts to censor China's economic data, however, cannot mask the country's economic challenges.

The year has also seen longstanding structural problems reach critical thresholds. For two decades, Beijing's debt and investment-led growth model relied on new property and infrastructure construction, which together reliably accounted for upward of 40–45 percent of GDP. This model's longevity has resulted in a deeply unbalanced economy. Moreover, Party-state lending practices, which favor inefficient state-owned enterprises (SOEs) over nonstate firms, have eroded the country's productivity and saddled the nation with debt. Property developers and local governments, the long-standing source of revenue generation and stimulus, now are heavily weighed down by unproductive debt limiting their maneuvering room to restore the economy. Further challenging and constraining Beijing, China's tax and fiscal structure, tailored around this investment-led model, is facing declining revenue and mounting expenditures. The Party-state under General Secretary of the CCP Xi Jinping nonetheless retains—and is bolstering—its imposing sway over China's economy, aiming to redirect resources into technological development and strategic industries and hoping that innovation can defuse accumulated problems. While the CCP's central balance sheet

provides the strength to pose challenges to the United States in targeted industries, underlying challenges in China's economic model indicate that Beijing's ambitions face growing internal headwinds.

This section begins with an overview of China's economic weakness and the central role of the real estate crisis therein. It then discusses broader structural issues related to overinvestment and underconsumption, accumulation of debt, and the local government fiscal and debt challenge. The section then looks at developments in China's financial and technology sectors. This section draws on the Commission's 2023 hearing on "China's Current Economy: Implications for Investors and Supply Chains," the Commission's staff and contracted research, consultations with policy experts, and open source research and analysis.

China's Real Estate Crisis Devastates Domestic Demand

The collapse in China's real estate sector is a significant contributor to the weakness in China's current economy. Over the last two decades, real estate and related construction has become the cornerstone of China's economy. Lacking other sources of stable investment, China's urban middle and upper classes have traditionally seen homeownership as a one-way bet. Any developments therein matter greatly to China's overall growth, to many other interdependent industries, to households, and to government revenue. Roughly 25–30 percent of GDP annually over the past decade has derived from related activity (compared to 17 percent in the United States), which includes production of the materials used in construction; roughly 70 percent of Chinese household assets are in property (compared to 35 percent in the United States);* and approximately 30 percent of total government revenue over the past decade has been generated via local government land-use sales to property developers.†¹ Real estate development is also a highly leveraged business, with developers funding land purchases and housing construction through loans, bonds, and deposits from home buyers rather than revenue.

As credit tightened, construction and delivery of property slowed, which in turn had a significant impact on households. Chinese house-

*There are many estimates of real estate's share of household wealth, but most reporting goes with the 70 percent figure. The 70 percent figure derives from a People's Bank of China survey of urban households in 2019 (however, as the report notes, only 59 percent is in the form of residential property). State-owned newspaper *Economic Daily's* 2019 housing wealth survey produced similar numbers: 71 percent in real estate for urban households and 52 percent for rural. One frequently cited source, China's Southwest University of Finance and Economics *2018 Urban Household Wealth Health Report*, however, estimates that 78 percent of urban wealth is in real estate. Other estimates are lower, some by quite a lot. Goldman Sachs estimates 62 percent of household wealth is in property. The Chinese Academy of Social Sciences estimates real estate is just 33 percent of assets in household balance sheets.

†The state owns all urban land in China and leases it to property holders for varying durations depending on the land use—70 years for residential use, 50 years for commercial use, and 40 years for industrial use. Local governments also frequently raise capital through loans from quasigovernment investment vehicles using converted land as collateral. Rural land is owned by village collectives. Lacking sufficient tax revenue to meet their expenditure obligations, many local governments in China generate a substantial portion of their revenue through land expropriation: the governments compel farmers to sell rights to their land to the government far below market value, rezone this land as "urban," and then lease it to property developers at a significant return. Meg Rithmire, "Land Institutions and Chinese Political Economy: Institutional Complementarities and Macroeconomic Management," *Politics & Society* 45:1 (2017), 123–153, 126, 135; *China Economic Review*, "If Beijing Is Your Landlord, What Happens When the Lease Is Up?" June 17, 2013; Wen Wang and Fangzhi Ye, "The Political Economy of Land Finance in China," *Public Budgeting & Finance* 36:2 (2016), 91–110, 91–93.

holds serve as the most important financiers to real estate developers, meaning they effectively prop up the central pillar of their economy.² Roughly 90 percent of home sales in 2021 were for “presold” units.³ This means Chinese families took on interest-bearing mortgages which they then, in effect, lent on without interest to developers in exchange for yet-to-be-completed units.⁴ The developers relied on prepayments for under-construction units to continue paying contractors and buying land from local governments to turn into more housing units. However, when developers like Country Garden and Evergrande could no longer take on new debt because of limits set by the “three red lines” policy,* they began defaulting and could not complete construction on presold units. Alarmed buyers protested publicly, defaulted on home mortgages, and actively reduced their debts.⁵

Household disillusionment with the sector has continued into the first half of 2023, with outstanding residential mortgage debt declining year-over-year in Q2 2023, a drastic change from the previously rapid pace of mortgage debt accumulation prior to the pandemic.⁶ From 2014 to 2019, for example, mortgage debt increased by approximately 260 percent, or 21.2 percent every year, from \$1.6 trillion (renminbi [RMB] 11.5 trillion)[†] to \$4.15 trillion (RMB 30.1 trillion).⁷ Once households lost confidence in the property market and in developers, the flow of funds at the core of much of China’s economy seized up, with developers’ most important revenue source declining at the same time they were cut off from bank lending.⁸ Thousands of recipients of those funds—most importantly contractors, upstream industries, and local governments—are now feeling the pain.⁹ Developers remain in crisis as of September 2023, with Country Garden, China’s largest developer, teetering on the verge of default and in a grace period after missing coupon payments on off-shore dollar-denominated bonds.¹⁰ China’s second largest developer, Evergrande, already defaulted and is still struggling to restructure its staggering \$340 billion in liabilities.¹¹ Evergrande has filed for bankruptcy in U.S. courts, seeking legal protections that may have implications for investors.¹²

After peaking in early 2021, new housing construction starts and total sales have both been on a near-continuous decline. Since then, activity in the property sector has been reduced by more than half, with new housing starts down 57 percent and sales down 39 percent from their peaks.¹³ Analysts at Rhodium Group expect the real estate contraction will not level off until 2024 at the earliest.¹⁴ In the meantime, the Party-state has stepped in, prioritizing completion of presold houses to avoid further unrest. Highly leveraged nonstate developers have sold projects and equity to state-owned developers at the same time policy banks have stepped in to support completion of presold units.¹⁵ The unfinished housing stock, as implied by the data, is now at a record low, but at 65 million square meters still represents a major challenge for Beijing to resolve.¹⁶

The intention behind diminishing the role of the property sector is likely three-fold: to limit excessive expansion of real estate con-

*The “three red lines” cuts off new bank loans to real estate developers that do not meet certain prudential requirements, including: (1) a debt-to-asset ratio of 70 percent; (2) a debt-to-equity ratio of 100 percent; and (3) short-term borrowing on par with cash reserves.

[†] Unless noted otherwise, this section uses the following exchange rate throughout: \$1 = RMB 7.25.

struction, to redirect Chinese household savings into technology and the Party-state's "innovation-driven development strategy," and to free up resources to facilitate a longer-term transition toward more sustainable domestic demand.* The short-term impact, however, has been devastating for China's economy. The central government now faces a dilemma: it is hesitant to restimulate the sector but also wary of further home price declines, which could further stifle consumer spending as households feel poorer. Controlling the expansion in China's real estate sector, long delayed but necessary, by no means ensures that new growth drivers will materialize. Indeed, nothing of sufficient scale can fill the hole in construction activity caused by the diminishment of the real estate sector.

Property Price Declines Trigger "Balance Sheet Recession" and Deflation

The term "balance sheet recession" is being used with growing frequency to characterize the state of the Chinese economy.¹⁷ It refers to an economic situation wherein individuals, firms, and even local governments, anxious about their debt levels and potentially declining asset values, prioritize repaying existing debts rather than undertaking new expenditures, new borrowing, or new investments.¹⁸ Such behavior can lead to deflation, a situation where overall price levels decline due to a lack of demand. Deflation can lead to a problematic cycle of delayed spending and investment, as households and businesses fear investments will not generate returns and must repay loans in money worth more than what was borrowed, stifling economic growth.[†]

Though household spending has been the only driver of China's GDP growth in 2023, household consumption expenditure growth is still below pre-pandemic levels.[‡]¹⁹ Weak employment, especially youth unemployment, plays a role in this, as does lack of policy support for household incomes.²⁰ Property price declines likely play the biggest part, though data from property agents and private providers indicate that prices have plunged between 10 and 25 percent from their peak in many of China's major second-tier cities§ versus only 6 percent in official statistics.¶²¹ The negative wealth effect

*The "innovation-driven development strategy" is a term formally introduced under General Secretary Xi at the 18th Party Congress in 2012 to refer to the Party-state's growing emphasis on developing science and technology prowess and striving to rely more on innovation and productivity for growth. *Xinhua*, "Explainer: What Does China's Innovation-Driven Development Strategy Mean for the World?" March 9, 2023.

†Because there is an opportunity cost to holding money, the real value of uninvested savings effectively decreases over time. In a deflationary environment, however, the expectation is reversed: the real value of money increases over time, as the same unit of currency can purchase more goods and services as price levels drop. Debt burdens thus get magnified, and because real interest rates are equal to nominal rates net of inflation, the real interest rate borrowers must pay also increases as price levels decrease.

‡Retail sales grew at a meager 3.1 percent year-on-year in Q2 2023 (a number that is still likely overstated), while Alibaba's online sales fell 4.2 percent. Logan Wright, Allen Feng, and Endeavor Tian, "June/Q2 2023 Macro Data Recap," *Rhodium Group China Markets Research*, July 17, 2023, 1.

§Chinese cities are unofficially but widely grouped into four "tiers" based on population, affluence, and whether they are governed at a provincial level (e.g., Shanghai, Chongqing, Beijing, and Tianjin are provincial-level municipalities), as provincial capitals, or at lower echelons of administrative hierarchy. For example, Shanghai is a first-tier city; Chengdu, the populous capital of Sichuan and a regional hub in the southwest, is a second-tier city; Wenzhou, a prefecture-level port city and tourist destination on the coast of Zhejiang Province, is a third-tier city; and Xiangcheng, a county-level city in Henan Province famous foremost as the birthplace of the first president of the Republic of China, Yuan Shikai, is a fourth-tier city. Dorcas Wong, "China's City-Tier Classification: How Does It Work?" *China Briefing*, February 27, 2019.

¶While property price declines are not yet akin to the real estate bubble bursting in Japan in the 1990s, secondary market property prices in China's second-tier and third-tier cities have

from the hit to most households' primary asset has led consumers to shore up savings, avoid new borrowing, withdraw from mortgage debt and riskier investments such as wealth management products, constrain their consumption, and funnel into bank deposits.²² Even sharper price decreases remain a key risk.²³

Recent data indicate that China remains near deflationary territory in key areas, pointing to the seriousness of the economic downturn.²⁴ Deflation compounds the difficulty in reviving household spending as it incentivizes households to delay their purchases and hoard cash.²⁵ Consumer price growth dropped to zero in June for just the second time in over a decade and turned negative in July, but bounced back in August.²⁶ Producer prices, meanwhile, saw a continuous yearlong decline accelerate sharply in June, caused in large part by weakness in the property and construction sectors, and has only ameliorated slightly in August.²⁷

The collapse in the real estate industry is a core driver of deflation, as declining construction drags down producer prices as well as broader industrial demand. As with households, nonstate businesses across China's economy have refrained from new investment and have instead drawn down inventories amid producer price deflation.²⁸ Nonstate business investment in the first six months of 2023 declined 0.2 percent year-on-year, the first time in years this figure has declined outright.²⁹ The data point is particularly notable given the weak base in 2022, indicating the dire straits most private businesses are in following Zero-COVID.³⁰ Meanwhile, with prices falling, businesses have decreased their borrowing despite Party-state admonitions to banks to loosen lending standards and lend more to the real economy. The People's Bank of China (PBOC) has also eased monetary and banking policy, lowering interest rates multiple times this year and decreasing banks' reserve requirement ratio (or the amount of deposits banks must hold in reserve) three times. Such moves to increase liquidity and stimulate lending have thus far been largely insufficient to stimulate the economy (for more, see "Banking Sector Struggles to Deploy Credit to Support Growth" below). Since 2022, almost all investment growth in China has come from state-owned entities, which do not operate according to market rationality. The CCP is now pressuring economists to avoid discussing deflation and other negative economic news.³¹ In July 2023, the Central Committee and State Council jointly issued a 31-point opinion on how to increase support for the nonstate sector. While likely a welcome message for Chinese businesses, it is far from enough to restore business confidence or paper over massive economic challenges.³²

The CCP Tries to Control Economic Statistics—and the Narrative about Its Rise

Control over economic data has steadily increased under Xi's tenure and reached new levels in 2023. As the CCP has relentlessly trained its focus on achieving great power status under Xi,

continued a multiyear decline into 2023, with year-on-year decreases each month thus far in 2023. First-tier city secondary market prices (i.e., Shanghai, Beijing, Guangzhou, and Shenzhen) even saw their first official decline overall in June 2023 since August of 2019. Logan Wright, Allen Feng, and Endeavor Tian, "Property Market Chartbook, July 2023," *Rhodium Group China Markets Research*, July 27, 2023, 5.

The CCP Tries to Control Economic Statistics—and the Narrative about Its Rise—*Continued*

the narrative of China's robust, inevitable economic rise is a critical propaganda message Beijing seeks to guard and amplify. As just one of many machinations to bolster this narrative, Beijing routinely manipulates its headline data, often retroactively adjusting previous years' data downward so as to fictitiously create year-over-year growth. As Logan Wright, partner at the economic research firm Rhodium Group, noted in testimony before the Commission, "China's headline economic data—meaning the data likely to generate media coverage, such as GDP growth—should be understood as critical elements of China's internal and external narrative management concerning the economy."³³ Data series that contradict Beijing's narrative, or that might allow other observers to derive an alternative picture, are increasingly suppressed and restricted, such as China's youth unemployment data.

With Weak Domestic Demand, China Leans on Consumer Markets Elsewhere

Export-oriented manufacturing has been a singular boost to China's economy since COVID. Net exports contributed nearly a quarter of China's real GDP growth from 2020 to 2023, the largest share since the late 1990s.³⁴ In contrast to the property sector, the importance of exports has been routinely emphasized, including by Premier Li Qiang at a State Council meeting in April 2023, which stressed the importance of implementing policies to promote exports.³⁵ Even during lockdowns in 2022, China enacted policies to ensure export-oriented manufacturers were protected, subsidized, and able to sell to global markets. China's mercantilist economic structure and policy orientation continues to impact global trade.

China's exports reached \$3.6 trillion in 2022—up 44.6 percent from \$2.49 trillion in 2019.³⁶ When looking just at manufactured goods, China reached roughly \$3.5 trillion in exports while importing just \$1.5 trillion at the end of 2022.³⁷ Data through the first seven months of 2023 indicate China's trade has contracted from record highs in 2022, but an evolving mix of manufacturing exports, including automobiles and legacy semiconductors, pose new challenges to the United States and global trade. Investment into the manufacture of electrical machinery and equipment was up a staggering 42.6 percent, the most of any category, indicating there are still select pockets of economic activity.³⁸ Meanwhile, cars produced in China, particularly electric vehicles, emerged from the pandemic

* China's 14th Five-Year Plan effectively makes this obligatory by doing away with targets for the services sector's growth and instead calling for the extraordinarily high manufacturing share of GDP to remain stable. *Xinhua*, "(Two Sessions Authorized Release) The 14th Five-Year Plan for National Economic and Social Development and the Long-Range Objectives through 2035" ([两会授权发布] 中华人民共和国国民经济和社会发展第十四个五年规划和 2035 年远景目标纲要), March 12, 2021. Translation.

† China issued substantial tax rebates to manufacturing exporters in 2022, totaling \$243.3 billion (RMB 1.55 trillion). Meanwhile, China taxes imports at regular values, earning \$231.3 billion (RMB 1.63 trillion) in tax revenue, thus intentionally creating an imbalance in favor of its own exports while discouraging foreign imports. China Ministry of Finance via CEIC, CN: *Govt Revenue: General Public Budget Revenue: Tax: Refund of Tax for Export; Consumption and Value Added of Imported Product*.

as a major force in international trade.³⁹ Up until 2020, China had only a moderate share of global auto exports; exports have since skyrocketed. In the first quarter of 2023, China surpassed Japan as the world's largest auto exporter, exporting 1.07 million vehicles, 58 percent more than the previous period.⁴⁰ While U.S. and Western manufacturers such as Tesla, BMW, and Renault still make up a substantial share, Chinese companies such as SAIC Motor Corp. are also among the top exporters.⁴¹

China's Long Foretold—Yet Still Unrealized—Rebalancing

While real estate is at the center of China's economic problems in 2023, the roots of the problem are deeper, residing in the Party-state's growth model. Over the last two decades, the defining characteristic of Beijing's economic model has been heavy reliance on debt-fueled investment and exports relative to domestic household consumption.* As Party secretary of Zhejiang Province in 2005, Xi Jinping presciently worried about the problems such an economic model would bring, writing that "a long-term high investment rate and a relatively low consumption rate, and the imbalance between investment and consumption ratios, will result in growth overly dependent on investment, causing a series of issues in the macro areas of production, distribution, and consumption."⁴² Today, at 38.5 percent of GDP, China's private consumption share of GDP remains by far the lowest of any major economy, at nearly half the United States' 68.2 percent share and small even in comparison to the 50 percent typical in other East Asian economies that pursued a similarly investment-driven growth model.⁴³ From 2010 through the end of 2021, China's economy saw a small move in the direction of rebalancing away from investment and toward consumption-led growth (with consumption's share of GDP increasing from 34.6 percent to 38.5 percent).⁴⁴

The Party-state's choice not to support households during its COVID-19 containment led consumption's share of GDP by the end of 2022 to fall to its lowest since 2014.⁴⁵ Beijing extended substantial subsidies, tax breaks, and cheap loans to businesses to try to prevent some shutdowns, but in stark contrast to the United States and other developed countries it offered relatively little assistance to households themselves.⁴⁶ At the same time, China's poorly developed social welfare and healthcare systems placed the burden largely on households and individuals to take care of themselves.

Despite rhetoric about increasing domestic consumption, in practice nearly all meaningful economic stimulus continues to go to producers in the form of subsidies, below-market loans, and tax breaks. This is one reason why households responded tepidly when Beijing called upon them to drive the economic recovery in 2023. Even the Party-state's limited consumption promotion strategies—such as subsidizing purchases of big-ticket items like electric vehicles—tend to be narrow and clearly intended to bolster a specific favored in-

*In the expenditure approach to GDP accounting, the most frequently used, there are four categories of growth: consumption, investment, government spending, and exports, represented by the equation $Y=C+I+G+NX$, wherein Y is GDP, C is household or private consumption, I is investment, G is government spending, and NX is exports minus imports. In this section, consumption only refers to household consumption unless otherwise stated. "Final consumption" is another frequently used measure that refers to both household consumption and government spending combined.

dustry. Notwithstanding the Party-state recently releasing several high-level plans to boost domestic consumption, policymakers reliably and consistently fail to offer proposals that would meaningfully bolster consumption.*⁴⁷

Failure to Rebalance Is Rooted in the Party-State's Demand for Control over the Economy

China's investment-led growth model is a bulwark of the Party-state's organizational apparatus and its ability to continue co-opting elites and ensure regime survival. However, it also perpetuates a system of regulatory capture in which state-run banks keep SOEs operating through evergreen loans. At the same time, the central government establishes administrative monopolies to insulate SOEs from nonstate sector competition and guarantee their market share and profit margins. These are defining features of the Party-state's economic management, and they shed light on its reluctance to stimulate household consumption and rebalance away from an investment-led economic model. The Party-state retains control in part through a hierarchical rent-sharing scheme: the Chinese public's accrued savings are held in captive deposits in state banks because there are few alternative investment avenues. These savings are then lent to SOEs and a network of elites in key sectors such as real estate, infrastructure, utilities, and upstream commodities at below-market interest rates to fund centrally directed projects. But because the system is so indebted, its continued stability—the continued ability of highly indebted SOEs to service debt—depends on further lending and directing SOEs to fulfill state projects, regardless of whether there is market demand for them. As economists Thomas Rawski and Loren Brandt described in 2020,

*Authoritarian governance dominated by self-perpetuating elites occupies the core of China's political economy. The power and status of leaders at all levels rest on personal networks of patronage and loyalty. Rewarding supporters with money, positions, and commercial opportunities forms a critical bulwark of elite adherence, and thus regime survival. The continuing need to distribute resources inclines leaders toward institutions and policy structures that place large flows of rents at their disposal.*⁴⁸

Developments that undermine the Party's capacity to control resources are perceived as threats by Party leaders. This plausibly explains why growing calls by both Chinese and U.S. economists to stimulate consumption via direct distribution of resources to households appear to be nonstarters: bottom-up consumption does not buy elite adherence, nor can consumer spending be as readily funneled into the Party-state's priorities, such as technological self-reliance and industrial upgrading.

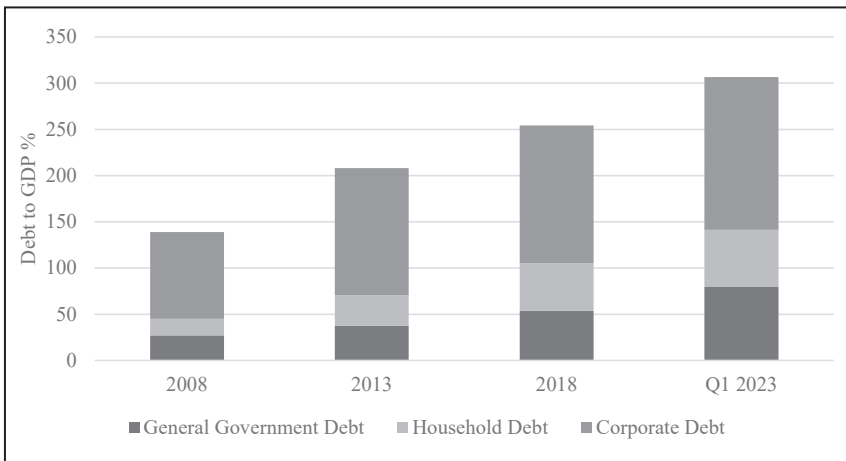
*This pattern is not new. Most famously, in 2007, then Premier Wen Jiabao—opining on the same issue—described China's economy as “unstable, unbalanced, uncoordinated, and unsustainable” and promised to boost consumption. China Government Network, *Wen Jiabao: China Has the Conditions to Continue to Maintain Stable and Rapid Economic Development*, (温家宝: 中国具备继续保持经济平稳较快发展的条件) March 16, 2007. Translation.

China's Debt Burden Forecloses Old Growth Playbook

The Overall Debt Picture

Overall debt to GDP in China is now more than double what it was in 2008 (Figure 1), according to data from the Bank for International Settlements (BIS).⁴⁹ Almost every sector's balance sheet in China is now highly leveraged. Chinese households, once touted as debt averse with a meager 17.9 percent of debt to GDP in 2008, now hold an estimated 63.5 percent of GDP in debt as of June 2023, only slightly less than in the United States.⁵⁰ Corporate debt, meanwhile, rose rapidly in the early 2010s and has leveled off at 165.1 percent of GDP, double the 80 percent level in the United States.⁵¹ China's general government debt in 2023, according to BIS, is estimated at only 79.4 percent of GDP, lower than the 120 percent in the United States.⁵² But this is misleading: the International Monetary Fund's (IMF) more expansive "augmented debt" calculation gives a more accurate estimate of China's total government debt at 121 percent of GDP (this includes officially recognized central and local debt, implicit local debt, and debt from government funds).⁵³ China's central government itself maintains the only unencumbered balance sheet in the country, at 23 percent of GDP in 2023 (up from 14.8 percent in 2014).⁵⁴ While explicit local government debt is only 32 percent of GDP, the implicit debt of their locally owned financing vehicles accounts for another 53 percent of GDP in 2023, bringing total local debt to 85 percent of GDP.⁵⁵

Figure 1: China's Total Debt to GDP, 2008–Q1 2023



Source: Bank for International Settlements, "BIS Total Credit Statistics."

The upshot of China's debt situation is that it has achieved developed country debt levels at middle income GDP per capita levels. China's economic growth over the last two decades is inseparable from its growth in debt, as China's banking sector has ballooned from \$9 trillion in assets to a staggering \$56 trillion at

the end of 2022, representing the largest single country expansion in credit in modern economic history.⁵⁶ This unprecedented expansion in credit largely flowed into China's real estate and infrastructure construction bubble. Research from the IMF and others has shown that China's productivity slowdown is closely linked to the expansion of credit to these sectors over the last decade, as investment in more productive areas was crowded out.⁵⁷ With viable infrastructure projects increasingly difficult to find and housing arguably oversupplied, substantial additional construction appears unlikely.⁵⁸ As Dr. Wright noted in testimony before the Commission, the financial system in China will not be able to maintain such extensive credit growth again and will "no longer be as capable of insulating unproductive enterprises from default."⁵⁹ In effect, the old playbook for growth in China is over. And with the Party-state structurally antagonistic to consumer-led growth, it is difficult to see where new growth will derive. As China settles into a lower growth equilibrium, it must now also contend with the accumulated problems from its previous growth model.

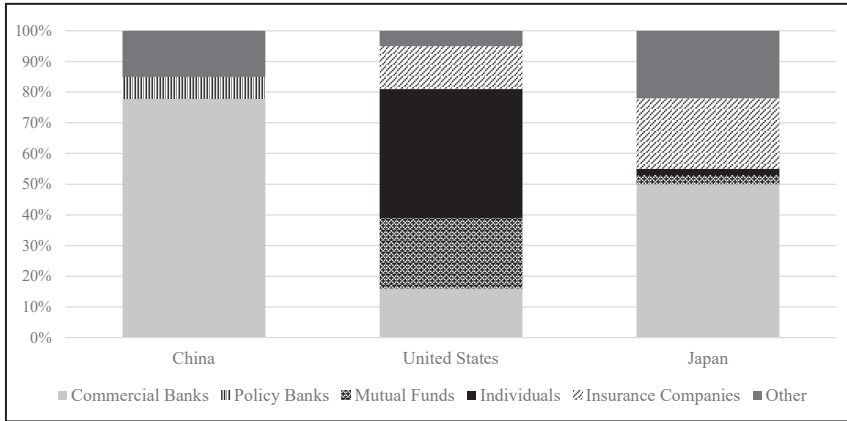
Local Government Debt: The Crux of the Problem

Under General Secretary Xi's tenure, local government debt has accumulated more rapidly than any other sector.⁶⁰ There are two broad categories: (1) the explicitly recognized bonds of local governments themselves; and (2) the debt of the SOEs they control, known as local government financing vehicles (LGFVs). Analysts refer to the latter as "implicit debt" of the local governments, as investors in China treat these entities as backstopped by local governments, even as Beijing denies these are the government's obligations and instead includes them in corporate debt statistics.*

Explicit Local Debt (32 percent of GDP): The IMF estimates explicitly recognized local government debt in 2023 will total \$5.5 trillion (RMB 40 trillion), equivalent to 32 percent of China's GDP and up from 23.8 percent in 2014.⁶¹ As indicated in Figure 2, ownership of explicitly recognized local government bonds as of 2019 is highly concentrated, with China's commercial banks, overwhelmingly state-owned, purchasing 80 percent of the bonds.†⁶²

*Prior to 2015, municipal governments could not issue debt directly, with the exception of a few pilot programs authorized by China's central government. Because local governments' revenue bases were often insufficient to meet their expenditure obligations, they used LGFVs to evade these restrictions, having the LGFV issue debt on the local government's behalf. This practice has continued even as China legalized municipal debt issuance in 2015. Zhiguo He, written testimony for the U.S.-China Economic and Security Review Commission, *Hearing on China's Quest for Capital: Motivations, Methods, and Implications*, January 23, 2020, 6, 10.

†Officially recognized local government bonds include general and special purpose bonds.

Figure 2: Local Government Bond Holders, 2019

Source: Alex Holmes and David Lancaster, "China's Local Government Bond Market," *Reserve Bank of Australia*, June 2019, 184.

Implicit Local Debt (53 percent of GDP): The IMF estimates overall LGFV debt in 2023 will total \$9.1 trillion (RMB 66 trillion), equivalent to 53 percent of China's GDP and up from 13.5 percent in 2014.^{*63} Ownership of local government implicit debt (i.e., LGFV debt), meanwhile, is a larger and more complicated story than explicit local debt. There are two main categories of LGFV debt: bonds and bank loans.⁶⁴ The exposure to LGFV debt across China's financial system is extremely large. According to estimates as of July 2023 from Dr. Wright and Allen Feng at Rhodium Group, LGFV bonds represented 51 percent of all corporate bonds in China, and LGFV loans comprised 20–25 percent of all of China's bank loans.⁶⁵

LGFV bonds are roughly 25 percent of all LGFV debt.⁶⁶ In contrast to explicitly recognized local government bonds, LGFV bonds are largely privately owned via investment products, including wealth management products and other products issued by fund management companies, trust companies, and nonbank financial institutions. Roughly two-thirds of LGFV bonds were sold in this manner.⁶⁷ Banks purchased most of the rest.⁶⁸

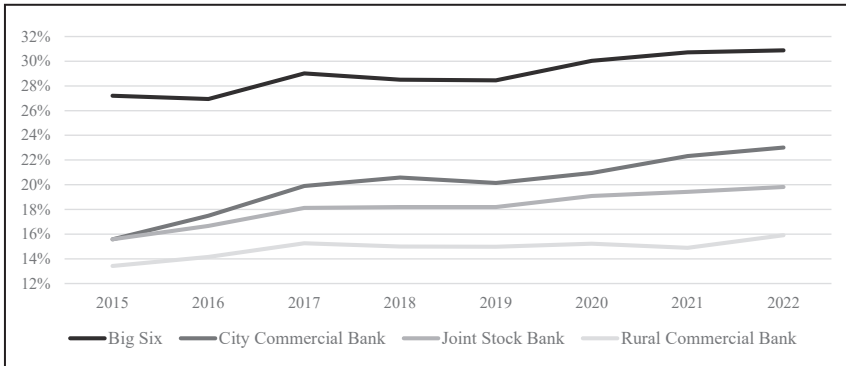
Bank loans, however, are the main funding source for LGFVs. Unlike local governments themselves, their LGFV proxies can borrow directly from banks—which is in fact what they were originally set up to do. Loans make up as much as 75 percent of all LGFV debt, or \$5.66 trillion (RMB 41 trillion), per Dr. Wright and Mr. Feng's calculations.[†] Most loans originate from branches of China's six largest national banks, while a rapidly rising share comes from city

^{*}By the end of 2021, Dr. Wright calculated total LGFV debt stood at \$8.4 trillion (RMB 54 trillion), equivalent to 43 percent of China's GDP, though as he notes this is almost certainly an underestimate. Dr. Wright's calculations derive from a bottom-up survey analyzing roughly 3,000 LGFVs that release financials. Many smaller LGFVs, however, do not publish financials. Logan Wright and Allen Feng, "Tapped Out," *Rhodium Group China Markets Research*, May 23, 2023.

[†]Rhodium Group surveyed a sample of over 300 banks to confirm this number from the bottom up, looking at their lending to four industries that are most heavily dominated by local government infrastructure investment and LGFVs: transportation, power/heat/water production and supply, utilities/public services, and commercial/leasing services. Logan Wright and Allen Feng, "Who Holds China's Local Government Debt," *Rhodium Group China Markets Research*, August 3, 2023, 5.

commercial banks, which are controlled by local governments (see Figure 3).⁶⁹ China's financial institutions are consequently highly exposed to credit risk from LGFVs.

Figure 3: Estimated Holdings of LGFV Loans by Bank Type, 2015–2022



Note: Percentages for each type of bank reflect LGFV loans relative to total loan balance. The big six banks are the six largest national-level banks, namely the Industrial and Commercial Bank of China (ICBC), Bank of China (BOC), China Construction Bank (CCB), Agricultural Bank of China (ABC), Bank of Communications, and Postal Savings Bank of China. City and rural commercial banks are those incorporated at the city and township level and largely controlled by local governments. Lastly, China's 12 joint-stock banks, sitting between the nation's large state-owned banks and smaller city commercial banks, have more diversified ownership but are still state controlled.

Source: Adapted from Logan Wright and Allen Feng, "Who Holds China's Local Government Debt," *Rhodium Group China Markets Research*, August 3, 2023, 6.

While the average LGFV debt-to-GDP ratio in China's provinces is 70.6 percent as of 2021, some provinces—such as Guizhou, with 157.81 percent of GDP—face more severe challenges.⁷⁰ There are growing risks of a potential default on LGFV-issued bonds, an event that has thus far never occurred in China but could have systemic risk implications, as a default could lead to rapid repricing of all such debt.⁷¹ Local government debt is where the Party-state has enabled and allowed debt to accumulate most rapidly in pursuit of growth over the last several years. As the Party-state deals with its debt burdens, this is where some of the greatest potential risks reside.

The heavy debt load local governments carry is also important context to understand the current state of the economy: debt-fueled investment by local governments and their proxies has been the primary lever the Party-state has relied upon to enact stimulus and promote growth over the last two decades. Locally owned banks, controlled by local Party-state officials, have been a particularly critical source of this debt-fueled growth.⁷² This policy support channel is now heavily encumbered (leading to questions about the ability to pull this lever in the future). At the same time, the Party appears more resolved than ever before not to pull it (leading to questions about the will to do so).⁷³

In April 2023, the Politburo reiterated earlier messages sent at both the March 2023 National People's Congress and the December 2022 Central Economic Work Conference, noting that debt—in particular the off-balance-sheet debt held by LGFVs—is at the top of the Party-state's economic agenda.⁷⁴ The central Party-state

currently lacks a clear picture of the volume and composition of such local debt. Beijing's struggle to ascertain and contain such local government debt is underscored by a new round of nationwide inspections reportedly launched in May 2023 by China's Ministry of Finance to understand the scope of the problem.⁷⁵ Meanwhile, the exposure of the banks was clearly demonstrated in the first LGFV debt restructuring pushed through early in 2023, with bank lenders given no choice but to allow borrowers to delay loan payments and extend the time they had to pay back their debts.*⁷⁶ With Beijing signaling more serious intent than ever about reining in local debts, the question is whether the central government would be willing to tolerate the consequences (for more detail, see Appendix: Bureaucratic Reorganization Points to Focus on Local Debt Challenges).

If Beijing were to take effective steps to cut off LGFV borrowing, China's growth would collapse below zero. Local government investment accounts for roughly 14–15 percent of GDP.⁷⁷ Further, LGFVs' role in stimulating China's economy goes beyond infrastructure, as a recent IMF report details.⁷⁸ LGFVs have direct and indirect investment linkages to nearly 5,000 non-LGFV firms, of which roughly half are nonfinancial firms that undertake a large amount of investment relative to income.⁷⁹ LGFVs amplify risks in the system by using their own easy access to credit to support these affiliated companies.⁸⁰ Further LGFV credit constriction would thus have a major knock-on effect. With LGFV income from operating activities so minimal that the IMF estimates new external financing, primarily in the form of debt, is responsible for 80–90 percent of their spending, a reinvigorated deleveraging campaign will inevitably limit LGFVs' ability to fulfill their GDP-boosting role.⁸¹ Whether Beijing would be willing to stomach so much additional economic turmoil on top of the real estate sector's collapse remains to be seen.

China's Fiscal Crisis

China's local governments entered 2023 in a fiscal crisis, with China's overall consolidated budget deficit† having risen to 7.2 percent of GDP (\$1.21 trillion) by the end of 2022, up from 4.9 percent of GDP (\$784 billion) in 2021.⁸² The increase had three major drivers: first, government expenditures rose sharply to provide for Zero-COVID enforcement. Second, tax revenues decreased as many firms reduced operations at the same time Beijing and local governments reduced fees on businesses and granted sizable subsidies and tax credits to firms.⁸³ And finally, property-related taxes as well as sales of land use rights—which together constitute roughly a third

*For an overview of the first LGFV restructuring in the city of Zunyi, in Guizhou Province, and how the costs of local government debt restructuring are likely to be borne by banks, see U.S.-China Economic and Security Review Commission, "Fiscal: Bank Loan Restructuring Shows Limits of Local Debt Cleanup," in *Economics and Trade Bulletin*, January 31, 2023, 6.

†There are three budget categories used by China's government: the general public budget revenue, the government-managed fund revenue, and the state-owned capital budget. The social insurance fund is generally treated separately. General public budget revenue is the category related to taxes and government fiscal outlays, similar to the U.S. government budget, whereas fund revenue refers mostly to revenue and expenditures related to land sales. *Xinhua*, "Report on Central and Local Budget Implementation in 2022 and Draft Central and Local Budget in 2023 (Summary)" (关于2022年中央和地方预算执行情况与2023年中央和地方预算草案的报告(摘要)), March 6, 2023. Translation.

of local government revenue—plummeted as the real estate sector contracted.⁸⁴ Land sales in particular contracted 23.3 percent from \$2.35 trillion (RMB 8.7 trillion) in 2021 to \$991 billion (RMB 6.7 trillion) in 2022.*⁸⁵ The crisis was not evenly distributed, as poorer provinces saw steeper declines. Yunnan, for example, saw its general budget revenue decline 27 percent and fund revenue drop 68 percent.⁸⁶

The situation was likely even worse than top-line indicators suggest, however. According to research from Dr. Wright and Mr. Feng of Rhodium Group, which analyzed the 2022 annual results of 2,892 LGFVs in 205 cities, nearly half of all land use right sales were to LGFVs in 2022, up from 33 percent in 2021 and 17 percent in 2020.⁸⁷ In effect, local governments engaged in expensive borrowing from banks via LGFVs in order to create one-off fiscal revenue. The across-the-board fiscal crisis has seriously constrained Beijing's capacity to act on its priorities, whether that be infrastructure building or common prosperity. As Dr. Wright and Mr. Feng assess, weakness in local government finances "is the primary reason that there has been no meaningful fiscal support for China's recovery this year."⁸⁸

The challenge facing China's fiscal capacity, however, is broader and deeper than recent stresses from Zero-COVID: China's entire fiscal and tax system has been structured around revenues from an investment-led growth model.⁸⁹ Specifically, both the central and local governments rely heavily on production-focused taxes, such as the enterprise income tax and value-added tax (VAT). In 2022, enterprise income taxes and the VAT made up the majority of general budget revenue at a combined 54.4 percent.⁹⁰ Personal income tax, meanwhile, made up a meager 8.6 percent of general public budget revenue in 2022, well below the Organization for Economic Cooperation and Development average of 25 percent.⁹¹ The high level at which the personal income tax rate begins effectively excludes most of the population from paying anything, while many of the wealthiest individuals are able to evade the tax.⁹² The Party-state's fiscal structure thus provides little incentive to boost household income while effectively necessitating production expansion. The importance of production to government revenue, particularly at the local level, creates overwhelming incentives for local governments—who will go to great lengths to accumulate a revenue base—to attract new investment and promote additional production. China's tax system thus incentivizes excess capacity and debt-fueled investment, as tax revenue expands in line with production expenditure, contributing to imbalances in China's domestic economy as well as global trade distortions.

China's problematic balance in its center-local fiscal relationship further complicates the situation. Beijing denies local governments discretion to set tax rates in their jurisdictions and only allows 50

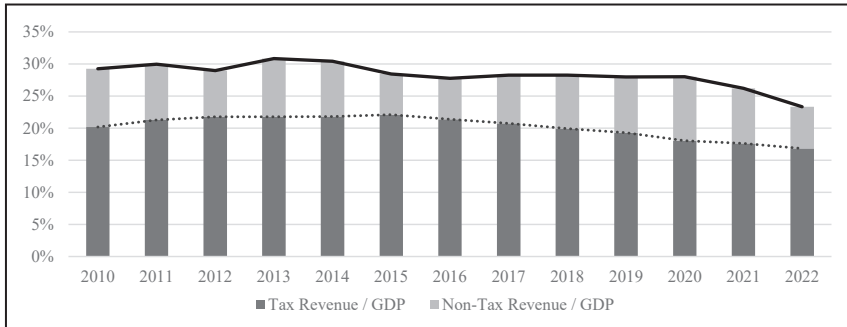
*For context, rural land is owned by village collectives, while the state owns all urban land in China and leases it to property holders for varying durations depending on the land use—70 years for residential use, 50 years for commercial use, and 40 years for industrial use. Local governments thus convert rural land to urban land and sell usage rights. Local governments also transfer land to LGFVs, which raise capital using the converted land as collateral. Meg Rithmire, "Land Institutions and Chinese Political Economy: Institutional Complementarities and Macroeconomic Management," *Politics & Society* 45:1 (2017): 126, 135; *China Economic Review*, "If Beijing Is Your Landlord, What Happens When the Lease Is Up?" June 17, 2013.

percent of fiscal revenue to be retained locally while shifting 85 percent of expenditure obligations onto the local level.⁹³ Across the largest expenditure areas, namely social security and employment, health, and education, local governments bear closer to 90 percent of the expenditure burden.⁹⁴ Beijing is not blind to local governments' burden and has been increasing transfer payments. In response to Zero-COVID-induced hardships in 2022, the center increased transfers to localities by 18 percent in 2022, sending down an additional \$224 billion (RMB 1.5 trillion) and nearly offsetting the officially calculated decline in local land sales.*⁹⁵ But major inefficiencies and a lack of accountability plague the transfer mechanism, including delays as well as siphoning as the transfers make their way from the center to the province and to cities, counties, and townships.⁹⁶ Beijing's asymmetric resource concentration grants it political leverage over localities (which must turn to the central government to make up funding shortfalls) but induces highly undesirable behavior at the local level as local officials strive to make up for limited funding while facing intense competition for promotion based on growth and fulfilling top-down mandates.⁹⁷

Beijing has been striving to tighten controls on off-balance-sheet borrowing without compromising its centralization of financial power over localities and changing the underlying relationship. Beijing has been granting localities the ability to issue increasing amounts of debt via centrally controllable and observable channels, for example granting localities an overall special purpose bond quota of \$524 billion (RMB 3.8 trillion) in 2023,† a 4.1 percent increase from the 2022 quota.⁹⁸ Such explicitly allowed debt, however, comes nowhere close to replacing off-balance-sheet LGFV borrowing and is also earmarked to be spent on "high-quality" infrastructure projects, which are increasingly scarce. With Beijing prioritizing controlling implicit and off-balance-sheet borrowing, local governments face an increasingly impossible task of maintaining GDP-supporting investment while balancing their other major fiscal obligations.⁹⁹ Ultimately, stress from debt obligations is rising and an aging population will demand increasing support.¹⁰⁰ Despite General Secretary Xi's conspicuous rhetoric around promoting common prosperity and people's wellbeing, changes to the tax system and implementation of social welfare programs that would put such an agenda on more stable financial footing are lacking.¹⁰¹ In fact, under Xi's tenure, the government's revenue as a percentage of GDP has fallen substantially from 30.8 percent in 2013 to 23.3 percent in 2022, while more sustainable non-land-sale tax revenue fell from 21.8 percent in 2013 to just 16.8 percent in 2022 (see Figure 4).¹⁰²

* Local governments used LGFVs to borrow from banks and purchase 50 percent of all land in 2022. The decline of land sales, had they not done so, would have been much larger. This is the prime example of using the banking system as an expensive source of quasi-fiscal revenue. Logan Wright and Allen Feng, "Tapped Out," *Rhodium Group China Markets Research*, May 23, 2023.

† Special purpose bonds are a debt instrument Beijing allocates to local governments and earmarks for infrastructure projects and other projects.

Figure 4: China Government Revenue as Percentage of GDP, 2013–2022

Source: China Ministry of Finance via CEIC.

Note: Tax revenue includes central and local general public budget revenue; nontax revenue includes central and local fund revenue (which is mostly revenue from land sales).

Local Government Debt and Fiscal Reform Paths Are Politically Difficult

Beijing confronts a two-fold challenge: dealing with the stock of existing debt and adjusting the flow of funds and impetus for potential additional debt. With regard to existing debt, Beijing has four broad options, from most to least challenging: write off the debt and assign losses; sell assets to pay down the debt; absorb local debt onto the healthier central government balance sheet; or restructure the debt.* With regard to the fiscal flow of funds and potential new debt, Beijing could: extricate the banking sector from Party-state control; adjust the center-local fiscal balance; find new recurring revenue streams; or cut expenditures. Ultimately, as Nicholas Borst, vice president and director of China research at Seafarer Capital Partners, noted in testimony before the Commission, the paths Beijing is most likely to tread are those that require as few difficult structural changes as possible.¹⁰³ China is thus likely to muddle through using familiar tactics of defusing acute risks by moving debt from one balance sheet to another (e.g., state-owned commercial banks, policy banks, or asset management companies), while underlying problems linger and further weigh on growth.¹⁰⁴ Fundamentally resolving the problems, however, would require pursuing more difficult paths.

Debt Stock Options

Write Down Debt and Assign Losses: The quickest and most thorough way to deal with unproductive local debt would be for Beijing to force the most distressed local governments and their LGFVs through a bankruptcy process wherein creditors accept losses and bad debt is recognized and written down.¹⁰⁵ While theoretically the most straightforward way to deal with debt, breaking implicit guarantees would lead to system-wide readjustments that would see many LGFV borrowers unable to roll over loans, abruptly curtailing

*China's Ministry of Finance created a similar list in 2018 for how it might tackle off-balance-sheet debt, specifying "six strategies for resolving local governments' hidden debt: arrange repayment through government funds; sell government equity and state-owned assets; use project carry-over funds and operating income for repayment; convert borrowings into business debts; roll over existing debt by issuing new debt; or use of bankruptcy reorganization or liquidation." Cheng Siwei et al., "China's Economy Hostage to Local Governments' Hidden Debts," *Nikkei Asia*, August 23, 2023.

a substantial share of LGFV economic activity and creating major contagion risk.¹⁰⁶ At the same time, assigning the losses would be a very difficult and politically fraught process. Banks are not sufficiently capitalized to deal with the extent of losses they would likely be exposed to, and many ultimate creditors to local governments are wealthy urban Chinese households who represent a powerful constituency.¹⁰⁷ Abruptly assigning losses and writing down debt would thus risk economic consequences and discontent among politically influential constituencies. Nonetheless, Beijing could try to slowly and selectively introduce bankruptcy processes for local governments and LGFVs, though even this could still potentially precipitate contagion and lead to rapid readjustments in credit worthiness of many such borrowers and a cascading contraction in economic activity.¹⁰⁸

Asset Sales: The central and local governments could preemptively try to sell off state-owned assets to pay down local debts or even do so in conjunction with bankruptcy processes discussed above. According to an IMF estimate, LGFVs held assets equivalent to 120 percent of GDP in 2020, half of which are physical assets and half of which are financial, in comparison to liabilities equivalent to just 75 percent.*¹⁰⁹ Meanwhile, in addition to LGFV assets, central and local governments have extensive financial holdings, particularly as the Party-state has invested heavily into the nonstate sector, part of a broader shift toward a Party-state-capitalism economic model.¹¹⁰ One Chinese government think tank estimates central and local government financial holdings at \$19 trillion in 2019, equivalent to 130 percent of GDP at the time.¹¹¹ Most LGFV and government assets, however, are priced at book value and likely diverge sharply from their true market value.¹¹² Many, though, such as Guizhou's 50 percent ownership of publicly listed liquor company Moutai, with an overall market capitalization of over \$300 billion in 2023, are real and substantial.¹¹³ Given Xi's views on the importance of the state-owned sector, however, major central government asset sales of strategically important SOEs are unlikely. Asset quality of local governments will be highly variable, and any widespread effort to sell off assets could lead to panic and rapid deterioration in value. Overall, this path would require substantial reduction in the size and role of the state sector while introducing substantial risk as assets are repriced.

Central Government Action: China's central government commands one of the only unencumbered balance sheets with a debt of \$3.88 trillion (RMB 26 trillion) in 2022, a debt-to-GDP ratio of 22 percent and significantly below that of other major economies.¹¹⁴ Further, as Mr. Borst wrote in testimony before the Commission, the central government can also borrow at very low rates over long durations.¹¹⁵ The central government has the option to establish relief funds for struggling local governments and LGFVs or direct-

*As the IMF noted in 2020, "Infrastructure and other physical assets like inventories account for 48 percent of LGFV assets, down from 52 percent in 2015. Financial assets, encompassing accounts receivable and investments in securities, cash, loans, company equity and other unspecified tangible assets, are the fastest growing portion of LGFV balance sheets, accounting for 48 percent of total LGFV assets, up from 42 percent in 2015. Intangible assets account for the remaining 4 percent of assets." *International Monetary Fund*, "People's Republic of China: Selected Issues," December 20, 2021, 40.

ly move certain local government debts to its own books. Another possibility is for the central government to inject capital into its state-run banks, policy institutions, and asset management entities to enable them to aid local governments.¹¹⁶ Moving the debt from one state balance sheet to another does not resolve the debt stock issue, though it may place the existing debts with actors more capable of bearing them. Depending upon how the central government acted, however, it could encumber its own balance sheet, potentially constraining Beijing's ability to maneuver in the future while introducing additional moral hazard into the system.

Restructuring and Rolling Over Debt: Beijing may seek to restructure a substantial portion of the costliest debt, most prominently the implicit debt of LGFVs, by swapping or rolling it over into debt with a lower interest rate and longer duration. Beijing ran this playbook once before in 2015 when it allowed local governments to convert \$1.9 trillion (RMB 12.2 trillion) from LGFV loans into explicitly recognized local government bonds—and made state banks serve as the counterparty.¹¹⁷ Reviving that playbook, in August 2023, Beijing allowed provincial-level governments to raise \$139 billion (RMB 1 trillion) via bond sales to swap the debt of the most troubled LGFVs at various administrative levels, effectively bailing them out by shifting the debt burden to provincial governments instead.¹¹⁸ Bloomberg also reported that authorities identified “12 provinces and cities as ‘high-risk’ areas where more support will be provided, including the provinces of Guizhou, Hunan, Jilin, and Anhui, as well as Tianjin city.”¹¹⁹ Meanwhile, restructuring could take a slightly different form, as with the first explicit LGFV loan restructuring of Zunyi Road and Bridge Construction Group in Zunyi City in Guizhou Province. Rather than converting LGFV debt to explicit bonds, bank lenders were forced to restructure the loans with the LGFV itself, pushing the maturity of loans out for 20 years and drastically reducing the interest rates.¹²⁰ Beijing recently signaled, however, that it would not be following the Zunyi model more broadly.¹²¹ Overall, as the August announcement indicated, this approach of rolling over the debt is effectively the path of least resistance for Beijing, as it does not require any hard, structural changes or sharp and immediate consequences. In this muddling-through scenario, existing debt will slowly be amortized as borrowing costs are reduced, and the ultimate lenders (i.e., household depositors) will bear the costs in the form of lower returns on their savings.¹²²

Debt and Flow of Funds Options

Remove Party-State Control of Banks: Aside from China's high national savings rate, Party-state control over banks is perhaps the most fundamental factor facilitating China's massive debt buildup. Party-state officials at central and local levels are able to direct banks to create debt at will. Local officials have played an increasingly prominent role in bank debt since the mid-1990s as Beijing allowed locally controlled banks (city commercial banks) to proliferate.¹²³ The ballooning number and overall asset size of these local state banks have made them a major pillar of China's debt and investment growth model.¹²⁴ The lack of separation between the Party-state and the bank system allows central and especial-

ly local Party-state officials to command banks to lend.¹²⁵ Without changing this institutional setup, China's problematic debt dynamic may never be resolved. Severing the CCP from the banks, however, would be antithetical to the Party's Leninist agenda of controlling the economy's commanding heights.

Change Center-Local Dynamic: The imbalance between local revenue and expenditure is another key structural issue undergirding local government debt and fiscal problems. Overburdening and underfunding local governments is a fundamental issue in China's system—one that contributed to the failure of the 2015 restructuring to get local governments to stop using LGFVs—and it is likely to limit the system's effectiveness again in 2023.¹²⁶ To fix the issue, Beijing could give localities greater autonomy to develop revenue streams (i.e., allowing local governments autonomy in setting tax rates). Alternatively, Beijing could allow local governments to retain a greater share of existing tax streams, such as the VAT, of which localities currently only retain 50 percent.¹²⁷ Another option is for Beijing to centralize more expenditures to limit lower-level burdens in areas such as healthcare and education, where localities currently bear 90 percent of the spending obligations.¹²⁸ Without raising overall revenue, however, Beijing would simply be transferring the fiscal deficit onto itself while decreasing its top-down control over localities. Given the clear preference for consolidating central control, further decentralization is unlikely.

Raise Revenue: In addition to the limited role of the personal income tax discussed already, China also has no estate tax and no property tax.¹²⁹ For years, analysts—and China's own State Council beginning in 2003—have flagged a property tax as an obvious route China should pursue to at least partially remedy a variety of ills, from regressive taxation to the property bubble to fiscal challenges.¹³⁰ In April 2023, China reportedly finished creating its first nationwide property registration list, which it had begun compiling in 2014.¹³¹ This could be a precursor to the long-anticipated implementation of a property tax. However, the long delay in creating the list, coupled with the quiet abandonment of property tax pilots that were part of Xi's 2021 "common prosperity" initiatives, does not bode well. The Party-state faces resistance from many corners, from local governments and property developers to middle- and upper-class homeowners to corrupt communist cadres with multiple homes.¹³² The Party-state may also be reluctant to expand direct taxes on the population, which could increase discontent as well as demands for accountability.¹³³ Thus, reforms that would increase revenue, such as increasing reliance on personal income taxes and establishing property taxes, remain elusive as the Party-state avoids politically fraught changes to its tax system.

Cut Expenditures: Without additional revenue, austerity is the other obvious option. This raises the risk of local discontent, particularly in the most distressed areas. But this option impacts the least politically powerful constituencies and is thus seeing the most traction.¹³⁴ Hegang, a city in the country's northeast whose debt to fiscal revenue exceeded 200 percent in 2021, became the first city administration subject to the emergency plan initially published by

the State Council in 2016.¹³⁵ This emergency plan describes how local governments in crisis should deal with rising debt and fiscal distress. The core of the response is austerity: public services shut down and public employees like street cleaners and teachers facing pay cuts or even withholding.¹³⁶ Recent calls from Beijing have echoed this model, encouraging local governments to reduce social welfare spending, a move likely to further undermine consumption and increase precautionary saving behavior.¹³⁷ With debt servicing costs as the fastest-growing expenditure area over the last decade, austerity without a solution to debt will be difficult.¹³⁸ Either way, cutbacks are likely to come and will likely be borne by those least able to resist.

For now, Beijing continues its longstanding trend of muddling through its debt and fiscal challenges rather than enacting difficult structural resolutions, as little progress has yet been made in resolving bad debt, achieving fiscal rebalancing, or creating alternative income streams. With the old investment model faltering, revenues stagnating, and expenditure obligations rising, stresses will only mount, hard choices will become more pressing, and Beijing's fiscal space to enact domestic priorities will likely grow more constrained. Unlike in 2008, the CCP does not have double-digit growth looming over the horizon to rescue it.

Economic Impact of Unfolding Risks in China's Financial System

Chinese banks struggled to support the economy in 2023, aggravating financing conditions for China's nonstate companies. Increases in defaults on property loans, declines in sales, and falling asset prices have forced banks to shore up their capital positions to absorb further potential losses, constraining their ability to lend in spite of central government pressure to boost growth through easy credit. Additionally, in the first half of 2023, corporate bond issuance collapsed and equity market listing activity slowed. Consequently, China's financial sector cannot play the role of shock absorber against economic downturn and unemployment.

Banking Sector Struggles to Deploy Credit to Support Economic Growth

Rising property loan defaults and falling asset prices have forced China's commercial banks to rebuild their balance sheets, trading profit and new lending for greater ability to mitigate risks. Those risks have been sizeable. Reported nonperforming loans held by Chinese commercial banks increased by \$34 billion (RMB 246.2 billion) between June 2022 and June 2023 to \$441.4 billion (RMB 3.2 trillion), equal to 1.7 percent of the total loan portfolio.¹³⁹ The true level of nonperforming assets is almost certainly much higher, as Chinese banks delay or avoid recognizing losses on loans.¹⁴⁰ China's banking sector is also highly exposed to default risk among property developers, with \$1.8 trillion (RMB 13.1 trillion) in loans extended for real estate development in June 2023, the equivalent of 5 percent of all lending.¹⁴¹ By the middle of 2022, property developers in default on their bonds held over \$567 billion (RMB 3.8 trillion) in outstand-

ing debt to China's banking sector.*¹⁴² Chinese banks are likely to recover only a portion of those loan balances. Although commercial banks across China's financial sector—including the four largest national state-owned banks†—are exposed to the property downturn, balance sheet risks are highest in smaller city commercial and rural banks, which have lower buffers of regulatory capital and tend to be more exposed to individual borrowers.¹⁴³ To remain in compliance with Chinese banking regulations,‡ those banks confronting declines in asset quality were forced to divert resources to clean up their balance sheets and set aside billions of RMB to provision against losses.¹⁴⁴ This problem is not new: 2022 was the third year in a row that Chinese banks disposed of over \$448 billion (RMB 3 trillion) in nonperforming assets.¹⁴⁵ Much of this delinquent debt was acquired by China's state-owned distressed asset management companies, allegedly boosting the financial health of banks by shuffling nonperforming loans to other parts of the financial market.¹⁴⁶ As a result, China's banking sector appears outwardly to be stable, with bank capitalization above minimum regulatory requirements. The reality is that mounting risks in the financial system remain.¹⁴⁷

Capital constraints on extending loans have hurt the ability of Chinese banks to boost credit, offset the economic downturn, and otherwise support the Party-state's policy goals. The PBOC has gradually guided borrowing rates lower over the past year as it sought to stimulate lending activity.¹⁴⁸ However, these rate cuts narrowed banks' net interest margins—the difference between interest banks earn on loans and the rate banks pay on deposits.§ The net interest margin for all banks declined from 1.97 percent in the first quarter of 2022 to 1.74 percent at the start of 2023.¹⁴⁹ Throughout 2023, the PBOC sought to lower deposit rates to ease pressure on lenders; however, these efforts were disjointed with lending rate cuts, causing deposit rates to decline more slowly than loan rates.¹⁵⁰ Declining profitability consequently constrained banks' ability to expand their capital base, and banks faced reduced capacity to extend credit, particularly to riskier borrowers in the nonstate sector.¹⁵¹ Due to these capital constraints, banks have responded weakly to policy efforts to boost liquidity in targeted sectors. A set of lending facilities introduced

*S&P Global Ratings estimates that nonperforming loans to the real estate sector doubled in 2022. S&P Global, "Chinese Banks Enter 2023 in Worse Shape than Global Peers; More Risks Ahead," December 19, 2022.

†In June 2023, the Bank of China, Industrial and Commercial Bank of China, China Construction Bank, and Agricultural Bank of China reported that their balances of nonperforming loans to the construction sector rose 32 percent, 23.9 percent, 20.8 percent, and 9.7 percent year-on-year, respectively. Nonperforming property loans also increased at three of the Big Four banks by more than 12 percent year-on-year, although the Bank of China reported a 22.8 percent decline. Echo Wang, "China's Top Banks Report Rising Bad Loans as Property Woes Spread," *Nikkei Asia*, August 31, 2023.

‡China implemented regulations in 2013 to increase the minimum available capital banks are required to hold in proportion to their risk-weighted assets as part of the international reform effort under Basel III. Basel III introduced a set of standards to address shortcomings in financial prudential regulations exposed during the 2007–2008 Global Financial Crisis. While many Chinese banks nominally comply with the capital adequacy ratios set forth in Basel III, the true resiliency of Chinese banks may be overstated due to lax accounting of nonperforming loans across China's banking sector. For more on China's adoption of Basel III standards, see Virgilio Bisio, "China's Banking Sector Risks and Implications for the United States," *U.S.-China Economic and Security Review Commission*, May 27, 2020, 13–15.

§Chinese banks rely on deposits as their primary source of funding, and competition to attract more depositors has kept deposit rates elevated since 2022. Allen Feng and Logan Wright, "Center of the Storm: Banks' Results Cry Out for Rate Cuts," *Rhodium Group*, July 25, 2023; *Trivium China Markets*, "Interest Rate Cuts—Time to Get Unconventional?" June 30, 2023.

by the PBOC in 2022 to provide \$59.3 billion (RMB 430 billion) to property developers for finishing incomplete housing projects largely failed to get off the ground.¹⁵²

China's monetary policy stimulus failed to revive nonstate demand for credit. Even with record low interest rates, declining revenues and expectations of a prolonged economic slowdown caused businesses to hold back on investment projects.¹⁵³ In July 2023, the stock of financing grew at its slowest pace on record, increasing by just 8.9 percent compared to the prior year, as businesses paid down debts and avoided additional borrowing.¹⁵⁴ Beijing's standard playbook to slowing growth based on aggressively expanding liquidity is consequently failing to perform.

Banks Curtail Lending to the Nonstate Sector as Risks Rise

China's deleveraging campaign amplified a lending bias against nonstate companies, which suffered tight credit conditions even as borrowing costs fell. In 2023, banks were either unable or unwilling to lend at rates attractive enough to nonstate firms. In the year through August 2023, overall fixed asset investment grew 3.2 percent year-on-year, compared to 7.4 percent among state-linked firms.¹⁵⁵ Since the mid-2010s, the government's willingness to let financial institutions fail under its deleveraging campaign has forced banks to begin pricing in the risk of default on their assets.¹⁵⁶ More risk averse, banks are less likely to lend to nonstate firms even though they are often more dynamic than SOEs, as the central or local governments are likely to backstop SOE borrowers. As local governments' credit situations have worsened, Dr. Wright indicated that banks' lending decisions also account for a "geographic counterparty risk," explaining that "over the past three years, loan officers and bond investors began determining credit risks based on the perceived stability of local governments backing certain companies."¹⁵⁷

Equity Market Reforms Fail to Revive Stock Investment

Despite a flurry of regulatory action to boost China's stock trading in 2023, prices slid as pessimism about the economy spread to China's equity markets. The CSI 300 index, which tracks the largest companies listed on the Shanghai and Shenzhen stock exchanges, fell 5.1 percent between the start of 2023 and the end of September.¹⁵⁸ Investors held back from secondary market trading as listed companies reported large earnings decline amid China's slowing economy.¹⁵⁹ A statement from a Politburo meeting chaired by General Secretary Xi on July 24 pledged to "invigorate the capital market and boost investor confidence."¹⁶⁰ Three days prior to the Politburo's meeting, Fang Xinhai, the vice chairman of the China Securities Regulatory Commission (CSRC), met with foreign investors to discuss steps to boost foreign investment in China.¹⁶¹ On August 27, the Ministry of Finance and the CSRC announced a series of measures aimed at stimulating trading activity. These included halving the stamp duty on securities trading to 0.05 percent—the

first cut since 2008—lowering margin requirements on trades, and increasing restrictions on large shareholders selling shares.¹⁶² Additionally, China’s stock exchanges reportedly instructed large mutual fund managers to avoid selling more shares than they bought.¹⁶³ Despite these efforts, trading activity remained muted as investors weighed the impact of China’s prolonged growth slowdown, leaving policymakers grappling with the challenge of restoring confidence in a beleaguered market.¹⁶⁴

The CSRC slowed down IPO listing activity after listings of small companies increased on Chinese stock exchanges. Through June 2023, 173 companies listed on China’s major exchanges, an increase from 169 over the same period in 2022.¹⁶⁵ As a result, the Shanghai and Shenzhen stock exchanges were the most active IPO markets globally in the first half of 2023.¹⁶⁶ However, many of the IPOs were for small-cap companies and startups, and total proceeds from IPOs fell by 33 percent year-on-year.¹⁶⁷ Despite this decline, Chinese companies still raised \$34.2 billion (RMB 247.8 billion) in funds by going public on Chinese stock exchanges between January and July 2023.¹⁶⁸ This continued appetite among investors for IPOs reflects the nature of China’s listing process, where shares pop on debut. Because the IPO approval process is tightly controlled by China’s securities regulators and involves regulatory restrictions on offer prices, IPOs on Chinese stock exchanges are historically undervalued, leading to one-way speculative bets for investors.*¹⁶⁹ Nearly half of the stocks listed in August 2023 doubled their share price on their first day of trading.¹⁷⁰ Because of these incentives for investors, the CSRC viewed the IPO activity as sucking liquidity away from trading in large-cap stocks.¹⁷¹ The CSRC announced on August 27, 2023, that it would slow the pace of IPOs, citing a need to establish a “dynamic balance” between supply and demand.¹⁷² The delay could impact more than 650 companies that are waiting to list on the Shanghai and Shenzhen exchanges.¹⁷³ This move ironically appears to undermine reforms introduced by the CSRC in March 2023 that aimed to improve the IPO listing process by limiting direct regulatory interventions, as discussed in the next section.

Chinese regulators will likely continue fast-tracking listing applications from companies in advanced technology sectors as the Party-state leverages stock markets to support its techno-industrial goals. Over 42 percent of funds raised through IPOs in the first seven months of 2023 came from the STAR market, which specializes in smaller innovative technology companies (see textbox below).¹⁷⁴ As Beijing channeled support to the semiconductor industry following U.S.-led restrictions on advanced semiconductor exports and investments, 14 Chinese semiconductor firms received approval to go public, raising \$8.7 billion (RMB 63.4 billion) in funding as of early August 2023.¹⁷⁵ In 2023, three of the largest IPOs were led

*The CSRC’s policies that create a systematic underpricing of IPOs are motivated by a desire to prevent investors from taking losses during IPOs. However, such restrictions also make it less worthwhile for Chinese companies to list domestically as compared to going public overseas in the United States, Hong Kong, or other markets. Because their offer value is below market value, companies are forced to leave money on the table when going public; when the price of their stock is inevitably bid up after its debut to reflect the true value of the listed company, the gains accrue to retail and institutional investors rather than the company itself. Yiming Qian, Jay R. Ritter, and Xinjian Shao, “Initial Public Offerings Chinese Style,” *Journal of Financial and Quantitative Analysis* First View (November 2022): 11–13.

by semiconductor companies: Hua Hong, which raised \$2.9 billion (RMB 21.2 billion); Nexchip Semiconductor, which raised \$1.6 billion (RMB 11.5 billion); and Semiconductor Manufacturing Electronics, which raised \$1.5 billion (RMB 11.1 billion).¹⁷⁶ Overseas investors may be able to invest in these newly issued stocks in the future, as Shanghai and Shenzhen-listed shares that meet certain requirements—including a minimum market capitalization and length of time on the exchange—are added to the Stock Connect programs for cross-border trading.¹⁷⁷ The CSRC may also ramp up approvals of Chinese companies' applications to list on foreign stock exchanges (for more on the CSRC's changing registration mechanism for overseas IPOs, see Chapter 1, Section 1, "U.S.-China Bilateral and China's External Relations").¹⁷⁸ Many Chinese companies list on U.S. exchanges through complex corporate structures called variable interest entities, which have unresolved legal standing inside China, amplifying the risks to U.S. investors.

China's Capital Markets Serve the Party-State's Technology Development Goals

In capital markets, Party leadership has fully restructured how domestic tech firms raise capital, with an eye toward financing firms that support national technology development goals. The Shanghai-based Science and Technology Innovation Board, commonly known as the STAR market, was launched in 2019 to help smaller Chinese tech companies that align with national development strategies raise funds in China's capital markets.¹⁷⁹ Historically, the Shanghai and Shenzhen stock markets have catered to larger established firms due to minimum revenue requirements and an onerous listing process. Listings on the STAR market have accelerated, and in 2022 its \$34 billion in IPO proceeds was the world's largest.¹⁸⁰ As of 2022, 82 percent of the STAR-listed companies are operating in industries targeted by the Made in China 2025 initiative, such as advanced information technology equipment, biomedical devices, and electrical power equipment.¹⁸¹ The growth of these firms within STAR on the Shanghai Stock Exchange stands in contrast with the experience of larger, more commercial-facing firms such as Ant Financial, which had its listing on the Shanghai exchange blocked by Party regulators in 2020.

Beijing is attempting to expand a pre-IPO pipeline to support early-stage companies scaling up for IPOs. Government guidance funds—investment vehicles that combine state and nonstate capital—are key policy instruments used by the Party-state to make pre-IPO venture and private equity investments in startups operating in strategic and emerging sectors.¹⁸² As of July 2023, there were more than 2,100 government guidance funds that have raised a total of \$897 billion (RMB 6.5 trillion), although only a fraction of this capital has been deployed.*¹⁸³ One study found

*Private equity and venture capital financing tends to be much smaller than funding raised during an IPO. For example, 546 companies raised \$118.4 billion (RMB 858.2 billion) through IPOs on the STAR Market as of July 2023, compared to a total of \$82.8 billion (RMB 600 billion) in venture capital funding raised by these companies. *Securities Times*, "Focusing on the Fourth Anniversary of the STAR Market—The Vibrant STAR Market Yields Fruitful Outcomes as a Pilot Zone of Registration System," *Shanghai Stock Exchange*, July 21, 2023.

China's Capital Markets Serve the Party-State's Technology Development Goals—*Continued*

that two-thirds of all government guidance funds have yet to make any investments.¹⁸⁴ According to researchers at the Center for Security and Emerging Technology, “most guidance funds fail to live up to their ambitions, weakened by unrealistic goals, bureaucratic constraints, incompetent management, risk aversion, and a lack of market discipline.”¹⁸⁵

Attempts to Streamline Domestic IPOs Face Constraints from Party-State Priorities

To expand the role of stock exchanges in its financial system, China has recently streamlined the process for going public across its domestic equity markets. In a change to the listing process planned for over a decade but repeatedly stalled,* China switched from an approval-based procedure administered by the CSRC to a “registration-based” process for companies going public on all domestic stock exchanges in 2023.¹⁸⁶ The change expands the role of investors in vetting listing applications.† Any company that meets the listing requirements will ostensibly be able to issue shares. After testing such a system on smaller exchanges, including the STAR market, the main boards of the Shanghai Stock Exchange and the Shenzhen Stock Exchange implemented this registration-based process in March 2023.‡¹⁸⁷ The new IPO system is meant to address a major backlog of applications under the CSRC’s approval-based process, where the security regulator undertook a lengthy case-by-case review process that forced companies to wait over a year on average for their IPO after filing.¹⁸⁸ The switch to a registration-based system is intended to speed up the listing process for startups and expand companies’ access to equity financing in China’s financial system.§ The changes are simultaneously intended to make market

*Reforms to create a registration-based IPO process were first proposed in 2013, but changing the system proved challenging to accomplish without undermining regulators’ oversight of markets. China’s regulators used the IPO review process to identify and weed out fraud, a rampant problem in China’s equity markets. Compared to U.S. markets, there is far less policing by private entities bringing class action suits and less enforcement capacity for monitoring market behavior, like insider trading. China concentrated regulatory resources into policing which companies were listed in the first place to compensate for these weak oversight mechanisms. Franklin Allen et al., “The Development of the Chinese Stock Market,” in Marlene Amstad, Guofeng Sun, and Wei Xiong, eds., *The Handbook of China’s Financial System*, 2020, 287–288; Charles Horne and Xinling Wang, “What We Learned from the Stock Market Crash,” *China Economic Quarterly*, March 2016, 37–38.

†Though Chinese securities companies are the lead underwriters for most listings, foreign firms, including U.S. financial companies, have sponsored a number of IPOs on China’s stock markets. Foreign participation in bookrunning Chinese IPOs may help companies that pose national security risks to the United States attract funding. Goldman Sachs and JPMorgan are vying for a role in the planned listing in Shanghai of multinational agrochemical giant Syngenta, which was acquired by Chinese SOE ChemChina in 2017. ChemChina is included on the U.S. Department of Defense’s Chinese Military Companies list. Kaye Wiggins et al., “China’s Biggest IPO in Years Poses \$9bn Question for Western Banks,” *Financial Times*, June 25, 2023.

‡Since 2019, China has experimented with a U.S.-style registration system on its small-cap stock exchanges, where the exchange itself evaluates a company’s compliance with its listing standards and disclosure requirements. The CSRC first deployed a registration-based system on the Shanghai Stock Exchange’s STAR Market in 2019, followed by introducing reforms on the Shenzhen Stock Exchange ChiNEXT Board in 2020. The Beijing Stock Exchange also implemented a registration-based system when it debuted in September 2021. Quan Yue et al., “Seven Things to Know about China’s Latest IPO System Overhaul,” *Caixin Global*, February 3, 2023.

§Even though China’s equity market is the second largest in the world, it plays only a minor role in capital allocation in the overall economy. As a component of Aggregate Financing to the

participants more accurately price an IPO's valuation and bear the costs and risks of inadequately scrutinizing IPO applicants' disclosures. However, the CSRC may not have the enforcement capacity to prevent fraud, potentially putting investors, including U.S. investors, at risk. With IPOs continuing to jump in price in excess of 300 percent on debut after March 2023, the policy change appears to have limited effects thus far.¹⁸⁹ Investors continue to view IPOs as reliable and highly profitable opportunities, often neglecting thorough due diligence.

Even with a reformed listing process, companies in sectors not prioritized by the Party-state's industrial policy may still face restrictions when seeking access to China's capital markets. Although investors now have an expanded role in the listing application process, companies still require final approval from the CSRC before going public, and the regulator has stated it will assess whether issuances align with national industrial policy objectives.¹⁹⁰ Further, the CSRC has reportedly set up a "traffic light" system for financial institutions that underwrite IPOs, warning financial institutions that manage the process of taking a company public to increase scrutiny of firms in "yellow light" industries and avoid supporting IPOs in "red light" sectors, such as alcohol, and sectors currently under CCP political scrutiny, like private education providers.¹⁹¹ Businesses in sectors that further China's techno-industrial objectives, such as semiconductor manufacturers, will face a smoother path to going public.¹⁹²

Foreign Investors Remain on the Sidelines

Having withdrawn billions from Chinese assets since 2022, foreign investors have refrained from reentering China's financial markets. Between December 2021 and December 2022, non-Hong Kong* foreign portfolio holdings of Chinese assets declined by \$324 billion, a drop of 21 percent.¹⁹³ The outflow of foreign capital stemmed from a culmination of factors since the start of 2022. Interest rate hikes in developed economies reduced the extra yield investors could earn on Chinese assets over assets in advanced markets.† The shift in interest rates and China's slowing domestic economy caused China's currency to depreciate, further reducing the dollar-denominated returns foreign investors could earn on Chinese investments. Rising geopolitical tensions due to China's stance on Russia's unprovoked

Real Economy, a measure that China uses to track the broad scope of funding across its financial sector, China's equity markets contribute roughly 3 percent of the total amount of funding from the financial sector to the economy. Zhiguo He and Wei Wei, "China's Financial System and Economy: A Review," *Annual Review of Economics* 15 (August 2022): 18.

*Mainland China classifies residents of Hong Kong and Macau as foreigners in its balance of payments data. Hong Kong is China's single-largest source of "foreign" capital due to Chinese companies that round-trip investment through Hong Kong. In December 2022, Hong Kong reported that its residents held \$395 billion in Chinese portfolio assets, accounting for 25 percent of total foreign and Hong Kong portfolio holdings. International Monetary Fund, "Derived Portfolio Investment Liabilities (All Economies) by Economy of Nonresident Holder: (Derived from Creditor Data)," *Coordinated Portfolio Investment Survey*.

†Chinese government bonds have yielded less than U.S. Treasuries since April 2022, and on August 21, 2023, the gap reached 1.78 percentage points, the highest reading in 16 years. As of August 2023, ten-year U.S. Treasuries carried a yield above 4 percent, providing investors a higher return than ten-year Chinese government bonds, where yields remained below 3 percent. *Federal Reserve Bank of St. Louis*, "Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity, Quoted on an Investment Basis," August 30, 2023; China National Interbank Funding Center via CEIC database; Hudson Lockett, "Global Investors Dump Chinese Securities as State Support Hopes Fade," *Financial Times*, August 17, 2023.

invasion of Ukraine added to the uncertainty of investing in China, particularly as the investment world took note of the losses suffered by holders of Russian assets due to the coordinated international financial sanctions campaign.¹⁹⁴ Investment firms factored in the risk of sanctions and reputational damage if China took overt action to support Russia. Portfolio flows briefly turned positive in December and into the first months of 2023, but this tepid rebound quickly abated as investors confronted the headwinds to China's economy.¹⁹⁵ Foreign and Hong Kong holdings of onshore Chinese bonds declined by \$14.3 billion (RMB 103.6 billion) in the year through August, falling to \$438 billion (RMB 3.2 trillion) in August 2023.¹⁹⁶ On the equity side, foreign and Hong Kong investors added Chinese stocks to their holdings at the slowest rate in five years in 2022, with foreigners on net purchasing \$12.5 billion (RMB 87 billion) in Chinese shares, a drop of nearly 80 percent relative to 2021.¹⁹⁷ Foreign interest in Chinese stocks remained muted in 2023. Foreign portfolio investment into China's equity markets rose briefly in July 2023, but the trend quickly reversed in mid-August after Country Garden missed coupon payments on its dollar bonds, renewing investor concerns about the weakness of China's economic recovery.¹⁹⁸ In a selling spree that spanned a record 13 consecutive days, overseas investors offloaded \$10.7 billion (RMB 77.9 billion) in onshore stocks.¹⁹⁹

China Eases Restrictions on Foreign Investment in Asset Management Companies

Since 2014, China has approved the creation of roughly 50 local asset management companies (AMCs), joining the four large national AMCs that were created in 1999 to take nonperforming assets off the balance sheets of China's big four national banks, as well as a fifth national AMC created in 2020 to deal with COVID-19-related distress.*²⁰⁰ Unlike AMCs in most countries that specialize in one-off acquisitions of bad loans so banks can keep lending, AMCs in China play a role more akin to a distressed debt manager, routinely taking bad loans from the same sources so banks can maintain a facade of low nonperforming loans.²⁰¹ In July 2023, China's new bank regulator set out draft rules indicating it would soon remove minimum asset requirements for equity investments by foreign financial institutions (previously firms had to have at least \$10 billion in assets) and allow nonfinancial foreign entities to make investments into China's AMCs.²⁰² AMCs will thus be the newest vehicle in China's carefully managed financial system to be opened to a broader array of foreign financiers, coming on the heels of 2020 regulations that opened China's mutual fund and life insurance markets to full foreign ownership.²⁰³ The gambit is likely aimed at securing additional foreign capital and expertise to assist in financial engineering, particularly important given increasing debt troubles in China's economy.

*First established in 1999 to clean up major Chinese banks' balance sheets after the East Asian Financial Crisis and prepare them for foreign stock listings, asset management companies buy and dispose of banks' nonperforming loans, recapitalizing the banks and attempting to recoup value from the distressed assets. Barry Naughton, *The Chinese Economy: Transitions and Growth*, MIT Press, 2007, 462–463.

To reattract foreign investment to China, Beijing amplified a narrative that China's financial markets were open to overseas investors and that China was committed to a long-term process of opening of its capital account.²⁰⁴ Although foreign investment makes up only a small portion of total investment across China's financial markets—with foreigners owning less than 5 percent of the outstanding market capitalization on China's domestic markets—China's government sees attracting foreign capital as central to the realization of several overlapping objectives.²⁰⁵ Increasing the role of global investors lends knowhow and expertise to further professionalize China's financial markets, contributing to policy efforts to improve the corporate governance of Chinese-listed companies, stabilize market activity against China's volatile retail investors, and expand Chinese firms' access to capital.²⁰⁶ At the same time, Beijing is wary of allowing foreign investors to dominate China's financial markets and balances financial opening against the government's strict maintenance of market control and steering of market activity. To maintain close control over cross-border capital flows, China has strategically opened channels into its financial markets, notably by establishing the Stock Connect in 2014, the Bond Connect in 2017, and, most recently, the Swap Connect in May 2023 (for more on foreign investors gaining access to the onshore derivatives market, see Chapter 5, Section 3, "Hong Kong"). Despite these policies, China will not permit unfettered inflows or outflows of capital so long as its investment-led economic growth model relies on channeling domestic savings back into the banking system. Although Beijing aims to direct foreign capital to fund its techno-industrial goals, full capital account opening means giving global capital markets greater influence over the allocation of capital within China while losing the ability to manage the value of the exchange rate (for more on the limits to RMB internationalization, see Chapter 1, Section 1, "U.S.-China Bilateral and China's External Relations").

China's monetary policy options to stimulate the economy were limited by the rapid depreciation of the RMB. The outflows of capital in 2022 and 2023 put sharp downward pressure on the RMB. The RMB exchange rate fell from 6.37 RMB per dollar at the start of 2022 to the 7.30 level at the end of October 2022, its weakest reading since 2007.²⁰⁷ The RMB remained depreciated against the dollar into 2023 amid continued capital outflows and weak export orders. Although the RMB was largely stable relative to other major currencies, the rapid shift in China's exchange rate with its largest trading partner heightened uncertainty for foreign investors and impacted China's trade account.*²⁰⁸ The PBOC sought to smooth the volatility of the RMB, deploying a number of indirect measures to intervene in the value of the exchange rate, including managing the daily fixing rate† to slow the depreciation of the onshore RMB.‡²⁰⁹ The

*An RMB depreciation against the dollar is not unambiguously beneficial to China's economy. Although a weaker currency makes Chinese exports cheaper for the United States, it simultaneously makes it costlier for China to import intermediate products and consumer goods priced in dollars. This impacts not only goods imported from the United States but also imports from other countries that are paid for in dollars.

†The PBOC publishes a central parity rate every day, which establishes a midpoint for the value of the exchange rate. The value of the RMB is allowed to move up to 2 percent above or below the reference level. The PBOC can slow the depreciation of the RMB by setting a lower-than-expected central parity rate.

‡China utilizes a nontransparent regime to manage and influence the value of the RMB. Under the managed-float system, the exchange rate can adjust freely over the long term, but the PBOC

PBOC also appeared to direct China's national state-owned commercial banks to deploy their foreign asset holdings, which totaled around \$1.1 trillion, in defense of the RMB (for more on the volume of reserves controlled by the PBOC, see the textbox below).²¹⁰ The weakness of the RMB factored into the central bank's ability to use monetary easing to push borrowing costs lower and stimulate the economy. Further reducing interest rates to lower financing costs for domestic borrowers would decrease the attractiveness of Chinese investments, induce more foreign capital outflows, and add additional depreciation pressure on the RMB. As China trends toward further opening its capital account to foreign investment flows, it will confront a dilemma between intervening in the exchange rate and using monetary policy to support economic growth.²¹¹

China's Foreign Reserve Accumulation

Official data on China's foreign exchange reserves understate the true value of foreign assets controlled or influenced by the Party-state. China's accumulation of unreported reserves gives the central government greater capacity to intervene in foreign exchange markets. In August 2023, the PBOC controlled \$3.2 trillion in officially-reported foreign exchange reserves.²¹² China's officially reported reserves have remained level since the beginning of 2016 at around \$3 trillion, despite a continued influx of foreign currency into the economy that resulted from China's growing trade surplus.²¹³ The PBOC appeared to avoid accumulating these inflows of foreign currency on its own balance sheet.²¹⁴ As Brad Setser, senior fellow at the Council on Foreign Relations, notes, "China often seems to have bought foreign currency in the market and then lent it to domestic institutions who then invested abroad—at times, on a rather significant scale."²¹⁵ The institutions most prominently involved include China's state-owned commercial banks, China's policy banks (e.g., China Development Bank and China Export-Import Bank), and a number of sovereign wealth funds (e.g. China Investment Corporation). The institutions accumulating these "shadow reserves"—so-called because they do not appear as reserves in financial accounts—likely hold another \$3 trillion in overseas assets, bringing total holdings to \$6 trillion.²¹⁶ China appears to be using the reserves to maintain the value of the RMB, quietly selling large quantities of dollars through state-owned banks. For example, Dr. Wright and Mr. Feng of Rhodium Group observed that the Industrial and Commercial Bank of China and the Agricultural Bank of China reported combined foreign exchange losses of \$1.3 billion (RMB 9.2 billion) in 2022, even though they should have seen increased profit on their large dollar holdings from the dollar appreciation in 2022.²¹⁷ This suggests that these banks swapped their dollar holdings for RMB,

sets a cap on daily exchange rate movements to slow the speed of adjustment. Additionally, the Chinese authorities can directly intervene in markets to guide the value of the RMB. China also possesses a number of indirect means to intervene in exchange rate markets. In April 2023, former Governor of the PBOC Yi Gang asserted that China no longer intervenes in exchange rate markets and allows market forces to determine the RMB's value. Yi Gang, "Macro Week 2023: Yi Gang, Governor of the People's Bank of China," *Peterson Institute for International Economics*, April 15, 2023; U.S. Department of the Treasury, Office of International Affairs, *Macroeconomic and Foreign Exchange Policies of Major Trading Partners of the United States*, June 2023, 20–24.

China's Foreign Reserve Accumulation—*Continued*

slowing the RMB depreciation. China's leadership likely believes obscuring its management of the exchange rate through these indirect channels will avoid raising investor concerns about the value of the RMB, which has dropped significantly since 2020 and faces continued depreciation pressure given China's low interest rates, weak economic performance, and capital outflows from foreign investors following China's tacit support for Russia war in Ukraine.*

Beijing's Evolving Technology Ambitions

The year 2023 saw China's government attempt to revive growth in the consumer technology sector, which sputtered amid a sprawling regulatory tightening of e-commerce, fintech, ed tech and other data-intensive business models since late 2020. While government leaders announced that the crackdown would be easing, the CCP has kept in place close government oversight, ensuring that the future of Chinese tech, particularly in the cutting-edge field of artificial intelligence (AI), proceeds under the close watch of Beijing. The Party-state's hand in steering tech development also strengthened with the March restructuring of the Ministry of Science and Technology (MOST) and creation of a new Party-led commission, likely to be chaired by General Secretary Xi. Both will exercise greater control in directing the vast resources China channels toward its industrial policy initiatives, reflecting China's enduring and deepening prioritization of achieving technological breakthroughs in order to boost productivity and attain self-sufficiency.

Tech Campaign Eases but Chill Persists

Amid a broader economic slowdown, the CCP eased its tech crackdown in early 2023, likely spurred by layoffs in the industry. In January, Guo Shuqing, then Party Secretary of the PBOC, announced that the expansive Party-led crackdown on China's technology sector had been basically completed.²¹⁸ Launched in late 2020, the CCP's common prosperity campaign sought to contain the “disorderly expansion of capital” among major internet firms like e-commerce giant Alibaba, and also imposed stricter regulation on fintech and edtech firms and tighter controls on cross-border data flows.[†]²¹⁹ The campaign's “completion” in January 2023 brought under Beijing's watchful eye a sector viewed as essential by Party leaders—with the stated goal of aligning tech development with strategic government objectives.²²⁰ Chinese technology firms have faced difficulties under

*Foreign exchange transactions directly from the PBOC's balance sheet are relatively easy to track by the changes in official reserves, though China does not explicitly disclose the size of its foreign exchange market intervention. Foreign exchange interventions by China's state commercial and policy banks are even less transparent. The U.S. Department of Treasury uses net foreign exchange settlement to estimate Chinese banks' foreign exchange transactions, however, these data are frequently difficult to interpret for signs of intervention. U.S. Department of Treasury, Office of International Affairs, *Macroeconomic and Foreign Exchange Policies of Major Trading Partners of the United States*, June 2023, 20–24.

†For more on regulatory tightening in the tech sector and its motivations and consequences, see U.S.-China Economic and Security Review Commission, Chapter 2, Section 1: “Year in Review: Economics and Trade,” in *2021 Annual Report to Congress*, November 2021, 134–138.

sustained investigations, with Alibaba and Meituan receiving fines totaling \$2.8 billion and \$530 million, respectively, for what the government characterized as antimonopoly and antitrust violations.²²¹ The crackdowns introduced significant drag on China's technology sector as investment and financing in China's internet industry decreased 42.6 percent in the first quarter of 2022 and 76.7 percent compared to the same period in 2021.²²² This decline led to layoffs at internet companies, with China's Ministry of Industry and Information Technology announcing a total of 216,800 job losses reported from July 2021 to mid-March 2022.²²³ According to data from Maimai, the Chinese job networking platform, December 2021 showed a drop of 50 percent year-on-year in the growth of new hiring among the top ride-hailing, e-commerce, gaming, and social media companies.²²⁴ The following year saw this trend continue with companies like video-streaming site Bilibili and TikTok parent ByteDance cutting their workforce and reducing new hiring in 2022.²²⁵

While the platform economy is still viewed by the government as essential to China's development, it will continue to be scrutinized to ensure it supports the economy and national technology development goals. Following Guo's January announcement and signs of renewed support for China's tech sector at China's yearend economic work conference, regulators have greenlighted activities by major tech firms that had been halted during the crackdown. For example, Ant Group received approval to expand its consumer finance arm's capital base by \$1.5 billion (RMB 10.5 billion) in preparation for an IPO, coming more than two years after regulators halted Ant's planned IPO on the Shanghai and Hong Kong stock exchanges in November 2020.²²⁶ Similarly, ride hailing company Didi Chuxing resumed new user registration after it was ordered to stop in 2021.²²⁷ Yet despite the crackdown's easing, there is a lingering chilling effect among major tech players. Announced regulations keep tight government oversight in place, particularly by the PBOC and Cyberspace Administration of China (CAC), which have been empowered to closely monitor and review the function and business practices of prominent tech firms.²²⁸ For example, the Fintech associated arms of Ant Group and JD were made to restructure as financial holding companies, placing new regulatory capital requirements on each firm, and placing both fintech operations directly under PBOC oversight.²²⁹ In another salvo by PBOC in using its powers to rein in major tech firms, in July 2023 PBOC fined Ant Group \$982 million (RMB 7.12 billion) for a raft of violations, including what PBOC determined to be violations of corporate governance and financial consumer protection laws.²³⁰ In this chilled environment, other prominent tech firms continue to lag, including Alibaba and JD, which have yet to recoup their 2019 stock valuations as of October 2023.²³¹

With these tightened regulations and renewed priorities from Beijing, a wave of prominent Chinese technology entrepreneurs have been pushed out or stepped down. On the same day Party regulators announced that the regulatory campaign would be easing, they simultaneously took a blow at one of China's most notable tech executives: several hours after Guo's announcement, reports broke that Jack Ma, the founder of Alibaba, would have his voting rights reduced. Mr. Ma lost a controlling stake in his firm, seeing his vot-

ing rights shrink from above 50 percent to 6.2 percent following an investigation into Alibaba's business practices.²³² Joining Mr. Ma, JD.com's Richard Liu, ByteDance's Zhang Yiming, and Pinduoduo's Colin Huang are no longer CEO or chairman of their respective firms.²³³

Lagging Technology and Staunch Oversight Confounds China's ChatGPT Competitors

The November 2022 launch of Open AI's ChatGPT prompted an outpouring of investment in competing models among Chinese tech firms, but results so far have been lackluster. A flurry of AI startups quickly gained backing from investors, with MiniMax, which works on Large Language Models (LLMs) similar to that of ChatGPT, gaining a valuation of \$1.2 billion valuation just a year and a half after its founding.²³⁴ The former heads of delivery giant Meituan and search engine Sogou also founded new AI firms focused on creating LLMs, with the Sogou-backed venture receiving \$50 million in capital from investors.²³⁵ Chinese national champions, which have received significant state funding to research and develop AI, have also sought to enter the LLM market, with Baidu, SenseTime, Huawei, and Alibaba all announcing LLMs in development and in consumer testing.²³⁶ Baidu's "Ernie Bot," which mimicked ChatGPT, underwhelmed at its launch as the prototype only presented a prerecorded demonstration of the software's capabilities rather than a live interaction.²³⁷ It has since failed translation and math tasks.²³⁸ The muted reception of Ernie Bot caused shares of Baidu to slide as much as 10 percent following its launch.²³⁹ Access to ChatGPT is restricted in China.*

The long-term prospects for development of Chinese LLMs is constrained by the restrictive regulation regime the CCP is placing on AI developers. A law passed in January 2023 obliged LLM providers to "dispel rumors" spread using content generated by their products, meaning that companies can be held legally liable if their AI tools produce information or opinions that challenge the CCP.²⁴⁰ An April 2023 draft law goes a step further, requiring LLM developers to verify the truth and accuracy of both what the AI programs produce and the material used to train the program. As LLMs rely on vast troves of data to function effectively, this last requirement especially is a significant roadblock.²⁴¹ The April regulation further requires that AI models reflect "core socialist values" and requires firms to submit a security assessment of their models to authorities before they launch their offerings to the public.²⁴² Beijing's high rate of regulation of China's AI industry will likely adversely impact the success of its startups. In response to this wave of regulatory scrutiny, and in light of China's slowing economy, a growing number of Chinese startups are

*While U.S. AI-backed products such as ChatGPT have been blocked in China, Chinese companies have tested AI products and collected data in the United States. Since 2016, Baidu has been permitted to test its autonomous vehicles on public roads in California, with a driver present to ensure safety. In 2021, that permission was upgraded to a new permit allowing Baidu to test its autonomous vehicles without a driver present. U.S. firms do not have reciprocal access to test AI-assisted products in China. Andrew J. Hawkins, "Baidu is the Sixth Company Approved to Test Fully Driverless Cars in California," *The Verge*, January 27, 2021.

Lagging Technology and Staunch Oversight Confounds China's ChatGPT Competitors—Continued

deciding to move their operations abroad and sell to an international market rather than focus on China's domestic market.²⁴³ This shift allows Chinese AI firms to both gain easier access to foreign investments and potentially avoid sanctions imposed on Chinese companies by the United States. Poor retention of Chinese-trained AI talent is a further drag of the nation's AI development: a 2020 study by MacroPolo found that while more leading AI researchers did their undergraduate education in China than anywhere else, a sizeable majority of these researchers and experts have since left to pursue their graduate work abroad. More than half of these AI experts came to the United States, and over 90 percent of those who came to the United States chose to stay and work in the United States after graduation as of 2020.²⁴⁴

The development of advanced AI has been a key focus for Party leadership over the last decade, reflected in the New Generation Artificial Intelligence Development Plan published in 2017.²⁴⁵ However, that plan failed to substantively anticipate rapid strides in AI LLM innovation. As China's LLMs try to catch up, they still depend on U.S. research and technology.²⁴⁶ Despite the Party's efforts to develop technology surrounding AI, recent research by *Foreign Affairs* analyzing Chinese AI LLMs found that 17 of China's main LLM models used chips produced by the California-based firm NVIDIA while just three models were built with Chinese-made chips.²⁴⁷

Regulatory Shifts Strengthen the Party's Position at the Center of Tech Development

Party Oversight of Science and Technology Ministry Strengthened

China's Ministry of Science and Technology has been recast to centralize management of industrial policy, shedding much of its program administration to focus on key technology breakthroughs. For years, MOST administered a broad portfolio of state projects to advance an array of policy goals, ranging from building industrial parks to fostering rural technological development.²⁴⁸ In 2020, it managed over \$5.6 billion (RMB 40 billion) of government research and development (R&D) funds, the highest among the 40 central government R&D funding management departments.²⁴⁹ Following years of poorly administered R&D projects leading to waste, duplicative investment, and corruption, the reforms announced in March 2023 spin off much of MOST's project evaluation and management to other agencies and strip its role in building high-tech industrial development zones.²⁵⁰ In their place, the restructuring will focus MOST's portfolio primarily on coordinating across government agencies on projects aimed at strengthening China's technological self-sufficiency and achieving breakthroughs on key industrial policy goals.²⁵¹

Establishment of the powerful Party-led Central Science and Technology Commission (CSTC) within MOST underscores the min-

istry's focus on developing critical technologies. While the CSTC has not been fully formed as of October 2023, it is expected to spearhead initiatives in new technology and evaluate the progress of technological development across the government.²⁵² Operating as an entity directly under the CCP Central Committee, the new commission also gives Party leadership a direct role in supervising scientific and technology policies and in guiding research on critical technologies. Although the chair of the CSTC has not yet been indicated as of October 2023, experts predict the commission will be chaired directly by Xi Jinping. If Xi does become chair of the commission, it will be a clear demonstration of the importance he places on directly managing China's technology developments.²⁵³

China Deepens Emphasis on "Self-Reliance," but Progress Is Mixed

In the face of continuing U.S.-led export controls and sanctions, China continues to turn to indigenous firms to develop critical technologies. The finance ministry said it would boost special funds for the industrial and manufacturing sectors by \$607 million (4.4 billion RMB) to \$1.83 billion (13.3 billion RMB) in 2023 to support critical technologies such as integrated circuits.²⁵⁴ It announced an additional \$897 million (RMB 6.5 billion) for science and technology advancement at the local level this year, an increase of \$280 million (RMB 2 billion).²⁵⁵ These sizable increases underpin China's push toward "self-reliance," seeking to promote the capacity of domestic firms to develop circuit and semiconductor technology as it races to reduce China's current reliance on global technology supply chains.

However, funding increases do not always yield rapid scientific breakthroughs in China. This has been the case with Made in China 2025, which has not achieved its goal of producing 40 percent of the chips consumed in domestic value chains by 2020 and 70 percent in 2025 (China's microchip consumption was just 16 percent domestically in 2021).²⁵⁶ Meanwhile, as U.S.-led export controls on semiconductors came into full effect, China's chip imports slumped 23 percent in the first three months of 2023.²⁵⁷ The CCP government is aware of "chokepoints" in its supply chain where reliance on foreign technologies will likely continue for years.²⁵⁸ This is a critical issue for Chinese manufacturers of smartphone processors and autonomous driving tools, who are still heavily dependent on foreign countries to manufacture chips essential to their function.²⁵⁹ In AI development too, many Chinese labs heavily rely on high-end chips developed by U.S. firms.²⁶⁰

A Centralized Data Regime

The Chinese government also announced the formation of the National Data Bureau (NDB) under the National Development and Reform Commission. The NDB's aim is to centralize control of China's data and harness the country's digital resources for economic growth.²⁶¹ The establishment of the bureau comes as China implements its data governance regime, wherein China views cyberspace,

data, and networks as sovereign territory subject to local laws and restrictions and largely isolated from international actors.* The new national-level NDB is set to oversee the management of all data flows between government agencies. Despite the Party-state's attempts to centralize dataflows—including increased oversight of and limitations on cross-border dataflows—government control of data within China is highly fragmented, with some 18 province-level data authorities established since 2015 to manage local data resources.²⁶² In its role, the NDB will seek to consolidate domestic management of Chinese data. The NDB will also take over regulation of China's digital economy and the implementation of national plans, such as its national big data strategy, which seeks to build digital infrastructure and promote China's global role in AI and data analytics.²⁶³

Aside from centralized management of data, the NDB is to play a direct role in facilitating China's development of AI.²⁶⁴ Part of the scope of the new bureau's responsibility includes coordinating data sharing with AI firms and helping to manage the data samples being used to train AI models.²⁶⁵ This could provide China's new data regulators another channel to influence the development of AI. While CAC will retain its regulatory and censorship powers, the NDB is also expected to support the CAC in promoting China's global data governance regime, state-centric rules, and standards for data that compete with existing U.S.- and EU-backed approaches as part of the CCP's efforts to promote "cyber sovereignty" and "data sovereignty."[†]²⁶⁶

Implications for the United States

China's economy is confronting slowing growth, a fiscal crisis, and financial turbulence. The central government is responding to China's debt buildup and the excesses of its industrial policy initiatives by strengthening CCP oversight and further centralizing authority. However, Chinese financial regulators' past efforts to address systemic financial risks have repeatedly done more to shift moral hazard within the financial system rather than fundamentally reform it. Initial steps to unwind China's acute debt suggest a similar game plan: force the banking system to write down debt gradually while ignoring the true extent of the crisis and shifting nonperforming assets off banks' books to other corners of China's financial system.

*The legal framework governing cross-border data transfers includes China's Cybersecurity Law enacted in 2017, the 2021 enactment of the Data Security Law, and the Personal Information Protection Law. Major rules published by the Cyberspace Administration of China to implement the measures of these laws came into effect in 2022 and 2023. These measures establish procedures for conducting a security assessment before transferring data and personal information overseas (effective September 2022), a third-party certification process for conducting cross-border data transfers (effective November 2022), and a standard contract for facilitating the data transfers overseas (effective June 2023); Qiang Tong and Wang Xintong, "How China Is Tightening Controls over Cross-Border Data Transfers," *Caixin Global*, June 14, 2023; Womble Bond Dickinson, "Cross-Border Data Transfers under China's Personal Information Protection Law," May 31, 2023; Todd Liao, "China's Cross-Border Data Transfer Security Assessment Measures Take Effect September 1," *Morgan Lewis*, August 1, 2022.

†In September 2020, China released its Global Initiative on Data Security that requires that data gathered locally should be stored locally for the protection of data sovereignty and national security, while opposing the "weaponization" of data against China and other states. The initiative has been endorsed by some countries that also practice the centralized and closely monitored approach of internet governance advocated by China, including Russia, Tanzania, Pakistan, and the Arab League. Jian Xu, "What Does China's Newly Launched National Data Bureau Mean to China and Global Data Governance?" *Internet Policy School*, April 25, 2023.

As it confronts slowdown and crisis, Beijing continues to look to exports to and encourage direct investment from the United States and other developed countries to boost short-term growth, and in the long term seeks to deepen global dependence on Chinese manufactures. It continues to open its capital account selectively and develop novel and often opaque methods to manipulate the value of the RMB, seeking foreign portfolio investment to fund development priorities. In short, China's policies look to foreign firms, capital, and markets to mitigate the consequences of its economic mismanagement while deepening global exposure to this mismanagement and systemic risks from China's financial system.

For the United States, this exposure poses two distinct challenges. First, lack of transparency in China's fiscal and financial system makes it difficult to gauge the scale of the problems and the true extent of U.S. exposure. Central and local governments buy, sell, and transfer debt within China's financial system, making it difficult to gauge potential risks and contagion from a failing institution. Second, China's overtures to U.S. business are increasingly overt in their aims to advance specific policy goals. Attempts to increase U.S. investment and maintain access to U.S. and other advanced industrial countries technology ecosystems, in areas that would improve China's competitiveness vis-à-vis the U.S. economy, heighten perennial questions about the consequences of offshoring and the cumulative erosion of U.S. domestic capabilities and capacity.

Appendix: Bureaucratic Reorganization Points to Focus on Local Debt Challenges

The year 2023 marked the start of a new five-year session for China's National People's Congress and a major reorganization of the Party-state's administrative structure. In addition to announcing the year's slate of economic goals, new congresses fill key roles within the state bureaucracy (like Premier Li's announcement as nominal head of economic affairs) and serve as venues for China's state bureaucracy and the CCP to announce major structural changes. This congress's structural changes focused on two primary areas—debt and financial issues as well as technology development—foreshadowing the thrust of Beijing's efforts for the next five years.* As was the case this year, these changes typically involve either creating or dissolving government agencies or CCP oversight commissions and are important indicators of CCP priorities, often presaging major policy initiatives or regulatory campaigns to be launched by the newly formed bodies.

Three new Party commissions were created at the very top of China's Party-state bureaucracy in 2023, two dealing with financial issues and a third dealing with science and technology to orchestrate policy in those domains.²⁶⁷ These changes are the strongest signal the Party-state can send regarding its priorities, reflecting the importance that handling debt and financial risks and development of technology and scientific breakthroughs will play in the Party's economic policies over the next five years. Beijing is likely to leverage its newly established central financial commissions as part of a comprehensive strategy to steer capital away from conventional sectors like property and toward increasingly prioritized areas such as advanced manufacturing. At the same time, the greater top-down control capacity will likely be used to try and manage any systemic risks that may arise as implicit guarantees are removed from local governments and property developers, an intrinsically risky process. Below is an overview of the two new finance commissions (for discussion of the science and technology commission, see "Beijing's Evolving Technology Ambitions").

- The first new finance commission, the Central Financial Commission, is now China's highest body in charge of financial policy and is responsible for "top-level design" and "overall coordination." This puts it on equal footing with the powerful Central Finance and Economic Affairs Commission, formerly headed by outgoing vice premier and Xi-confidant Liu He, and which called the shots on major economic initiatives during Liu's tenure.† Of

* Extensive changes in 2018 were largely seen as efforts to expand General Secretary Xi's and the CCP's authority. The structural changes announced at the 14th National People's Congress in March 2023 work in the same direction, though they are less sweeping, reflecting that Xi has already consolidated power.

† Leading Small Groups, of which commissions are a direct outgrowth, have been referred to as Xi's "signature governance innovation." Although they have long been used by the CCP, his extensive utilization of this bureaucratic coordinating mechanism has allowed him to take on greater personal coordinating power and overall influence over China's vast bureaucracy. Analysts believe Xi is likely to chair this new Central Finance Commission personally, as he does with many other commissions. One among his new team of trusted economic advisors—either Li Qiang (premier), Ding Xuexiang (executive vice premier), or He Lifeng (vice premier)—is likely to run the general office of the commission, dealing more directly with implementation, regulatory coordination, and substantive day-to-day issues. Christopher K. Johnson, Scott Kennedy, and Mingda Qiu, "Xi's

note, this new CCP apparatus will absorb the responsibilities of the Financial Stability and Development Commission, a similarly tasked commission within the state bureaucracy that was dissolved at the March congress.²⁶⁸

- The second new CCP commission is the Central Financial Work Commission, a revived body formerly in operation from 1998 to 2003 to deal with the fallout of the Asian Financial Crisis. The Financial Work Commission's new mission is "Party-building" throughout the financial system, working to ensure personnel within every unit and at every administrative level of China's financial bureaucracy adhere to central directives. In conjunction with the increased oversight from the CCP's internal watchdog, the Central Commission for Discipline and Inspection, the financial sector will now be subject to even stronger top-down guidance, monitoring, and control.²⁶⁹

The centralization of authority under these new finance commissions indicates that the Party is girding itself to deal with potential instability that may arise from debt restructuring and limits on local debt accumulation. As China's most recent debt restructurings in Guizhou foreshadow, the financial system, in particular the banks and household depositors, will need to bear the brunt of these costs, either through delayed interest and principal payments or outright write-down.²⁷⁰ And it is precisely at the moment of reform that risks tend to be greatest. The Party will rely on its two new financial commissions to oversee controlled chaos within the system, allowing for additional defaults and market pricing. Beijing's increasing exertion of top-down control over the financial system will thus likely coincide with further efforts to remove moral hazard,* allowing more defaults and accurate pricing of risk to enter certain parts of the system.[†]²⁷¹ At the same time, however, Beijing will rely on certain parts of the system to cushion and absorb some of the impact, as per reports that it has sent state-owned asset manager Cinda to help Guizhou deal with its LGFV debt.²⁷²

The congress also oversaw three changes to implementing bureaucracies that will have important implications for financial, corporate, and technology issues, respectively. The first change is the creation of the National Financial Regulatory Administration (NFRA), which will function as the primary implementer of policy related to financial conduct-of-business supervision and will be under the State Council. Beijing's creation of the NFRA is likely intended to

Signature Governance Innovation: The Rise of Leading Small Groups," *Center for Strategic and International Studies*, October 17, 2017; Frank Tang, "China's Financial Overhaul Brings More Power to the Party, with US\$58 Trillion in Assets at Stake," *South China Morning Post*, March 18, 2023.

*Dr. Wright characterizes moral hazard as "a condition in which decisionmakers or investors either seek out additional risk or avoid managing risk because they believe they are protected from losses" and notes that it has become a pervasive aspect of China's financial system due to authorities' routine interventions to stabilize markets. Logan Wright, "Grasping Shadows: The Politics of China's Deleveraging Campaign," *Center for Strategic and International Studies*, April 10, 2023, 15.

†A central aim of Beijing's deleveraging and de-risking campaign that began in 2016 has been to remove the moral hazard underpinning China's financial system. The Party-state has progressively allowed more and more areas of the economy to default. As Trivium notes, the ongoing reforms reflect that "policymakers are not satisfied with the results of the financial de-risking campaign that has been underway since 2017" and will become increasingly forceful in resolving debt and risk accumulation at local levels. *Trivium China*, "2023 Two Sessions: China's Government Restructuring," March 2023.

claw back control over financial regulatory functions from local governments, centralizing top-down control over financial risk and deleveraging priorities.*²⁷³ The second is the creation of a new Social Work Department under the Party's Central Committee that will take responsibility for extending the Party-state's tendrils into the private sector and into local governance, specifically by overseeing formation and work of Party cells within private firms, industry alliances, and grassroots-level governance functions.†²⁷⁴ Third, MOST has been simultaneously streamlined—with specific functions mostly related to industrial policy given to other departments—as well as upgraded in terms of importance by becoming the implementing agency for the new Central Science and Technology Commission's top-level designs (for more on MOST's restructuring, see “Beijing's Evolving Technology Ambitions” above).²⁷⁵ The key throughline from bureaucratic restructuring is that the changes seek to enable more top-down command and control so the center can steer the economy in desired directions.

Exerting control over local governments to rein in debt growth will be among the top priorities of the new financial regulator and top-level financial commissions. In order to control the localities, Beijing is centralizing finances, increasingly “cutting off easy financing at the local level, such as debt financing through LGFVs.”²⁷⁶ State bureaucratic reforms in 2023 will also alter China's center-local financial governance relationship, likely giving the center greater control. Beijing is requiring local governments to restructure their local financial regulatory bodies, typically called Financial Work Bureaus or Offices. These local bodies, although charged with overseeing and regulating the local finance industry, also often wear dual hats as economic development coordinators and promoters, which creates conflicts of interest that can contribute to debt accumulation and undermine top-down capital allocation preferences and financial de-risking efforts. These local finance bodies are thus to be reorganized as subunits of the new NFRA, meaning the local financial regulator will no longer report to officials at the same level in China's governance hierarchy but instead to the higherups in the NFRA administrative bureaucracy. In other words, rather than take orders from city-level officials in the local government and Party group, a city-level branch of the NFRA will instead be responsive to the provincial-level NFRA.‡²⁷⁷ Local governments will have until the end of 2024 to implement these changes.²⁷⁸

*The NFRA is absorbing the Central Banking and Insurance Regulatory Commission, taking over responsibility for oversight of the banking and insurance sectors. According to Trivium China, a research firm focused on China policy, the new NFRA will be a “beefed-up version” of its former self, as it will also take on responsibilities formerly under the PBOC for regulating financial holding companies and consumer protection as well as responsibility for investor protection from the China Securities Regulatory Commission. Trivium China, “The Financial Sector Regulatory Overhaul: What It Means and How Things Will Change,” *Trivium Markets Deep Dive*, March 10, 2023.

†The COVID-19 pandemic witnessed an expansion in governance functions to the grassroots that had not been seen in China for decades. A new governance architecture has been established, particularly in cities, that gives subdistrict-level governments and residential committees far greater ability to intervene in the lives of citizens. A key task of the new Social Work Department will be in formalizing and securing top-down control over these local agents. These changes, combined with increasing technological capacity, effectively lay the groundwork for unprecedented thorough penetration and control of society. Yutian An and Taisu Zhang, “Pandemic State-Building: Chinese Administrative Expansion since 2012,” *SSRN*, February 12, 2023.

‡China's bureaucracy is characterized by two major types of authority relationships: leadership relations (*lingdao guanxi*) and advisory relations (*yewu guanxi*). Leadership relations are for-

The Party-state's ability to manage debt issues through its new efforts is nonetheless dubious, given the continued desire to both direct credit to priority sectors and maintain some amount of growth. Beijing will struggle going forward to limit debt while continuing to rely on a system that uses GDP growth targets, promotion metrics that prioritize growth, and local-level infrastructure deployment to boost employment and economic activity. Even if the center is able to limit local-level officials' ability to pile up debts in support of non-strategic but job-supporting local zombie firms,* Beijing will use its greater top-down control to lean on the financial system to provide cheap capital to strategic and technological priority areas, independent of market rationales.

mal and binding, whereas advisory relations are suggestive. Formerly, local government financial regulatory offices had leadership relations with Party-state officials at the same administrative level (e.g., at the same county or city level), but following reforms it appears that leadership relations will now be with the bureaucratic unit higher up in the administrative hierarchy (e.g., the city-level finance office will be led by the province level). For more on the bureaucratic process, see Andrew Mertha, "China's 'Soft' Centralization: Shifting Tiao/Kuai Authority Relations," *China Quarterly*, December 2005.

*A zombie firm is a company that keeps operating despite being unprofitable and often unable to repay its existing debts, instead relying on outside support and constant new borrowing to stay afloat. In China's case, most zombies are loss-making local firms that provide employment and possess good ties to local lenders and Party-state officials. For more on the problem of zombie firms in China, see W. Raphael Lam et al., "Resolving China's Zombies: Tackling Debt and Raising Productivity," *International Monetary Fund Working Paper*, November 27, 2017.

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274. Central Committee and State Council, *The Central Committee of the Communist Party of China and the State Council Issued the "Party and State Institutional Reform Plan"* (中共中央 国务院印发《党和国家机构改革方案》), March 16, 2023. Translation.

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CHAPTER 4

CHINA SEEKING MILITARY INFLUENCE AND ADVANCED CAPABILITIES

SECTION 1: CHINA'S RELATIONS WITH FOREIGN MILITARIES

Abstract

China uses the People's Liberation Army's (PLA's) activities and relationships with foreign militaries to promote a positive image of China as an international security partner, undermine U.S. influence, and pursue military, foreign policy, and economic benefits. China's leadership coordinates a range of military activities with foreign security forces, including bilateral and multilateral meetings, functional exchanges, port calls, exercises, and arms sales. It also uses military exchanges to pursue combat-relevant skills, practice power projection capabilities, and collect intelligence. Although China's military diplomacy is expanding, the United States maintains key strengths and advantages in building partner capacity that can help it remain a partner of choice for security cooperation.

Key Findings

- China orients many of its interactions with foreign militaries around undermining U.S. leadership of international security affairs. The PLA's messaging to its foreign counterparts in bilateral and multilateral military engagements aims to enhance China's reputation at the expense of the United States.
- Russia is China's most important military partner, and their relationship serves many of China's interests, such as signaling strategic unity against the United States, undermining U.S. security partnerships, practicing combat-relevant military skills, and obtaining advanced technology. During Russia's unprovoked war in Ukraine, China and Russia have continued to conduct joint exercises both bilaterally and with other partners such as Iran and other members of the Shanghai Cooperation Organization (SCO).
- China's military exercises with foreign counterparts align with General Secretary of the Chinese Communist Party (CCP) Xi Jinping's requirement for the military to strengthen its combat effectiveness. The PLA uses bilateral and multilateral exercises to carry out increasingly realistic, combat-oriented training such as live fire drills, combat simulations, air defense, and strike operations. The PLA also pursues relevant combat sup-

port capabilities such as communications, logistics, survival skills, military medicine, and other basic military skills. The PLA accrues additional benefits, including practicing skills that support power projection and gathering military intelligence during exchanges.

- China uses ostensibly cooperative engagements with militaries of neighboring states to encourage greater acquiescence to its plans in the region. Nevertheless, China undermines its own efforts in some cases by continuing to engage in aggressive behavior targeted at these same militaries, such as by harassing the vessels of its supposed “partners” in the South China Sea.
- Many of the activities China conducts with foreign militaries, including exercises and international military education and training, do little to develop foreign partner military capacity. The United States maintains strong advantages in these areas due to the quality of its programs and focus on building partner capacity that China struggles to replicate.

Recommendations

The Commission recommends:

- Congress require the U.S. Department of Defense and the U.S. Department of State to provide to the appropriate committees of Congress within 180 days a classified briefing on China’s efforts to educate and train foreign military personnel. The briefing should address how China’s programs affect U.S. interests, including: (a) foreign military partners’ assessment of the value of China’s security assistance and training programs; and (b) whether the scale and offerings of U.S. military education and training programs are sufficient to maintain the United States’ status as a preferred partner.
- Congress require the U.S. Department of Defense (DOD) to submit a report within 180 days that builds upon the restrictions on DOD’s contacts with the People’s Liberation Army (PLA) outlined in section 1201 of the National Defense Authorization Act for Fiscal Year 2000 by detailing measures DOD is taking to mitigate the risk of the PLA gaining indirect knowledge of U.S. Armed Forces’ equipment and operational tactics, techniques, and procedures through interactions with the militaries of U.S. allies and partners. The report should identify any obstacles to ensuring sufficient partner awareness of these risks and to conducting the necessary follow-up and end-use monitoring to ensure compliance.

Introduction

As China’s foreign policy ambitions and military capabilities have grown, the PLA has expanded its interactions with foreign militaries around the world.* In bilateral and multilateral engagements,

*The Commission consulted the “Chinese Military Diplomacy Database” produced by the Center for the Study of Chinese Military Affairs at the U.S. National Defense University, which tracks military exercises, naval port calls, and senior-level meetings conducted by the PLA. According to available data, the PLA’s engagements with foreign militaries moderately increased over time

the Chinese military increasingly promotes China as a desirable security partner and echoes General Secretary Xi Jinping's pronouncements about China's qualifications to lead the global security order.¹ Through exercises with foreign militaries, especially its "no limits" partner, Russia, the PLA gains opportunities to practice military skills.² At the same time, Beijing seeks to deepen relationships with other countries through arms sales, international military education, and military and paramilitary training programs to serve China's economic and strategic interests.

According to Li Daguang, a professor at the PLA's National Defense University, the broad objectives of China's foreign military relations under Xi's leadership range "from promoting the military relations of major powers to building a favorable surrounding environment, from creating a platform for enhancing combat effectiveness to striving for the initiative in international public opinion struggles."³ This assessment, published in the *People's Daily* in 2014 shortly after Xi's rise to power, provides a snapshot of the many ways China's leadership hopes to use PLA interactions with foreign militaries to its advantage.⁴

This section evaluates China's objectives in its foreign military relations, examines the activities the PLA undertakes with foreign counterparts, and considers their implications for the United States. It first lays out China's general approach to foreign military relations, including its main activities, coordination mechanisms, and primary objectives. The section then explores how China uses foreign military relations to advance its foreign policy goals. It then analyzes how foreign military relations benefit China's operational capabilities, skills, and training. It concludes with a consideration of implications for the United States. The section draws on the Commission's January 2023 hearing on "China's Military Diplomacy and Overseas Security Activities," consultations with experts, and open source research and analysis.

China's Approach to Foreign Military Relations

China's leadership considers a range of activities as falling within the purview of its foreign military relations. A publication of PLA terminology released by China's authoritative Academy of Military Sciences defines the term "military foreign relations" (also translated as "military diplomacy") as "external relationships pertaining to military and related affairs between countries and groups of countries, including military personnel exchange, military negotiations, arms control negotiations, military aid, military intelligence cooper-

while varying in volume from year to year between 2002 and 2019 and then declined precipitously due to the COVID-19 pandemic. The number of recorded activities rapidly grew from 122 in 2002 to a peak of 216 in 2010. After a brief decline to 121 by 2012, total activities rose again to 212 by 2015. The years after 2015 show a modest decline to 190 in 2019, which Phillip Saunders, director of the center that maintains this database, attributed to Xi Jinping's military reforms beginning in 2016 and the need for greater attention to internal matters as well as to the declining frequency of U.S.-China military interactions. The proportion of China's engagements with foreign militaries dedicated to military exercises and port calls has increased relative to senior-level meetings over time, but senior-level engagements still constitute the majority of PLA engagements conducted with foreign militaries. Overall activity fell dramatically due to the impact of the COVID-19 pandemic, with an average of only 49 interactions per year between 2020 and 2022. (For a graph of the data described above, see Figure 1 in the Appendix.) Phillip C. Saunders, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China's Military Diplomacy and Overseas Security Activities*, January 26, 2023, 4, 6; Center for the Study of Chinese Military Affairs, "Chinese Military Diplomacy Database Version 4.00."

ation, military technology cooperation, international peacekeeping, military alliance activities, etc.”⁵ Subject to the overall guidance of the CCP central leadership, the PLA conducts these activities with counterparts around the world to advance China’s foreign affairs and military goals.

China’s Relations with Foreign Militaries Evolving under Xi

In a high-profile January 2015 speech at the All-Military Foreign Affairs Work Conference,* Xi declared that foreign military relations would play a more important role in China’s global activities.⁶ China’s military and paramilitary forces, including the People’s Armed Police and China’s Coast Guard, use bilateral and multilateral military activities with foreign military counterparts to promote China as a desirable security partner, enhance its soft power, and positively influence foreign media and governments’ perception of the PLA through the following global activities:⁷

- *Bilateral meetings:* China’s security officials frequently interact with senior-level military or civilian defense leaders, either hosted by the PLA in China or conducted abroad.⁸ Senior-level meetings represent a majority of the PLA’s military engagement with foreign partners.[†]⁹
- *Multilateral security fora:* Chinese and foreign defense officials participate in senior-level multilateral dialogues and meetings, such as the Shangri-La Dialogue and other meetings organized by ASEAN, the SCO, and BRICS (Brazil, Russia, India, China, and South Africa).¹⁰ China’s participation in multilateral dialogues allows it to convey desired messages to several countries, provides opportunities to shape regional security issues, and elevates its international status.¹¹ China has also launched its own multilateral fora such as the Beijing Xiangshan Forum, the China Africa Peace and Security Forum, and the China-Latin America Senior Defense Forum.¹²
- *Functional exchanges:* PLA and foreign military personnel conduct various professional exchanges, including academic exchanges.¹³ These exchanges offer opportunities for the PLA to build its skills, improve ties, strengthen cooperation, gather intelligence, and also support Chinese diplomatic goals.¹⁴ For example, the PLA Air Force hosted the International Military Flight Training Conference‡ in 2022, during which PLA Air

*The PLA Academy of Military Sciences defines the term “military foreign affairs work” as “the military’s work in conducting foreign exchanges and cooperation within the military domain.” The term refers specifically to the practical and technical actions taken by China’s military personnel to execute tasks relevant to China’s foreign military relations. Timothy R. Heath, “China Maritime Report No. 8: Winning Friends and Influencing People: Naval Diplomacy with Chinese Characteristics,” *U.S. Naval War College Digital Commons, China Maritime Studies Institute*, September 2020, 4.

†According to data from the U.S. National Defense University covering the years 2002 to 2022, PLA senior-level bilateral meetings reached their peak in 2010 at 168 engagements. From 2010, bilateral meetings have been steadily declining to 70 total engagements in 2019 before a steep decline to an average of 26 engagements per year between 2020 and 2022 due to the impact of the COVID-19 pandemic on travel. Center for the Study of Chinese Military Affairs, “Chinese Military Diplomacy Database Version 4.00.”

‡The International Military Flight Training Conference was initiated by the PLA Air Force in 2010 and is held biennially. It has convened seven times since 2010. Participants in previous conferences included representatives from Botswana, Cameroon, Ethiopia, Kenya, Kuwait, Namibia, Pakistan, Spain, Thailand, Zambia, Zimbabwe, and others. Some participants, such as Botswana and Zambia, participated at the working level, represented by the defense attaché in country; the level of other participants is unclear. In 2021, Pakistan’s chief of air staff was in attendance. Rep-

Force officers met with foreign representatives from 21 other countries to exchange approaches on methods to leverage scientific and technological innovation for the development and training of air forces.¹⁵ China's foreign military education exchanges aim to establish a global network of alumni within other countries' security forces to strengthen China's defense ties.¹⁶ In an effort to appeal to a broad foreign audience, China's military institutions offer courses in English, French, Russian, Spanish, and Chinese.¹⁷

- *Port calls:* The PLA Navy often visits foreign ports or hosts foreign naval vessels in China.¹⁸ Port calls provide opportunities to facilitate combined training and can be used to signal friendly relations.¹⁹ The PLA Navy has conducted port calls as standalone activities and while on training deployments, such as port calls en route to or returning from antipiracy patrol deployments in the Gulf of Aden.²⁰
- *Exercises:* China's military exercises and joint patrols with foreign militaries are carried out by either the PLA Army, Navy, Air Force, People's Armed Police, or multiple services and focus on specific training functions, including combined arms exercises,* live-fire combat drills, naval maneuvers, combat support (communications, engineering, resupply, logistics, survival skills), or competitions for specific skills such as sniping.²¹ Military exercises also include participation in a wide variety of nontraditional security activities with foreign partners such as humanitarian assistance/disaster relief (HA/DR), counterterrorism, and antipiracy.²² From 2002 to 2021, the PLA has gradually increased the foreign and multilateral military exercises it has participated in, reflecting an increase in the PLA's confidence to operate alongside foreign militaries.²³
- *UN peacekeeping operations:* The PLA defines international peacekeeping as a component of its military diplomacy and highlights its ability to be an international security provider through these activities.[†]²⁴ The PLA derives many benefits from participating in UN peacekeeping operations, such as learning from other troop-contributing countries, developing foreign language and cultural skills, exposing junior and midranking officers to high-risk environments, improving planning skills for expeditionary operations, and providing external validation of unit readiness.²⁵ As of 2021, most of China's roughly 2,500 peacekeepers deployed were engineers and medical staff that conduct combat support roles, but prominent units assigned to the standby force involved infantry and rapid-reaction forces.²⁶

representatives from aviation and aerospace companies and from academia have also participated. CGTN, "Intl. Military Flight Training Conference Held in Guangdong Province," *Global Herald*, November 10, 2022; Liu Jimei and Gao Yujiao, "PLAAF Cultivates Pilots for Intelligentized Air Battle," *China Military Online*, September 28, 2021.

*Participation by multiples branches of a single service is considered a combined arms exercise. Joint exercises involve the participation of multiple services. Kenneth Allen, Phillip C. Saunders, and John Chen, "Chinese Military Diplomacy, 2003–2016: Trends and Implications," *National Defense University Press*, 2017, 22.

†As of July 31, 2023, China was contributing 2,277 personnel to UN peacekeeping missions and ranked ninth overall in the provision of personnel behind Bangladesh, Nepal, India, Rwanda, Pakistan, Ghana, Indonesia, and Senegal. United Nations, "United Nations Peacekeeping: Troop and Police Contributors," 2023.

- *Military arms and equipment sale and provision:* China's sale and provision of military equipment and technology to foreign counterparts are motivated by both strategic and commercial interests.²⁷ China has long been a competitive international supplier of small arms.²⁸ With regard to larger systems, China has shifted from a "supplier of last resort" to a more competitive defense industry that has upgraded the quality of its arms for exports.²⁹ April Herlevi, senior research scientist at the Center for Naval Analyses, explained in testimony to the Commission that in the 1990s and early 2000s China primarily exported missiles and ground-based platforms such as tanks and artillery, often to countries that could not obtain such defense articles from other suppliers.³⁰ In the decades since, China has both improved the quality of its exports and expanded the range of equipment it provides, with the most notable advances in aircraft and ships.³¹ China has also expanded the range of countries to which it sells weapons globally and is now the fourth-largest exporter of military equipment in the world.³²

Coordination of China's Relations with Foreign Militaries

China's leadership coordinates foreign military relations through the Party's Central Military Commission (CMC) with important roles for China's Ministry of National Defense (MND), the PLA's Joint Staff Department, and certain other ministries.*³³

- The PLA's foreign affairs activities are overseen by the minister of national defense, who is both a member of the CMC and head of the MND.³⁴ The minister of national defense is the sole uniformed representative on the CCP's Central Foreign Affairs Commission, the top coordinating body for foreign policy in China.[†]³⁵
- The organization primarily responsible for formulating and coordinating relations with foreign militaries is the CMC's Office for International Military Cooperation (OIMC), one of the 15 subordinate entities of the CMC.³⁶ As China's 2019 Defense White Paper explains, OIMC's mission is to manage foreign military exchanges and cooperation and to supervise the foreign affairs work of China's armed forces.[‡]³⁷

* The CCP's Central National Security Commission (CNSC), which Xi established to manage the Party's increasingly interdisciplinary approach to security, may also play a role in the coordination of military and security diplomacy. As Phillip Saunders testified before the Commission, the representation of foreign policy, military, and public security interests on the CNSC likely means the organization could play some role in coordinating the international activities of China's security forces. For more on the CNSC, see U.S.-China Economic and Security Review Commission, Chapter 1, "CCP Decision-Making and Xi Jinping's Centralization of Authority," in *2022 Annual Report to Congress*, November 2022. Phillip Saunders, oral testimony to the U.S.-China Economic and Security Review Commission, *Hearing on China's Military Diplomacy and Overseas Security Activities*, January 26, 2023, 64.

† For more on the Central Foreign Affairs Commission and foreign policy decision-making, see U.S.-China Economic and Security Review Commission, Chapter 1, "CCP Decision-Making and Xi Jinping's Centralization of Authority," in *2022 Annual Report to Congress*, November 2022.

‡ OIMC itself is organized along both regional and functional lines. Known subordinate offices of OIMC include a Security Cooperation Center, an Arms Control and Compliance Affairs Office, a Comprehensive Bureau, and regional bureaus corresponding to Eurasia, Asia, the Americas, and Oceania. It likely has several other regional bureaus in line with the geographic divisions used by China's Ministry of Foreign Affairs. Phillip Saunders, written testimony for U.S.-China

Coordination of China's Relations with Foreign Militaries—*Continued*

The functions of today's OIMC were previously performed by the MND's Foreign Affairs Office, and their reorganization directly under the CMC in 2016 as part of Xi's PLA reforms demonstrated Xi's increasing emphasis on the importance of military diplomacy.*³⁸

- The PLA's Joint Staff Department also plays a role in the management of China's military diplomacy that it likely inherited from its pre-2015 reform predecessor, the General Staff Department.³⁹ One of the deputy chiefs of the PLA's Joint Staff usually has an important role in coordinating the PLA's military intelligence activities and its foreign affairs activities.
- The primary authorities over China's arms sales are the CMC and the State Council.⁴⁰ The State Administration for Science, Technology, and Industry for National Defense (SASTIND) and the CMC's Equipment Development Department (EDD) are responsible for formulating regulations on exports of military items and dual-use missiles.⁴¹ They are also primarily responsible for reviewing associated export license applications in consultation with other relevant ministries.[†]⁴² Any applications deemed to be of a particularly sensitive political or strategic nature must also receive final approval from both the State Council and the CMC, likely at a higher level.[‡]⁴³

China's Foreign Military Relations Serve Multiple Objectives

Through relations with foreign militaries, China's leaders seek to advance both foreign policy goals and military development goals. In his testimony for the Commission, Phillip Saunders, director of the Center for the Study of Chinese Military Affairs at the U.S. National Defense University Institute for National Strategic Studies, characterized China's foreign military efforts as simultaneously serving strategic goals such as diplomacy and shaping the international se-

Economic and Security Review Commission, *Hearing on China's Military Diplomacy and Overseas Security Activities*, January 26, 2023, 6; Chad Sbragia and Kenneth Allen, "Managing the PLA's Military Diplomacy: Key Institutions and Personnel," *Jamestown Foundation China Brief*, November 18, 2022.

*Some sources continue to reference an "Office for International Military Cooperation" under the MND. This is likely an example of a common pattern within the Chinese political system of one entity with two names, one listed under the Party and the other under the PRC government. A comparable example is the CCP's Central Military Commission itself, which has a nominal state counterpart in the PRC government with identical membership. Chad Sbragia and Kenneth Allen, "Managing the PLA's Military Diplomacy: Key Institutions and Personnel," *Jamestown Foundation China Brief*, November 18, 2022; Liu Zhen, "What Is China's Central Military Commission and Why Is It So Powerful?" *South China Morning Post*, October 18, 2022.

†According to the State Council's 2021 Export Control White Paper, organizations responsible for reviewing export license applications include the CMC's EDD, SASTIND, the Ministry of Commerce (MOFCOM), the Ministry of Industry and Information Technology (MIIT), the General Administration of Customs (GAC), and the State Atomic Energy Agency. Institute for Strategic Studies, "Strategic Dossier," 2023, 79.

‡According to analysis by the International Institute for Strategic Studies, given the involvement of SASTIND and the CMC's EDD in the previous stages of the licensing process, this step may indicate higher political approval within the state and Party system. The exact level of this approval remains unknown. Institute for Strategic Studies, "Strategic Dossier," 2023, 80.

curity environment as well as operational goals such as expanding PLA capabilities and comparing them to those of other militaries.⁴⁴ Kristen Gunness, senior policy researcher at the RAND Corporation, highlighted a similar range of objectives in her testimony.⁴⁵ In her assessment, China's foreign military relations serve "foreign policy goals such as shaping the international environment to be more conducive to Chinese interests, building influence with key partners in economically vital locations around the world, advancing and defending China's interests in the U.S.-China competition and building a strong military that can operate overseas."⁴⁶ According to China's state media outlet *Xinhua*, Xi himself stated in 2015 that foreign military relations serve to "promote the country's overall diplomacy, safeguard national security, and promote military construction."⁴⁷ Chinese sources from the PLA's Academy of Military Sciences further emphasize these functions by describing foreign military relations in the context of both "Xi Jinping Thought on Diplomacy" and "Xi Jinping Thought on a Strong Military," two official formulations representing Xi's policy guidance on foreign affairs and military development, respectively.⁴⁸

China's leadership tailors its objectives for foreign military relations depending on whether the foreign military in question falls into one of three categories: "major powers," "neighboring countries," or "developing countries."⁴⁹ As Dr. Saunders testified, and as DOD similarly noted in its 2022 report to Congress on China's military developments, this division aligns directly with the way China pursues foreign affairs more broadly.⁵⁰ Chinese sources describe "major powers" such as the United States, Russia, and often the EU as having a particularly large influence on the global security environment; as such, although the level and depth of military activities are determined by the nature of the broader relationship, China considers military relations with all three of these powers as "strategic."⁵¹ The label "neighboring countries"‡ is used to describe countries in the Indo-Pacific region (with the notable exception of Russia) with which China seeks to leverage frequent military in-

*Xi further directed that foreign military relations be harnessed to "make greater contributions to both the country's 'China Dream' and its 'Strong Military Dream.'" *Xinhua*, "Xi Jinping: Further Create a New Situation in China's Foreign Military Relations" (习近平:进一步开创军事外交新局面), January 29, 2015. Translation.

†Writings do not suggest that China's leaders view relations with these very different powers as being the same in all respects but rather that they carry a similar type of strategic importance. For example, even though sources cite "stability" as a general goal for relations with both Russia and the United States, the pursuit of this goal looks vastly different in each case. Descriptions of military relations with Russia tend to emphasize the potential for the two powers to collaborate in shaping the world in an advantageous way, whereas descriptions of military relations with the United States place emphasis on the strategic risk of conflict. U.S. Department of Defense, *Military and Security Developments Involving the People's Republic of China*, November 29, 2022, 163; *Xinhua*, "Head into the World with a More Open and More Confident Attitude—Military Representative Committee Members Discuss the New Atmosphere and New Conduct of New Era Military Diplomacy" (以更加开放更加自信的姿态走向世界——军队代表委员谈新时代军事外交新气象新作为), *Central People's Government of the People's Republic of China*, March 15, 2019. Translation; State Council Information Office of the People's Republic of China, *China's National Defense in the New Era*, July 2019; Chu Yongzheng, "New Ideas and Changes in China's Military Diplomacy" (中国军事外交的新理念新变化), *International Research Reference* 8 (2018), 37. Translation; *People's Daily*, "Li Daguang: The Meaning and Characteristics of Xi Jinping Thought on Military Diplomacy" (李大光:习近平军事外交思想内涵与特色), February 18, 2014. Translation.

‡A common alternative translation for this category is "periphery" countries. Timothy Heath, Derek Grossman, and Asha Clark, "China's Quest for Global Primacy: An Analysis of Chinese International and Defense Strategies to Outcompete the United States," *RAND*, 2021, 40.

teractions to steer regional security issues to its own benefit.*⁵² “Developing countries” is a category assigned to the many states in Africa, Latin America and the Caribbean, the Pacific, and the Middle East, where China seeks to use multifaceted military exchanges to deepen ties and establish itself as a preferred partner in security and other domains.†⁵³

Foreign Military Relations as a Tool of Foreign Policy

Advancing China’s broader foreign policy objectives is a key function of many of China’s foreign military interactions.⁵⁴ In his important 2015 speech to the military leadership, General Secretary Xi emphasized that relations with foreign militaries must support China’s “overall diplomacy.”⁵⁵ Xi’s guiding statement is echoed by Chinese military academics.⁵⁶ For example, in 2022, He Lei, former vice president of the PLA’s Academy of Military Sciences, explained that foreign military relations constitute an important aspect of China’s overall foreign relations.⁵⁷ China’s leadership aims to use interactions with foreign militaries to enhance China’s international image, counter U.S. international influence, and deepen engagements with other countries to serve its own interests.⁵⁸

Promoting China’s Desired International Military Image

Chinese military personnel seek to promote a positive image of China in the eyes of their foreign interlocutors. As Ms. Gunness explained in her testimony, China uses interactions with foreign militaries “to promote certain narratives that are aimed at bolstering China’s image overseas” as an attempt to “shape global perceptions in China’s favor.”⁵⁹ A 2014 *People’s Daily* article illustrates this objective by characterizing the PLA’s foreign relations as a means of “continuously improving military ‘soft power’” and as “a window for broadcasting the military’s image [and] declaring military policy.”⁶⁰ In international meetings, for example, PLA representatives attempt to portray China’s provision of peacekeeping forces, participation in HA/DR, and engagement with international “hotspot issues” as pos-

*In March 2019, OIMC Director at the time, Major General Ci Guowei, and later China’s 2019 Defense White Paper emphasized building a “community of common destiny” with China’s neighboring countries, a phrase China’s leadership uses to describe the construction of a Sinocentric international order. An author affiliated with China’s National Defense University describes the desired end state of military relations in the region as “harmonious,” a term that implies a lack of resistance by outside actors against the Chinese leadership’s objectives. Phillip Saunders, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China’s Military Diplomacy and Overseas Security Activities*, January 26, 2023, 6; U.S.-China Economic and Security Review Commission, *2020 Annual Report to Congress*, December 2020, 86–87, 113–114; Daniel Tobin, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on a “China Model?” Beijing’s Promotion of Alternative Norms and Standards*, March 13, 2020, 9–12; State Council Information Office of the People’s Republic of China, *China’s National Defense in the New Era*, July 24, 2019; *Xinhua*, “Head into the World with a More Open and More Confident Attitude—Military Representative Committee Members Discuss the New Atmosphere and New Conduct of New Era Military Diplomacy” (以更加开放更加自信的姿态走向世界——军队代表委员谈新时代军事外交新气象新作为), *Central People’s Government of the People’s Republic of China*, March 15, 2019. Translation; *People’s Daily*, “Li Daguang: The Meaning and Characteristics of Xi Jinping Thought on Military Diplomacy” (李大光: 习近平军事外交思想内涵与特色), February 18, 2014. Translation.

†Descriptions of military relations with developing countries often mention China’s provision of security assistance through training and equipment. State Council Information Office of the People’s Republic of China, *China’s National Defense in the New Era*, July 24, 2019; *People’s Daily*, “Li Daguang: The Meaning and Characteristics of Xi Jinping Thought on Military Diplomacy” (李大光: 习近平军事外交思想内涵与特色), February 18, 2014. Translation.

itive contributions to the international security order and proof of China's benign intentions.⁶¹ This argument also echoes a common theme found in China's defense white papers, state media, and propaganda from the MND.⁶² PLA personnel participating in meetings with foreign counterparts similarly echo propaganda describing the PLA as a "force for peace" willing to work with other militaries toward a peaceful world.⁶³

PLA personnel also try to defend China's and the PLA's image from perceived attacks.⁶⁴ Ms. Gunness pointed out in her testimony that China views interactions with foreign militaries as a tool to counter "anti-China narratives."⁶⁵ For example, a state media description of the 2022 Shangri-La Dialogue summarizes the PLA delegation's efforts to publicly refute other dialogue participants' allegedly "false" accusations against China.⁶⁶ It describes China's delegation members as "combatants" whose duty to "refute" accusations and "struggle" against opposition justifies a lack of diplomatic decorum.⁶⁷ Like China's aggressive diplomacy in other foreign policy realms,* this confrontational approach appears to be sanctioned from the top.⁶⁸ As early as 2014, the *People's Daily* had attributed the impetus for a combative military diplomatic style—one focused in part on striving to influence public opinion—to the PLA Central Military Commission under Xi's leadership.⁶⁹

Seeking to Undermine U.S. Influence and Challenge U.S. Security Partnerships

China seeks to leverage foreign military interactions to challenge and undermine U.S. influence. Ms. Gunness summarized this trend in her testimony, stating that "the PLA's foreign engagements now play a supporting role in China's broader efforts to build a network of partners that prioritize relations with China over the United States, degrade U.S. influence and partnerships as well as promote its own agenda."⁷⁰ In its 2022 report to Congress, DOD similarly noted that countering U.S. influence is among the goals of China's foreign defense relations in the Indo-Pacific.⁷¹ In his testimony for the Commission, Dr. Saunders argued that China uses foreign military relations in an attempt to undermine U.S. alliances, albeit with limited success to date.⁷² He characterized foreign military relations as an area of U.S.-China competition that is likely to intensify, paralleling a similar assessment from Ms. Gunness' testimony as well as from researchers at the RAND Corporation in 2021.⁷³

China's intention to challenge U.S. leadership is particularly evident in multilateral security dialogues, regardless of which country is hosting the dialogue.

*At the 2023 Shangri-La Dialogue, China's then Defense Minister General Li Shangfu characterized China as a peace-loving country that would nevertheless respond harshly when its interests are challenged, including by a stronger power. To illustrate his point, he quoted a line from a 1950s Chinese propaganda song originally written to eulogize China's conflict against U.S.-led UN forces during the Korean War, saying, "When friends visit us, we welcome them with fine wine. When jackals or wolves come, we will face them with shotguns." The quote recalls a similar statement by China's then ambassador to Sweden Cui Congyu in November of 2019, which analysts strongly associate with China's increasingly aggressive diplomacy. Li Shangfu, *Remarks at the Fifth Plenary Session of the 20th Asia Security Summit Shangri-La Dialogue*, June 4, 2023; Andrew Small and Dhruva Jaishankar, "For Our Enemies We Have Shotguns: Explaining China's New Assertiveness," *War on the Rocks*, July 20, 2020; Matt Schrader, "Friends and Enemies: A Framework for Understanding Chinese Political Interference in Democratic Countries," *German Marshall Fund Alliance for Securing Democracy*, April 2020; *Economist*, "How Sweden Copes with Chinese Bullying," February 20, 2020.

- *Shangri-La Dialogue*: China does not hesitate to use existing security dialogues widely attended by the United States and its allies to criticize the United States.⁷⁴ Hosted in Singapore by the International Institute for Strategic Studies (IISS), the Shangri-La Dialogue is the Indo-Pacific region's premier defense summit attended by national leaders, ministers, and policymakers from across the Asia Pacific, North America, Europe, and the Middle East to discuss pressing regional security issues.⁷⁵ At the 19th Shangri-La Dialogue in 2022, China's military delegation appears to have dedicated significant effort to refuting the points made by U.S. Secretary of Defense Lloyd Austin III, while the *PLA Daily* described the so-called "Western-led" event as a "tough military-diplomatic battle."⁷⁶ At the 20th Shangri-La Dialogue in June 2023, China's then Defense Minister General Li Shangfu* delivered a roughly 30-minute speech contrasting the ostensibly peaceful and cooperative behavior he ascribed to China in the Indo-Pacific with harsh criticism—both open and thinly veiled—of the United States for its security activities in the region.⁷⁷
- *Moscow Conference on International Security*: China's military representatives also regularly attend and speak at Russia's Moscow Conference on International Security.⁷⁸ The conference was originally conceived as a Russian alternative to the Munich Security Conference and has evolved into a high-profile, senior-level defense-military forum mainly used for facilitating military-to-military engagements between the Russian military and the militaries with which Russia has relations.⁷⁹ According to Russian state media, the 2023 meeting was attended by representatives from 76 countries, including China, India, South Africa, Israel, Turkey, Mexico, the United Arab Emirates (UAE), Saudi Arabia, and North Korea, as well as the African Union, the Arab League, ASEAN, the Collective Security Treaty Organization,[†] and the SCO.⁸⁰ According to former U.S. officials who have attended, even several years before Russia's 2022 invasion of Ukraine, an enduring theme of the conference was Russian grievances and vitriol against the United States, in particular accusations of the United States "mess[ing] up the world order."⁸¹ At the 2022 meeting, then China's Minister of National Defense Wei Fenghe took the opportunity to criticize the United States for then Speaker of the U.S. House of Representatives Nancy Pelosi's visit to Taiwan as well as other perceived offenses such as "act[s] of hegemony, highhandedness, and bullying."⁸²
- *Beijing Xiangshan Forum*: Ms. Gunness explained in her testimony that Beijing has used China-established venues such as the Xiangshan Forum, to which "it invites military lead-

*Beijing has regularly sent its minister of national defense to participate in the Shangri-La Dialogue since 2019. Prior to 2019, China had last sent its defense minister in 2011. The decision to once again participate at a senior level was likely motivated by the leadership's desire to defend China's position and counter U.S. messaging at a time when Beijing perceived the U.S. government to be conducting a public campaign to "slander and smear" China. Eleanor Albert, "Why Is China Sending Top Military Brass to Shangri-La 2019?" *Diplomat*, May 29, 2019.

†The Collective Security Treaty Organization is a mutual defense alliance between Armenia, Belarus, Kazakhstan, Kyrgyzstan, Russia, and Tajikistan. Global Security, "Collective Security Treaty Organization (CSTO)," <https://www.globalsecurity.org/military/world/int/csto.htm>.

ers from around the world, to criticize U.S. policies and push back on perceived U.S. hegemony.”⁸³ The Xiangshan Forum, which China established in 2006, is attended by senior government and military officials as well as scholarly representatives from a range of countries.*⁸⁴ According to comments recorded in state media from past iterations of the conference, China’s representatives have used the forum to raise grievances over U.S. freedom of navigation operations in the South China Sea and have also employed similar language used by China’s nonmilitary diplomats to attempt to discredit the United States and its allies, such as by accusing them of having a “Cold War mentality.”⁸⁵

China Promotes the Global Security Initiative to Foreign Militaries

Since Xi’s introduction of the Global Security Initiative in April 2022, the concept has become a favored framing device for China’s ongoing interactions with foreign militaries, especially within multilateral dialogue fora. In May 2022, China held a special topic video seminar on regional maritime security with African countries on the Gulf of Guinea, which China’s MND framed as a step toward implementing the Global Security Initiative.⁸⁶ In June 2022, China’s delegation, led by then Minister Wei, promoted the concept at the Shangri-La Dialogue.⁸⁷ In July 2022, then Minister Wei suggested to the gathered China-Africa Peace and Security Forum that the Global Security Initiative was a necessary component of China-Africa cooperation against the backdrop of the COVID-19 pandemic and other unspecified security threats.⁸⁸ In August 2022, he told attendees of the Moscow Conference on International Security that China seeks to coordinate with “militaries of various countries” to implement the Global Security Initiative.⁸⁹ Three months later, in November 2022, he urged the represented defense departments at the ASEAN Defense Ministers Plus Meeting in Cambodia to implement the Global Security Initiative in light of the regional security environment he described as “stable, but with worrying factors.”⁹⁰ In June 2023, then Minister Li’s remarks at the 20th Shangri-La Dialogue included a lengthy description of how China views the applicability of the Global Security Initiative in the Indo-Pacific.⁹¹ (For more on the Global Security Initiative and efforts toward its implementation in 2023, see Chapter, 1 Section 2, “U.S.-China Security and Foreign Affairs.”)

*The first Xiangshan Forum in 2006 was attended by PLA personnel and by experts from research institutions from China, France, India, Japan, Norway, Pakistan, the Philippines, Romania, Russia, Singapore, South Korea, Sweden, the United States, the UK, and Uzbekistan. In 2014, the forum transitioned to being a Track 1.5 event including both senior government officials and scholars. The ninth meeting of the forum in 2019 was reportedly attended by 23 defense ministers, representatives from 76 official delegations and eight international organizations, and other experts and observers. *Xinhua*, “9th Xiangshan Forum Formally Opens in Beijing,” October 21, 2019; Zhou Bo, “The Importance of Xiangshan Forum for Beijing,” *China-US Focus*, October 21, 2019; Xiangshan Forum, “The 9th Beijing Xiangshan Forum,” 2019; Beijing Xiangshan Forum, “Introduction”; Xiangshan Forum, “The 1st Beijing Xiangshan Forum.”

Political Signaling and Control of China's Immediate Environment

China's participation in bilateral and multilateral military exercises can be used as a political signal to demonstrate the PLA's increasing military strength and deepening security ties with foreign partners.⁹² In testimony to the Commission, Dr. Saunders noted that Chinese and Russian joint naval and joint air patrols over the past three years were conducted to signal the two militaries' willingness to cooperate and were not necessarily focused on building interoperability.⁹³ For example, in May 2022, on the last day of President Joe Biden's visit to Japan and South Korea, Russian and Chinese bombers flew a joint patrol near Japan and South Korea's air defense zone where Tokyo hosted the Quad Leader's summit.⁹⁴ This was the first joint military exercise conducted by China and Russia since Russia's unprovoked invasion of Ukraine; it was likely planned in advance and was probably intended to signal displeasure with the Quad summit.⁹⁵ U.S. Department of State Spokesman Ned Price noted the exercise demonstrated that the "no-limits" strategic partnership between Beijing and Moscow was "quite alive and well," and Japan's Defense Minister Nobuo Kishi viewed the timing of the exercise as provocative.⁹⁶ Signs of increased military cooperation between the two countries include China and Russia's second joint air patrol held in December 2022 as well as a joint naval patrol held in August 2023 in the Sea of Japan, the Sea of Okhotsk, and near the Aleutians off Alaska.⁹⁷ Dr. Saunders noted to the Commission that the message China and Russia are trying to send is that the two "can work together to thwart specific U.S. interests."⁹⁸

Many of China's military activities with countries in the Indo-Pacific aim to leverage ostensibly "cooperative" engagements to discourage counterparts from pushing back on China's aggressive pursuit of its own interests.⁹⁹ According to writings by authors affiliated with the PLA's Academy of Military Sciences and China's National Defense University, China's approach to military relations with "neighboring countries" in the Indo-Pacific puts particular stress on maintaining close contacts and frequent exchanges in order to "deepen" partnerships and strengthen so-called "mutual trust."¹⁰⁰ Military and paramilitary forces from China and Vietnam, for example, participate in a range of joint activities, including bilateral military exercises, port calls, high-level meetings, joint patrols, and other exchanges.^{*101} China's military representatives in bilateral and multilateral meetings with ASEAN countries have consistently characterized their exchange activities as contributing to regional stability.¹⁰² Melodie Ha, former management analyst at Aeyon's Defense Sector for DOD, explained in her testimony that "as military exercises play a symbolic role in demonstrating friendly political relations, we can see the PLA utilizing exercises as a means of manag-

*Vietnam and China participate in a bilateral joint medical exercise called Peace Rescue, last held in 2021. The China Coast Guard signed a memorandum of cooperation with the Vietnam Coast Guard in 2016 to strengthen maritime law enforcement cooperation through high-level meetings, exchanges, mutual ship visits, and joint exercises and training. The two forces also maintain routine meetings of a senior-level working group to discuss maritime enforcement cooperation. *China Military Online*, "China, Vietnam Coast Guards Hold Sixth High-Level Work Meeting," December 8, 2022; *China Military Online*, "China, Vietnam Coast Guards to Conduct Second Joint Patrol in Beibu Gulf," November 2, 2022; *China Military Online*, "China, Vietnam Round Off 'Peace Rescue 2021' Joint Medical Exercise," December 13, 2021.

ing bilateral relationships with other countries, including U.S. allies and partners.”¹⁰³ Yet analysts assess that in many cases, activities occurring under this banner are “limited in scope” and no more than “token expressions of friendship” by China.*¹⁰⁴ Ultimately, it is difficult for such joint activities and rosy statements to counterbalance China’s consistent record of aggressive behavior against those same partners. As a representative of the Philippines Coast Guard expressed in a rebuttal to then Minister Li at the 2023 Shangri-La Dialogue, “While China is talking about dialogue, China’s actions show confrontation.”¹⁰⁵ (For more on China’s aggressive behavior in the South China Sea, see Chapter 1, Section 2, “U.S.-China Security and Foreign Affairs.”)

Supporting Expansion of China’s Overseas Economic Interests and Broader Influence Efforts

China’s military exchanges with foreign countries support its objectives to build influence with key partners near key economic locations.¹⁰⁶ According to Ms. Gunness, the evolution of China’s economic and security interests may motivate further development of its security partnerships and access in developing countries.¹⁰⁷ For example, the PLAN’s counterpiracy activities in the Middle East and Africa, where China is increasingly depending on oil and natural gas imports, have played a role in supporting China’s energy security.¹⁰⁸ In Africa, China’s participation in UN peacekeeping operations has coincided with greater Chinese presence in countries where it invests heavily in energy and precious minerals.†¹⁰⁹ After 2015, a significant portion of PLA UN peacekeepers in South Sudan were forward deployed in proximity to strategic oil deposits in which the state-owned China National Petroleum Corporation had significant investments.¹¹⁰ According to Thomas Dyrenforth, a U.S. Army Foreign Area Officer serving at the U.S. Africa Command, China’s security presence and involvement in UN peacekeeping operations deployed to eastern Congo, South Sudan, Sudan, and central Mali support Belt and Road Initiative (BRI) investments.¹¹¹ In South Sudan, China has a vested interest in using its UN peacekeeping presence to prevent the conflict from spilling over into neighboring countries that host signature BRI investments, such as Uganda, Kenya, and Ethiopia.¹¹² China’s UN peacekeeping presence in Mali supports its future economic interests, presenting a gateway for its efforts to extend BRI across West Africa.¹¹³

China’s military academic exchanges‡ also play a role in promoting its governance model and building influence with countries of

*In her testimony for the Commission, Ms. Ha, pointed out that countries that have territorial-maritime disputes with China, such as Vietnam, Malaysia, and the Philippines, or are otherwise suspicious about Chinese intentions, like South Korea, still participate in exercises with China. She argued that U.S. allies and partners also choose to use military diplomacy in an effort to balance out tensions in their relationships with China, even while continuing to engage in more substantive security cooperation with the United States. Melodie Ha, oral testimony for U.S.-China Economic and Security Review Commission, *Hearing on China’s Military Diplomacy and Overseas Security Activities*, January 26, 2023, 98; Melodie Ha, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China’s Military Diplomacy and Overseas Security Activities*, January 26, 2023, 5.

†For more on China’s use of peacekeeping operations to defend economic interests, see Chapter 1, Section 3, “China’s Strategic Aims in Africa,” in U.S.-China Economic and Security Review Commission, *2020 Annual Report to Congress*, December 2020, 136, 168.

‡The PLA’s international military academic and functional exchanges offer PLA officers exposure to foreign militaries and a venue to present China’s worldview and strategic culture.

strategic interest.¹¹⁴ China's international military education and training exchanges aim to establish a global network of alumni within other countries' security forces to strengthen China's defense ties.¹¹⁵ Paul Nantulya, research associate at the Africa Center for Strategic Studies at the U.S. National Defense University, notes that the PLA views its professional military education with foreign militaries as a form of military political work that aims to advance the CCP's political and ideological goals.¹¹⁶ China's military education fosters and strengthens ties not only with foreign military personnel but also with policymakers.¹¹⁷ Mr. Nantulya found that in many African countries, Chinese-trained alumni have reached influential positions within their respective countries' defense hierarchies.¹¹⁸ The relationships between PLA academic institutions and the Tanzania, Ethiopia, Mozambique, and Uganda militaries afforded the PLA an opportunity to nurture personal ties.¹¹⁹

Comparison of Chinese and U.S. International Military Education and Training

Although China's training and education of foreign military officers is conducted through programs similar to the United States' own International Military Education and Training (IMET) programs, there are several substantial differences.¹²⁰ Expert analysis and anecdotal evidence from participants in China's programs point to a difference in perceived accessibility, particularly in terms of the scale* and affordability of offerings to certain partner countries. In his testimony, Dr. Saunders assessed that China competes with U.S. programs by "counter[ing] with lower prices and the ability to train large numbers of foreign students."¹²¹ As an analysis from the U.S. Army War college notes, the PLA has leveraged its low prices and ability to train a large number of officers to attract and invite foreign military officers from North and Sub-Saharan Africa, South and Central Asia, Latin America, Eastern Europe,† and the Middle East to attend China's military

According to John S. Van Oudenaren and Benjamin E. Fisher, the PLA may have developed its own National Defense University's International Symposium Course framework for foreign military exchanges following its experience participating in international symposiums and seminars hosted by the U.S. Asia Pacific Center for Strategic Studies. John S. Van Oudenaren and Benjamin E. Fisher, "Foreign Military Education as PLA Soft Power," *U.S. Army War College Quarterly: Parameters* 46:4 (2016): 110.

*It is difficult to gauge from publicly reported data how the overall scale of China's foreign military education and training programs compares to that of the United States. According to a Foreign Military Training Report jointly produced by DOD and the Department of State, DOD conducts "professional military education" and "technical training" for more than 5,000 international military and civilian officials annually at approximately 150 military schools and installations. According to a separate assessment from the U.S. Defense Security Cooperation agency, the United States' IMET program trains approximately 78,000 foreign military students annually, with approximately 22,000 of those individuals receiving their training within the United States. China's 2019 defense white paper reported that a total of over 10,000 foreign military personnel from over 130 countries had studied specifically in China's military universities and colleges by 2019, but it did not provide annualized figures, data on training programs more broadly defined, or any indication of how many individuals were trained or educated outside of China. U.S. Defense Security Cooperation Agency, *International Military Training & Education Programs*; U.S. Department of Defense and U.S. Department of State, *Foreign Military Training Report: Fiscal Years 2019 and 2020: Joint Report to Congress: Volume I, II-2*; State Council Information Office of the People's Republic of China, *China's National Defense in the New Era*, July 24, 2019.

†Although the ultimate impact on China's foreign military education programs in Europe remains unclear, China's ties with many countries in Central and Eastern Europe have become increasingly strained in the past two years as a result of Beijing's support for Russia's war in Ukraine. For more on China's relations with Central and Eastern European countries and the

Comparison of Chinese and U.S. International Military Education and Training—*Continued*

academies.¹²² In a report for the United States Institute of Peace (USIP) on China's military education engagements with African militaries,* Mr. Nantulya reports that knowledgeable officers from the continent characterize China's professional military education programs for foreign military officers as being "on a scale and scope that is unmatched by other foreign partners."[†]¹²³ According to testimony from Cynthia Watson, dean of faculty and academic programs at U.S. National War College, Chinese military education programs in Latin America and the Caribbean are also perceived as a more widely accessible alternative to U.S. programs.[‡]¹²⁴

The United States' and China's foreign military training programs differ in several key measures of program quality, with the United States maintaining a decisive advantage in this area. First, U.S. and Chinese programs differ greatly in their integration of foreign students.¹²⁵ In his testimony for the Commission, Dr. Saunders described China's foreign military training as "essentially... a stage managed set of education done specifically for foreigners," wherein foreign students studying in China have a separate program and even a separate campus from regular PLA students.¹²⁶ The United States, by contrast, integrates foreign students into classrooms with U.S. students at every level of professional military education, allowing them to learn the same curriculum and come away with much deeper relationships with their U.S. counterparts.¹²⁷ Second, as Dr. Saunders testified, the United States is "in general much more focused on building partner capacity and interoperability than the PLA."¹²⁸ As an example, Chinese programs are significantly more limited in their coverage of joint warfighting skills than U.S. programs.¹²⁹ Finally, while U.S. degrees are accredited by civilian accreditation associ-

impact of China's position on the war in Ukraine on China-Europe relations, see Chapter 5, Section 1, "Europe-China Relations: Convergence and Divergence in Transatlantic Cooperation."

*Foreign military education and training programs are a particularly important component of China's engagements with the militaries of African countries. China has responded to increasing demand for its programs from African militaries and engaged in a concerted marketing campaign to increase enrollment of officers from African militaries traveling to study at China's military schools. Despite a high proportion of officers from African militaries attending military education programs in China, however, China still lags behind the United States and other powers, including India, in running programs on African soil. Paul Nantulya, "Special Report: Chinese Professional Military Education for Africa: Key Influence and Strategy," *United States Institute of Peace*, July 2023, 8.

†As one officer from South Africa described in an interview for a USIP report, "China has a very generous and attractive package. They can give you as many slots [for your military officers in their schools] as necessary, and they have a wide pool of [Chinese] funded slots to choose from. No one else does it like this." Paul Nantulya, "Special Report: Chinese Professional Military Education for Africa: Key Influence and Strategy," *United States Institute of Peace*, July 5, 2023, 10.

‡Dr. Watson argued that China has engaged in a concerted effort to expand its programs in Latin America and the Caribbean that has not been matched by the U.S. side. Although U.S. National Defense University is increasing the overall number of international officers invited to the United States in response to a directive from the secretary of defense, Dr. Watson reported that these expansions have applied unevenly across combatant commands and resulted in comparatively little increase for officers from Latin America and the Caribbean. In the absence of opportunity to participate in U.S. programs, which are viewed as higher quality, growing numbers of Latin American and Caribbean officials take advantage of the more accessible opportunities offered by Beijing. Cynthia Watson, oral testimony for U.S.-China Economic and Security Review Commission, *Hearing on China in Latin America and the Caribbean*, May 20, 2021, 201.

Comparison of Chinese and U.S. International Military Education and Training—*Continued*

ations and are thus broadly transferrable, Chinese degrees often lack international accreditation and are mostly confined to the Chinese military academic system.¹³⁰

A third difference between China's programs and U.S. IMET programs is the values and norms they promote. Instruction in military education systems generally reflects the national values, norms, and identity of the hosting country.¹³¹ Programs from countries like the United States emphasize civilian control of the military, allegiance to the constitution, and political neutrality, principles the UN and other international organizations have also accepted as international standards for military professionalism.¹³² China's programs, by contrast, teach principles that align with the CCP's authoritarian one-party system, including the Party's absolute leadership of the military.¹³³ The promotion of China's governance model through foreign military training programs reflects an effort not only to foster a more favorable view of the CCP internationally but also to discredit other systems and undermine the principles supporting democratic governance and universal political values more generally.¹³⁴

China's share of global arms exports is in a position to grow, expanding China's political influence and economic benefits.¹³⁵ John Parachini, senior international and defense researcher at RAND Corporation, noted that arms exports work as a means of influence because arms exports negotiations can create the conditions for other diplomatic and commercial interactions.¹³⁶ In light of Russia's poor performance in Ukraine, Mississippi State University scholars Vasabjit Banerjee and Benjamin Tkach assert that China has the opportunity to gain a deeper foothold in the value arms* market with radars, missiles, armored vehicles, and other relatively affordable equipment.¹³⁷ In Central Asia, China's arms sales are growing quickly and could be part of a broader strategy to undermine Russia's influence in the region.¹³⁸ For example, China's arms sales to Central Asia include more advanced technologies such as communications technology and unmanned vehicles, compared to Russia's sales of basic hardware and military platforms such as small arms and vehicles.¹³⁹ In the Middle Eastern arms market, China's competitive edge is with its advanced drone technology, with unmanned aerial vehicles (UAVs) including the Wing Loong II and CH-4 selling to countries like Saudi Arabia and the UAE.¹⁴⁰ In some cases, China has sold arms in exchange for fossil fuels, which serves China's economic interest in pursuing energy security by expanding access to foreign energy markets.¹⁴¹ For example, Venezuela reportedly received articles including a ground-based air-defense radar

*Dr. Banerjee and Dr. Tkach explain in an August 2022 *Diplomat* article that value arms typically consist of "smaller transaction values of new and refurbished equipment." The scholars note that some countries exclusively purchase within the value market, while others prefer to buy high-end equipment but also obtain some equipment within the value market. Vasabjit Banerjee and Benjamin Tkach, "Amid Russia-Ukraine War, China Could Dominate the Value Arms Market," *Diplomat*, August 8, 2022.

system, transport aircraft, amphibious infantry fighting vehicles, and large surface ships from China in return for partial payment in oil, and Uzbekistan and Turkmenistan purchased Chinese long-range air-defense missile systems in exchange for natural gas.*¹⁴² In 2018, Chinese state media touted this strategy as an example of “flexible payment terms” making China’s arms sales competitive internationally; however, less than a year later, the agreement with Turkmenistan broke down when the Central Asian state struggled to pay back its debt to Beijing following a fall in gas production.¹⁴³

China’s Arms Sales Show No Consideration for Human Rights

China is known to provide arms to authoritarian regimes and perpetrators of human rights abuses. As Dr. Banerjee and Dr. Tkach note, China is “unencumbered by concerns about human rights or regime stability” and views arms sales as “transactional.”†¹⁴⁴ Recipients of China’s arms sales include at least four countries with active mandatory UN embargoes placed upon them at the time of the arms transfers, including the Central African Republic, Iran, Somalia, and Sudan.¹⁴⁵ Although it is difficult to prove from aggregate open source data whether the transactions China conducted in these countries violated the specific terms of the applicable UN embargo, China nevertheless demonstrates a willingness to sell arms in locations where Chinese military equipment could be used in internal conflicts or to perpetrate abuses of human rights. China also sells arms in other countries where the U.S. Department of the Treasury’s Office of Foreign Assets Control (OFAC) regulations prohibit military exports from the United States.¹⁴⁶ A comparison of OFAC records with data on arms transfers from the Stockholm International Peace Research Institute reveals that Belarus and Burma (Myanmar) received arms from China during the same years they were subject to OFAC sanctions on the U.S. side.¹⁴⁷

China’s Military Seeks Operational Skills and Capabilities

China’s military exchanges with foreign counterparts adhere to General Secretary Xi’s requirements for the military to strengthen its combat effectiveness.¹⁴⁸ To align with this objective, the PLA’s relations with foreign militaries expanded from activities such as high-level visits and dialogues to also include exchanges in areas such as military technology and exercises that allow the PLA to learn from the advanced technology, operational methods, and management experience of foreign militaries.¹⁴⁹ In 2020, during a CMC meeting on military training, Xi urged the faster establishment of a

* Gas from Turkmenistan and pipe infrastructure through Turkmenistan, Uzbekistan, and Kazakhstan supply the West-East Pipeline Project aimed at developing western China. Hydrocarbons Technology, “West-East Gas Pipeline Project.”

† Other recipients of Chinese arms, including Algeria, Pakistan, Thailand, and others, are noted on indices by both Freedom House and the Cato Institute as ranking low in metrics including civil liberties and personal freedom. Freedom House, “Global Freedom Status”; Ian Vasquez et al., “The Human Freedom Index 2022,” *Cato Institute*, 2022.

new type of training system and to carry out real-combat-oriented training.¹⁵⁰ *PLA Daily* articles published before and after the meeting highlighted enhancing training, war gaming, and joint exercises with foreign countries to improve the PLA's joint operations training methods.¹⁵¹ Ms. Ha testified before the Commission that the PLA's efforts to seek combat and combat support exercises have focused on advanced militaries and militaries that have extensive combat experience.*¹⁵² Over time, China's military has learned combat-relevant skills, practiced power projection, and collected intelligence on foreign tactics, techniques, and procedures while conducting military exercises and exchanges with foreign militaries.

China Practices Combat-Relevant Skills

The PLA participates in military exercises that practice a variety of combat-related activities, such as live-fire drills and exercises conducted in environments that simulate combat scenarios.¹⁵³ Most of the PLA's combat and combat support training exercises are conducted with the Russian military in both bilateral and multilateral settings.[†]¹⁵⁴ Military exchanges are beneficial for the PLA to gain practical experience that involves the integration of multiple combat arms and services, including the following:¹⁵⁵

- *Ground force exercises:*
 - Chinese and Russian ground forces have conducted complex drills during bilateral and multilateral exercises, such as rehearsed counterterrorism activities where units practice fighting insurgent movements, interdicting guerrillas, and liberating hostages.¹⁵⁶
 - The PLA Army also conducts a joint counterterrorism training with Pakistan known as the Warrior series.¹⁵⁷ The seventh iteration of the Warrior series was held in 2019 and involved drills with live ammunition.¹⁵⁸ The exercise has involved multidimensional reconnaissance, three-dimensional deployment and maneuver, comprehensive fire assault, and air-ground coordinated attack, all of which offer the PLA the opportunity to practice combat skills.[‡]¹⁵⁹
- *Naval joint exercises:*
 - The Russian and Chinese navies have conducted joint exercises on anti-submarine warfare, maritime air defense, ship-to-sea gunnery, maritime search and rescue, escorting civilian vessels, launching amphibious assaults, liberating ships

*Examples of advanced militaries with extensive combat experience that China has exercised with include Russia, the United States, and Australia. According to the U.S. National Defense University database, the PLA's top five most frequent military diplomatic partners with whom they have conducted military exercises from 2002 to 2022 are: Russia, Pakistan, Thailand, Australia, and the United States. Center for the Study of Chinese Military Affairs, "Chinese Military Diplomacy Database Version 4.00."

†The PLA gains tangible operational experience through the observation of alternative tactics, techniques, and procedures that can be applied to PLA doctrine, such as helicopter flight training in low altitudes and lessons learned for the use of armored assets during the urban phase of a counterterrorism exercise. Wilson Chun Hei Chau, "Explaining China's Participation in Bilateral and Multilateral Military Exercises," *Institute for Regional Security* 7:3 (2011): 63.

‡In 2018, the sixth iteration, Warrior-VI 2018, included participation from Special Operations Forces of the Pakistan Army and the PLA Army Xinjiang Military Command special operations brigade. *China Military Online*, "Chinese, Pakistani Armies Conduct Joint Counter-Terrorism Training," January 7, 2019.

seized by pirates, and providing underway cargo replenishment.¹⁶⁰ Since 2012, Russia and China have also conducted annual bilateral joint naval exercises known as Joint Sea, which have been held in the Mediterranean Sea, the Baltic Sea, and the East China Sea.¹⁶¹ In December 2022, the two navies conducted joint operations covering maneuvers such as blockade and control, rescue, anti-submarine drills, and air defense in the East China Sea.*¹⁶² In July 2023, the Russian and Chinese navies continued to practice combat capabilities in the high seas by conducting training that included maritime and air escort, maneuvers that deter and expel an opposing force, and anchorage defense to secure strategic maritime passages during the China-Russia Northern/Interaction-2023 exercise.¹⁶³

- In January 2020, China and Pakistan held their first biannual Sea Guardians joint maritime exercise in the Arabian Sea.¹⁶⁴ The second iteration, Sea Guardians-2, was hosted by the PLA in July 2022 at a military port in Wusong, Shanghai, and consisted of onshore and maritime components.¹⁶⁵ Onshore activities included operational planning and professional military education exchanges.†¹⁶⁶ The maritime component of Sea Guardians-2 included joint drills focused on attacking maritime targets, tactical maneuver, anti-submarine operations, replenishment at sea, reinforcing damaged ships, and anti-aircraft and antimissile operations.¹⁶⁷
- *Air Force exercises and patrols:*
 - China and Russia have conducted six joint strategic air patrols since 2019 and over time have displayed a gradual level of interoperability.¹⁶⁸ The patrols have evolved over time in both scale and scope. In 2020 and 2021, PLA Air Force H-6K strategic bombers and Russian Tu-95MC strategic bombers flew in formations together while conducting joint patrols over the Sea of Japan and the East China Sea.¹⁶⁹ In 2022, China and Russia conducted two joint patrols over the Sea of Japan, East China Sea, and the western Pacific Ocean.¹⁷⁰ The first featured Chinese H-6K and Russian Tu-95 strategic bombers accompanied by a Russian Il-20 reconnaissance plane and Su-30SM fighters, while the second featured Chinese H-6K strategic bombers, a Russian Tu-95MS strategic missile-carrying bomber, YU-20 tanker aircraft, and an escort of Chinese J-16 fighters.¹⁷¹

*These exercises included a Russian cruiser, destroyer, and two corvettes along with two PLA Navy destroyers, two frigates, a diesel submarine, and an airborne early warning and control aircraft and maritime patrol aircraft. Melodie Ha, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China's Military Diplomacy and Overseas Security Activities*, January 26, 2023, 9; Dzirhan Mahadzir, "Russian, Chinese Naval Exercise Wraps in East China Sea," *USNI News*, December 28, 2022.

†According to the PRC Ministry of National Defense, PLA Navy participants were mainly from PLA Eastern Theater Command and included two guided-missile frigates *Xiangtan* (Hull No. 531) and *Shouzhou* (Hull No. 610), one FUCHI Class (Type 903) supply ship *Qiandaohu* (Hull No. 886), one submarine, one early warning aircraft, two fighter jets, and one helicopter, while the Pakistan Navy sent the frigate *Taimur*. China's Ministry of National Defense, "China, Pakistan Kick Off Joint Naval Exercise Sea Guardians-2 in Shanghai," July 10, 2022; *Global Security*, "Type 903 AOR Fuchi / Qiandaohu Replenishment Oiler."

- The PLA Air Force and the Royal Thai Air Force (RTAF) conduct an annual bilateral exercise called Falcon Strike that began in 2015.¹⁷² According to a statement from China's Ministry of National Defense, the 2022 iteration focused on building combat capabilities such as air support, strikes on ground targets, and small- and large-scale troop deployments.¹⁷³ Falcon Strike-2022 consisted of PLA Air Force fighter jets, fighter-bombers, and airborne early warning (AEW) aircraft as well as RTAF fighter jets and AEW aircraft.¹⁷⁴ Falcon Strike-2023 included PLA Air Force fighters, bombers, AEW aircraft, and a surface-to-air missile unit and was held at Udorn Royal Thai Air Force Base on July 9, 2023.¹⁷⁵
- *Multi-service exercises:*
 - Since 2018, the PLA has participated in Russia's annual strategic command staff exercises* simulating major power conflict.¹⁷⁶ For example, Vostok-2018 reportedly tested the effectiveness of the PLA's reform and joint combat capabilities under combat conditions, and Zapad-2021, the first strategic-level multilateral exercise held in China's territory, utilized new PLA equipment.¹⁷⁷ Vostok-2022, which took place in Russia's Eastern Military District in 2022, marked the first time China sent units from the army, navy, and air force as PLA Navy and Russian warships conducted joint exercises, including a live-fire anti-aircraft drill in the Sea of Japan.¹⁷⁸ Chinese sources claimed these exercises provided an important platform for improving the PLA's military capabilities.¹⁷⁹
 - The PLA also gains combat-relevant skills in multilateral exercises such as the SCO biennial Peace Mission exercises, which have involved large units conducting conventional combat operations such as air defense and strike operations.¹⁸⁰ The SCO last held the Peace Mission exercise in 2021 in Russia, where participating PLA forces conducted live-fire drills using infantry assault vehicles to attack targets.[†]¹⁸¹

The PLA has also practiced combat support activities, such as communications, survival skills, logistics, and other basic military skills through exercises with foreign militaries.¹⁸² These exercises offer PLA soldiers exposure to foreign environments and the experience of operating with foreign troops.¹⁸³

*These strategic exercises have rotated through each of Russia's military regions: Vostok-2018 in the east, Tsentr-2019 in central Russia, Kavkaz-2020 in the Caucasus, and Zapad-2021 in the western part of Russia. Giangiuseppe Pili and Fabrizio Minniti, "Understanding Russia's Great Games: From Zapad 2013 to Zapad 2021," *Royal United Services Institute*, June 7, 2022; Rajeswari Pillai Rajagopalan, "Zapad/Interaction Military Exercise 2021: Growing China-Russia Bonhomie?" *Diplomat*, August 6, 2021; *CGTN*, "Chinese Military to Participate in Kavkaz-2020 Multinational Anti-Terror Drills," September 10, 2020.

†According to the joint communiqué of the SCO Defense Ministers' Meeting in August 2022, plans for Peace Mission-2023 included exercises to practice "responding to new tactics used by international terrorists" such as "countering [UAVs], ensuring information security, and preventing terrorist attacks using chemical and biological weapons." The joint communiqué did not identify a date for the exercise. Russian state media reporting from December 2022 later indicated that Peace Mission-2023 would take place at a military training ground of Russia's Central Military District in the Chelyabinsk Region in late August 2023. As of the time of writing, the exercise does not appear to have taken place yet. *Russian News Agency*, "SCO to Hold Peace Mission Counter-Terror Drills in Urals Next Year—Military Command," December 13, 2022; Shanghai Cooperation Organization, "Joint Communiqué of the Shanghai Cooperation Organization Defense Ministers' Meeting (24 August 2022, Tashkent)," August 26, 2022.

- *Military medicine*: In 2019, China and Germany held their second joint military exercise* called Combined Aid, where the Chinese military practiced medical services under live-fire combat conditions, such as scenarios focused on treating mass casualty events as well as the outbreak of infectious diseases.¹⁸⁴ The Logistics Support Department of China's CMC described the Combined Aid-2019 exercise as "the first time for China to dispatch a complete unit of medical service forces with real combat equipment to conduct joint exercise in Europe."¹⁸⁵ Commenting on a senior-level meeting between then CMC Vice-Chairman General Xu Qiliang and then German Defense Minister Ursula von der Leyen in 2018, Zheng Chunrong, director of the Institute of German Studies at Tongji University in Shanghai, noted to the Chinese state media that "the German military is very capable in medical logistics, postwar reconstruction, and managing civic emergencies and conflicts—all fields China can learn much from."¹⁸⁶ Exercises like this could help the PLA prepare its military medical teams for a conflict, such as a war over a Taiwan contingency.
- *Logistics*: China's armed forces are incorporating logistics units into joint exercises and training with foreign militaries as a means to build a combat-oriented logistics system.¹⁸⁷ The PLA is able to practice information support command and control, helicopter operations logistics to project and sustain forces abroad, and other activities relevant to combat support during HA/DR exercises.[†]¹⁸⁸ For example, the PLA Navy participated in the June 2023 Komodo multilateral naval exercise hosted by the Indonesian Navy with 36 other countries—including the United States, the UK, Japan, Russia, and South Korea—and focused on HA/DR drills.¹⁸⁹ During previous Komodo exercises, China has taken part in exercises that practice key competencies applicable to a Taiwan contingency such as aerial reconnaissance, underway replenishment, cross-deck helicopter landing, and maritime interdiction.¹⁹⁰
- *Soft skills*: China's military have participated in noncombat activities that develop survival skills, practice navigation drills, and engage in team-building exercises such as the bilateral exercise with Australia called Pandaroo and the multilateral exercise with the United States and Australia called Kowari.[‡]¹⁹¹

*China and Germany's first joint military exercise was held in 2016, where Chinese and German military medical services carried out an exercise based on an earthquake scenario in Chongqing, China. Zhang Yuan and Lian Zhen, "China-German Joint Exercise Provides References for International Joint Humanitarian Medical Rescue," *China Military Online*, July 10, 2023; Center for the Study of Chinese Military Affairs, "Chinese Military Diplomacy Database Version 4.00."

†HA/DR missions require operational flexibility; the transport of troops, equipment, and material; and the sustainment of a deployed force with similar skills needed to support combat operations abroad. For more on how the PLA views HA/DR as a means to test and enhance its operational proficiency, see Matthew Southerland, "The Chinese Military's Role in Overseas Humanitarian Assistance and Disaster Relief," *U.S.-China Economic and Security Review Commission*, July 11, 2019.

‡The Pandaroo annual exercise was first held in 2015 and last held in 2019. The annual adventure training exercises aims to build people-to-people ties between junior officers and non-commissioned officers between Australia's army and the PLA Army. Pandaroo adventure training consists of orienteering, a survival exercise, and a sea kayak journey. Kowari was first held in 2014 as an annual exercise that encourages participating military personnel to work together and build survival skills through a series of training activities, including hiking, sea kayaking, mountaineering, and canyoning. *Xinhua*, "China-Australia Joint Military Exercise Starts in South China," October 10, 2019; Australian Government Department of Defense, *Exercise PANDAROO*

The PLA's increased participation in international military competitions, often hosted by Russia, is another venue for it to learn new skills and compare its capabilities against others.¹⁹²

China's Military Practices Power Projection Capabilities

The PLA's participation in military exercises and operations abroad supports the development of its expeditionary capabilities.¹⁹³ Military exercises and port calls provide means for the PLA to operate further from its shores and practice and test its power projection capabilities.¹⁹⁴

- *Naval antipiracy escort task force:* In an effort to become a blue-water navy, the PLA Navy practices its naval power projection and expeditionary capabilities by deploying its antipiracy escort task force* in the Gulf of Aden, which develops the PLA's capabilities to protect sea lines of communication.¹⁹⁵ In 2022, the 41st Chinese Naval Escort Task force concluded a 182-day mission covering 90,000 nautical miles and escorting 38 Chinese and foreign ships.¹⁹⁶
- *Multilateral naval exercises:* Joint naval exercises also offer the PLA Navy the opportunity to practice far-sea deployments and close operations with foreign partners. In March 2023, China, Russia, and Iran conducted a joint naval exercise where the navies practiced aerial search operations, sea rescue, and fleet formation exercises in the Gulf of Oman.¹⁹⁷ In addition, the PLA is able to practice its ability to marshal, deploy, and sustain unit size deployment of forces and equipment in transit to and from various exercises. China has used multilateral exercises with the SCO to build its capacity to project military power and practice more robust force deployment within the region.[†]¹⁹⁸ SCO Peace Mission-2007 marked the first deployment of a PLA brigade-sized composite unit‡ abroad and entailed the long-distance transport of eight fighter bombers; 32 helicopters; fixed-wing transport aircraft; and army, air force, and integrated support groups to Russia by air and rail.¹⁹⁹ During Peace Mission-2021, the PLA Northern Theater Command sent more than 550 service members and 130 vehicles and equipment via rail and airlift, and for the first time it deployed its Y-20 transport aircraft to the Peace Mission exercise.²⁰⁰

Commences in China, October 9, 2019; Australian Government Department of Defense, *Exercise Kowari Starts in North Queensland*, August 28, 2019.

*The 43rd Chinese Naval Escort Task force is a antipiracy mission the PLA Navy has deployed to the Gulf of Aden since 2009. On June 2, 2023, the 43rd Naval Escort Taskforce completed its duties and handed off its mission to the 44th Naval Escort Task force consisting of destroyer *Zibo*, frigate *Jingzhou*, and fleet oiler *Qiandaohu*. Dzirhan Mahadzir, "Russian, Chinese Warships in East China Sea after Sailing near Alaska," *USNI News*, August 17, 2023.

†SCO exercises have offered the PLA opportunities to practice power projection skills such as transporting multiservice units by rail and air, conducting cross-border airstrikes, and executing air assault operations from foreign airfields. Matthew Southerland, Will Green, and Sierra Janik, "The Shanghai Cooperation Organization: A Testbed for Chinese Power Projection," *U.S.-China Economic and Security Review Commission*, November 12, 2020, 5–6, 9–13.

‡The ground combat unit that formed the basis of the PLA-deployed force was a temporary task-organized composite unit referred to alternately as a battle group and a cavalry brigade. The brigade-sized unit was composed of a mechanized infantry battalion with Type 92 wheeled infantry fighting vehicles and PTL-02 wheeled assault guns; an attack helicopter battalion; a transport helicopter battalion; and supporting engineers, artillery, and other combat support and combat service support units. Martin Andrew, "The PLA's Evolving Operational Doctrine: Experiments in Modularity," *Jamestown Foundation, China Brief* 8:5 (March 6, 2008).

China Gathers Intelligence on Foreign Military Tactics

The PLA's military activities with foreign partners also present opportunities to collect intelligence.²⁰¹ Personnel from the CMC Joint Staff Department, which coordinates foreign affairs with military intelligence activities, participate in many foreign meetings.²⁰² While any contact with a foreign military is an opportunity for the PLA to gain knowledge (such as knowledge of foreign leaders' policy preferences or technical intelligence), activities involving deeper operational contact likely have more intelligence value.²⁰³ According to DOD, China could use its military presence in UN peacekeeping operations to collect intelligence on other UN units.²⁰⁴ For example, it is likely that units engaged in more combat-relevant activities, such as those participating in naval exercises with Russia, seek technical intelligence on the capabilities and operational proficiency of Russian weapons systems and forces.²⁰⁵

Commercial Ports: PLA's Access and Opportunities for Intelligence Collection

China's overseas basing model leverages both military facilities and commercial ports operated by Chinese firms that could serve as dual-use logistics facilities for PLA Navy forces and complicate U.S. force movements.*²⁰⁶ According to the 2020 *Science of Military Strategy*, published by the PLA's Academy of Military Science, China's overseas military operations require greater overseas support capabilities, including intelligence information support, communications support, meteorological and hydrological support, and logistics equipment support.²⁰⁷ Since the PLA has yet to establish significant international military infrastructure, it relies on and leverages commercial infrastructure to support its military operations abroad.†²⁰⁸ Isaac Kardon, senior fellow for China Studies at Carnegie Endowment for International Peace, and Wendy Leutert, assistant professor at the Hamilton Lugar School of Global and International Studies at Indiana University, found that Chinese firms own or operate one or more terminals at 96 foreign ports.²⁰⁹ In his statement for the record for the Commission, Dr. Kardon noted that PLA Navy warships have conducted port calls at over one-third of these facilities.²¹⁰ In peacetime, these commercial port facilities support the PLA's military logistics; for example, Chinese state-owned enterprises like China Ocean Shipping Company and China Merchants Group have provided the PLA Navy with specialized technical repairs and maintenance operations from various ports in Djibouti, Egypt, Greece, Indonesia, Malaysia, Singapore, Spain, Sri Lanka,

*For more on the PLA's basing model, see U.S.-China Security and Economic Review Commission, Chapter 3, Section 2, "China's Growing Power Projection and Expeditionary Capabilities," in *2020 Annual Report to Congress*, December 2020.

†The PLA Navy's use of commercial ports and facilities is not uncommon among militaries operating internationally. Other blue-water navies rely on foreign commercial ports to conduct basic refuel and resupply operations. Port terminals offer routine services for commercial and military ships alike, such as refueling petroleum, oil, and lubricant stores, and other husbanding services, such as critical consumables like water, food, and power. Isaac Kardon, written statement for the record for U.S.-China Economic and Security Review Commission, *Hearing on China's Military Diplomacy and Overseas Security Activities*, January 26, 2023, 1; Jeffrey Becker, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China's Military Diplomacy and Overseas Security Activities*, January 26, 2023, 3.

Commercial Ports: PLA's Access and Opportunities for Intelligence Collection—*Continued*

and Tanzania.²¹¹ In addition, commercial port facilities could enable China's intelligence capabilities.²¹² Dr. Kardon noted in his statement to the Commission that the network of ports owned or operated by Chinese firms offer a platform for intelligence collection, including collecting and processing "huge volumes of proprietary information about vessels and their various fuel and supply requirements, routes and destinations, cargos, personnel, and other salient details."²¹³

Implications for the United States

China views expanded leadership in international security affairs as a priority for the opportunities it provides Beijing to expressly offer itself as an alternative to the United States. Given the premium Beijing places here, the United States should anticipate increasing competition for influence from China using military diplomacy. The CCP views its military as a tool that not only serves warfighting objectives but can also influence diplomatic, economic, and security conditions in peacetime, and the PLA has direction from the top to leverage itself more and more. Whether seeking to influence the behavior of its neighbors, burnish China's image, or build relationships that could lead to future economic or political gains, China's leadership will continue expanding avenues for interaction between the PLA and other security forces in support of a wide range of foreign policy goals. At the same time, as the PLA continues to seek improvement of its capabilities through international exercises and exchanges, its overseas presence is likely to continue to increase.

Through all these interactions, China's military leadership demonstrates its perception of China's growing influence in security affairs as coming at the expense of the United States. In disregard for its own purported standard of not targeting defense relations against any third party—as well as claims of seeking win-win cooperation—China continues to use international military interactions to shape other countries' views of U.S. intentions and strategy. For example, it frequently advances false claims that the United States is pursuing hegemony and that U.S. actions are a source of international instability. As competition in this realm intensifies, U.S. policymakers will increasingly need to consider how to best respond, both in practice and in rhetoric.

As China's military activities with foreign partners expand to more places with more countries, a greater number of PLA forces will be operating within proximity of U.S. forces, especially outside of the Indo-Pacific Command area of responsibility, necessitating greater communication and operational security with both China and, more importantly, U.S. allies and partners. China's military leaders' continued refusal to engage in transparent communication with their U.S. counterparts makes clear China's lack of due regard to reduce risk of miscalculation and conflict. While China may choose not to engage with its U.S. counterparts, U.S. military personnel, diplomats, and leaders have an opportunity to coordinate closely with

U.S. allies and partners regarding the risks of China's international military activities and to protect military capabilities and knowhow.

The greater emphasis China has placed on building military relations with foreign counterparts may also lead to increasing opportunities for the PLA to gather intelligence; observe tactics, techniques, and procedures; and practice combat-relevant skills. The risk of the PLA improving its combat capabilities and learning U.S. operational tactics and procedures through U.S. allies and partners remains high, particularly as the PLA engages in further multilateral exercises and operations focused on HA/DR, search and rescue, maritime security, counterterrorism, and antipiracy, where the United States may be present. China's growing involvement in such multilateral exercises may temper future U.S. participation given current statutory requirements in the National Defense Authorization Act for Fiscal Year 2000.*

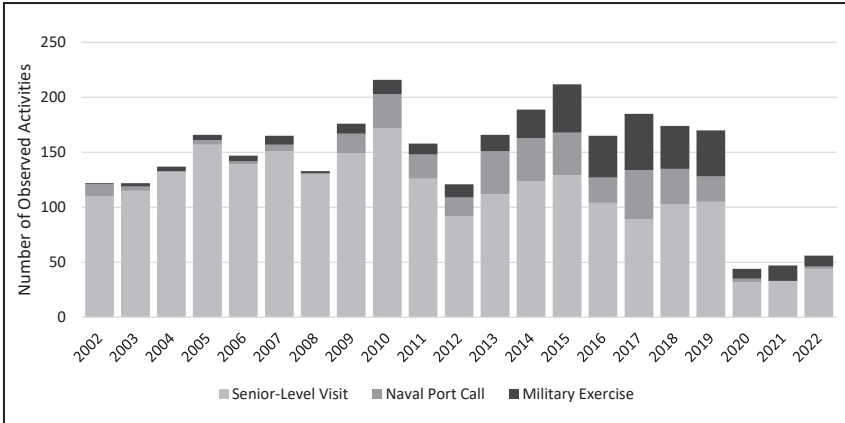
It will be important for the United States to mitigate risk by coordinating with allies and partners before, during, and after a multilateral exercise where China may be a participant. U.S. allies and partners routinely engage in effective military exchanges that build interoperability, capability, and transparency. Such interactions with China's military need to be carried out in different ways for different purposes. There is a risk that China may benefit from the level of transparency U.S. and allied militaries are used to offering in exchanges, which is not reciprocated by PLA units. To account for instances of actual search and rescue, humanitarian assistance, or other lifesaving operations, it may not be in the U.S. interest to fully isolate or avoid the PLA's participation in certain multilateral exercises, but effective controls and barriers must be placed on certain activities.

Although China's activities in several categories of military diplomacy continue to expand, the United States maintains key strengths and advantages. China's foreign military education and training programs and its exercises and training with other militaries often prioritize political objectives over substance and are thus limited in their contribution to partner capacity building. The United States, by contrast, is a leader in developing partner capacity through bilateral and multilateral exercises, and the quality of U.S. training and educational courses outpaces their Chinese competitors. In addition, the relationships the United States maintains with its allies and the security guarantees it provides are much more substantive than most superficial promises of "cooperation" the PLA may offer while continuing to undermine those same partners' security through aggressive behavior. The United States and its allies and partners can continue relying on these strengths as they seek to manage the problematic aspects of the PLA's behavior.

*The National Defense Authorization Act for Fiscal Year 2000 set parameters on DOD's contacts with the PLA, to include 12 operational areas (with exception to active search and rescue or humanitarian operations) where inappropriate exposure would create national security risk. The 12 operational areas include force projection operations; nuclear operations; advanced combined-arms and joint combat operations; advanced logistical operations; chemical and biological defense and other capabilities related to weapons of mass destruction; surveillance and reconnaissance operations; joint warfighting experiments and other activities related to transformations in warfare; military space operations; other advanced capabilities; arms sales or military-related technology transfers; release of classified or restricted information; and access to a DOD laboratory. Caitlin Campbell, "China Primer: U.S.-China Military-to-Military Relations," *Congressional Research Service*, CRS IF 11712, January 4, 2021, 2.

Appendix

Figure 1: PLA Senior-Level Visits, Naval Port Calls, and Military Exercises, 2002–2022



Note: This figure displays the number of observed PLA senior-level visits, naval port calls, and military exercises between 2002 and 2022 captured in the “Chinese Military Diplomacy Database” produced by the Center for the Study of Chinese Military Affairs at the U.S. National Defense University. “Senior-level visits” are defined as bilateral or multilateral meetings in which PLA officers at the CMC Vice Chairman, CMC member-grade, and Theater Command grade levels met with high-level foreign military leaders, either abroad, hosted in China, or virtually. “Military exercises” include bilateral and multilateral exercises that the PLA Army, Navy, Air Force, People’s Armed Police, or multiple services conducted with foreign militaries. “Port calls” refer to visits by PLA ships at the ports of other countries and do not include visits by foreign military ships to ports in China.

Source: Center for the Study of Chinese Military Affairs, “Chinese Military Diplomacy Database Version 4.00.”

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SECTION 2: WEAPONS, TECHNOLOGY, AND EXPORT CONTROLS

Abstract

China's rapid military modernization over the past two decades shows it has not only been successful as a "fast follower" but also is now leading in several technologies as it seeks to "leapfrog" the United States to achieve dominance in the military domain. The United States and China are engaged in a de facto arms competition, and the People's Liberation Army (PLA) is preparing for the possibility of open confrontation. If China overtakes longstanding areas of U.S. advantage in undersea warfare and space and establishes a decisive lead in artificial intelligence (AI), the balance of power in Asia and worldwide could be dramatically altered. But whether China will become the world's defense technology leader remains an open question, depending on how speedily it resolves its own inadequacies in areas such as human capital and certain manufacturing technologies. One potential accelerant of Beijing's efforts is its relationship with Russia. Russia may have no choice but to share its most valuable defense technologies with China, particularly those relevant to undersea warfare, as it becomes increasingly isolated from the world due to its war in Ukraine.

Key Findings

- The Chinese Communist Party (CCP) aspires to transform China from a "fast follower" into a world leader in defense technologies. Party leaders frame this drive to catch up and surpass the United States in key warfighting domains in terms of the needs for self-reliance in critical technologies and a shift from a model based on copying foreign technologies to one of original innovation.
- China's military-industrial complex produces a variety of quality modern weapons systems that increasingly enable the PLA to challenge the balance of power in the Asia Pacific region. China is also pursuing a space-based nuclear weapon that has the potential to threaten the U.S. homeland with a new global strike capability, and it is developing frontier technologies that could lead to a paradigm shift in warfighting. It does so in spite of the fact that its domestic defense industry is dominated by state-owned monopolies and plagued by inefficiency.
- China is already a world leader in missile and space technologies, and tighter U.S. export controls are unlikely to have an effect on future Chinese innovation in these areas. China's huge inventory of conventional ballistic, cruise, and hypersonic missiles already limits the United States' ability to operate freely

within the second island chain.* Beijing's pursuit of space-based nuclear weapons and potential development of low-yield warheads could also complicate U.S. deterrence by offering the PLA greater flexibility to threaten or engage in limited nuclear use against U.S. forces in the region.

- China has made significant strides in submarine technology over time and is heavily investing in anti-submarine warfare (ASW) capabilities to erode the longstanding U.S. advantage in undersea warfare. Current limitations China faces in undersea warfare technologies include quieting technologies for manned nuclear submarines and propulsion systems for small undersea vehicles. Russian technological assistance could, however, decisively affect how quickly China catches up to the United States in this area.
- China's military-civil fusion program has made rapid progress in AI for defense applications by leveraging commercial advances. Investment and procurement patterns suggest the PLA aims to use AI-enabled weapons systems to counter specific U.S. advantages and target U.S. vulnerabilities.
- U.S. export controls toward China have expanded substantially, though they now face significant obstacles to enforcement. Military-civil fusion presents a unique challenge to export controls, requiring a renewed focus on dual-use technologies, particularly in current multilateral regimes, which focus mainly on preventing the spread of military technologies that currently exist rather than preventing the development of new ones.
- Current investment restrictions are insufficient to stem the flow of U.S. and foreign technology, expertise, and capital into China's defense sector. Capital and technology flows are often accompanied by technical expertise, managerial acumen, and business networks—factors much more difficult to contain to intended end users. These intangible benefits can help Chinese firms build operational capabilities that are not covered under current screening mechanisms and into which the U.S. government has limited visibility.

Recommendations

The Commission recommends:

- Congress hold hearings to evaluate the potential for establishing a single export licensing system. Such a system would integrate the Commerce Control List, the dual-use technology licensing system managed by the U.S. Department of Commerce's Bureau of Industry and Security, and the U.S. Munitions List, the armaments licensing system managed by the U.S. Department of

*According to the U.S. Department of Defense (DOD), the first island chain consists of the islands spanning from "the Kurils, through Taiwan, to Borneo." The second island chain begins in Japan, travels south through the Northern Mariana Islands, Guam, Palau, and ends off the northern coast of West Papua. The first and second island chains are not officially demarcated and are the subject of debate regarding their boundaries. U.S. Department of Defense, *Military and Security Developments Involving the People's Republic of China: 2020 Annual Report to Congress*, 2020, 73; Wilson Vorndick, "China's Reach has Grown; So Should the Island Chains," *Center for Strategic and International Studies*, October 22, 2018.

State's Directorate of Defense Trade Controls. In evaluating a single licensing system, Congress should consider:

- Whether a single licensing system could improve the enforcement of export controls targeting specific end users, particularly those in jurisdictions with poor transparency into corporate ownership and commercial affiliations, such as China;
 - The potential commercial impact of combining the licensing systems, including how to reduce the compliance burden on industry without compromising national security;
 - Which technologies to include in a combined system and how to integrate appropriate technical expertise to scope evolving controls on dual-use emerging and foundational technologies;
 - Where such a system should be housed within the U.S. government and how to establish effective coordination between different agency stakeholders; and
 - How to provide the Department of State and other relevant agencies with appropriate information and authorities to advocate for multilateral export controls that advance U.S. security, foreign policy, and economic competitiveness.
- Congress provide the Committee on Foreign Investment in the United States (CFIUS) the authority to review investments in U.S. companies that could support foreign acquisition of capabilities to attain technological self-sufficiency or otherwise impair the economic competitiveness of the United States, including:
 - Investments in technology areas prioritized in potential adversaries' industrial policies, such as China's 14th Five-Year Plan, Made in China 2025, and other related initiatives;
 - Investments in U.S. firms that have received funding from the U.S. Departments of Defense, Commerce, Energy, and other U.S. government funding for projects critical to national security and competitiveness; and
 - Other investments that may provide privileged access to expertise, business networks, and production methods critical to maintaining U.S. economic and technological competitiveness.
 - Congress establish a risk matrix framework to evaluate the national security threat posed by electronic products imported from the People's Republic of China. To eliminate or mitigate risks identified in the threat matrix evaluation, Congress should consider the use of all trade tools, including tariffs.
 - Congress request an evaluation, to be completed within 180 days by the Government Accountability Office, of the effectiveness of recently imposed semiconductor export control regulations in preventing China from either acquiring or developing the capacity to manufacture certain advanced semiconductors. The report should include an assessment of the extent of cooperation received from key allied governments, as well as both U.S. and foreign-based companies, and an evaluation of China's efforts to circumvent these controls or to negate their effectiveness by developing its own indigenous capabilities. This assess-

ment should be prepared for public release but may include a classified annex. The report should be updated annually.

Introduction

This section evaluates China's pursuit of advanced defense technologies. It begins with an assessment of Chinese leaders' ambition to become a dominant military power and their efforts over time to improve the research, development, and acquisition process for modern weapons. It then assesses China's progress in mastering advanced defense technologies across three domains: undersea warfare, missile and space capabilities, and AI. Finally, the section assesses current U.S. and multilateral export controls and investment restrictions to determine whether they are adequately stemming the flow of U.S. and foreign technology, expertise, and capital to China's defense sector. The section draws on the Commission's April 2023 hearing on "China's Pursuit of Defense Technologies: Implications for U.S. and Multilateral Export Control and Investment Screening Regimes," consultations with experts, and open source research and analysis.

China's Drive for Defense Innovation

In just a few decades, the PLA has transformed itself from a technologically backward military to one that is capable and seeking to contest the United States' military superiority.*¹ An important element of this transformation has involved changes to China's system for developing modern and innovative weapons, which has benefited from ample state funding and China's systematic theft of foreign technology.² As Christian Curriden, a defense analyst at RAND Corporation, testified before the Commission, this system has inefficiencies but is also capable of producing highly sophisticated weapons systems that threaten the United States and allied forces throughout the Indo-Pacific.³ More generally, China is attempting to transition from being a "fast follower" of the United States and other advanced militaries to a dominant military power by making its weapons development system capable of original innovation.⁴

China Invests in Modern Defense Technologies to Counter U.S. Advantages

China's leaders have focused on modernizing the PLA in order to counter overwhelming U.S. military advantages in the Indo-Pacific and to build capabilities commensurate with the global power China seeks to be. Senior CCP officials have historically recognized that the PLA's past technological backwardness would make it an ineffective fighting force in the event of a conflict with the United

*The Commission assessed in its 2020 Annual Report to Congress that Beijing's view of strategic competition with the United States reflects an intention to surpass U.S. military capabilities, not simply to achieve parity. This drive for superiority has been especially pronounced in the space domain, where the Commission's 2019 Annual Report assessed that China "aims to catch up to and eventually surpass other spacefaring countries in terms of space-related industry, technology, diplomacy, and military power." For more, see U.S.-China Economic and Security Review Commission, Chapter 1, Section 1, "A Global Contest for Power and Influence: China's View of Strategic Competition with the United States," *2020 Annual Report to Congress*, December 2020, 31, 35, 56, and U.S.-China Economic and Security Review Commission, Chapter 4, Section 3, "China's Ambitions in Space - Contesting the Final Frontier," *2019 Annual Report to Congress*, November 2019, 359.

States.*⁵ Past CCP leaders Jiang Zemin and Hu Jintao both supported initiatives to expand China's limited capacity for defense-relevant research and development (R&D) and oversaw changes to China's military strategy that highlight information technology and other modern weapons technologies as the key to winning a regional war over Taiwan.†⁶ They also presided over Central Military Commission (CMC) efforts to invest in modern air, space, missile, and command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) capabilities throughout the 1990s and early 2000s.⁷ PLA strategists and technicians focused their efforts on countering a more developed adversary's qualitative advantages in an "asymmetric" manner, sometimes through the use of new technologies and at other times through the PLA's own quantitative advantages.⁸ Particular areas of focus in the PLA's early approach to asymmetric warfare included counterattacking an adversary's stealth, cruise missile, and helicopter capabilities while also defending itself from an enemy's precision strikes, electronic warfare, and reconnaissance.⁹

The PLA has spent the last several decades honing asymmetric capabilities and strategies that could be used in a war where both sides employed modern information technology.¹⁰ According to Elsa Kania, an adjunct senior fellow at the Center for a New American Security, PLA strategists have more recently studied how AI and other technologies can be used to gain decisive advantages in wartime decision-making and processes.¹¹ For instance, Lieutenant General Liu Guozhi, the director of the CMC Science and Technology Commission, claimed in 2017 that AI will not only "accelerate the process of military transformation" but also lead to "a profound revolution in military affairs."¹² As part of this new focus, Ms. Kania notes that PLA leaders have developed the concept of "hybrid intelligence," blending human and machine intelligence through techniques such as the use of brain-computer interfaces.¹³ Ms. Kania observes that this concept is being realized through new programs, including projects intended to promote human performance enhancement, such as the use of "intelligent autonomy" in weapons, with command exercised through brain-machine integration enabled

*The United States' success during the Gulf War taught Chinese leaders the importance of developing a modern, space-based C4ISR system in order to become a world-class military conducting joint force and expeditionary operations. Mike Dahm, "China's Desert Storm Education," *U.S. Naval Institute*, March 2021; John Costello and Joe McReynolds, "China's Strategic Support Force: A Force for a New Era," in Phillip C. Saunders et al., eds., *Chairman Xi Remakes the PLA: Assessing Chinese Military Reforms*, National Defense University, February 22, 2019, 440.

†In 1993, Beijing issued its first "military strategic guidelines," a set of principles encompassing China's military strategy for building long-term competitive capabilities, rather than preparing for U.S. or Soviet attacks on China's borders as had historically been the case. The 1993 military strategic guidelines were Beijing's response to U.S. technological capabilities exhibited in the 1990–1991 Gulf War, which some PLA strategists believe triggered a "revolution in military affairs," revealing a new model of war. In his speech on the 1993 guidelines, then General Secretary Jiang identified the focal point of China's strategy as deterring Taiwan from declaring independence. While the guidelines did not specify China's primary strategic opponent, they revealed that this opponent was no longer the Soviet Union and had changed based on "major changes in the strategic threat." The guidelines also noted that the most important geographic focus for China's military planning, known as the "primary strategic direction," would be China's southeast, toward Taiwan. By leaving the new strategic opponent the PLA would likely face unstated, Chinese leaders avoided naming the United States directly while tacitly acknowledging that a conflict over Taiwan would likely require the PLA to also fight the United States. Tai Ming Cheung, *Innovate to Dominate: The Rise of the Chinese Techno-Security State*, Cornell University Press, 2022, 143, 147–149; M. Taylor Fravel, *Active Defense: China's Military Strategy since 1949*, Princeton University Press, 2019, 183–184.

by cloud infrastructure.¹⁴ Through such investments in advanced military and frontier technologies, she argues, the PLA is seeking to create “technological surprise”^{*} for the United States and achieve paradigm-shifting advances in warfare.¹⁵

Under General Secretary of the CCP Xi Jinping, China is seeking to both “catch up and leapfrog” the United States in the military realm amid an increasingly tense strategic competition between the two powers and greater urgency to become self-reliant in key technologies.¹⁶ Xi has pledged to make the PLA a world-class military by the middle of the 21st century, a term which itself is a moving target and which Chinese state media have increasingly linked to the idea of military innovation.¹⁷ He has also tried to ready the PLA for this task by launching a far-reaching reorganization of the armed forces as well as the broader system responsible for PLA armaments and innovation.[†]¹⁸ Xi has also spoken consistently of the need to accelerate defense modernization through investments in innovative defense technologies, making independent innovation an important element of “Xi Jinping Thought on a Strong Military.”[‡]¹⁹ At the 20th Party Congress in October 2022, for example, Xi stated his government’s intention to “implement major projects to develop defense-related science and technology, weaponry, and equipment, and move faster to translate scientific and technological advances into combat capabilities.”[§]²⁰ Although the PLA’s capabilities today

^{*}Technological surprise occurs when the performance of new tools of warfare contravenes expectations and produces strategic effects, the latter of which may be large enough to decisively win a conflict. Technological surprise can be created by an adversary’s debut of an unexpected capability or by the unanticipated performance of one’s own technology. For more, see Con Crane, “The Danger of Technological Surprise: Expect the Unexpected or Suffer the Consequences,” *U.S. Army War College: War Room*, January 6, 2022; Mark F. Cancian, “Avoiding Coping with Surprise in Great Power Conflicts,” *Center for Strategic and International Studies*, 2018, 37.

[†]These changes included the dismantlement of the notoriously corrupt General Armaments Department, efforts to consolidate the state-owned defense conglomerates that dominate China’s defense industry, and the decision to make the CMC Science and Technology Commission an independent CMC organ. As in other policy areas, Xi has also made himself the chair of key bodies that make and coordinate decisions regarding China’s defense technology requirements. In addition to his role as chairman of the CMC, Xi leads the CMC Leading Small Group for the Deepening of Reforms in Defense and the Armed Forces, the CMC Military-Civil Fusion Development Commission, and the 995 Leading Small Group. Christian Curriden, written testimony for the U.S.-China Economic and Security Review Commission, *Hearing on China’s Pursuit of Defense Technologies: Implications for U.S. and Multilateral Export Control and Investment Screening Regimes*, April 13, 2023, 2–4; Tai Ming Cheung, *Innovate to Dominate: The Rise of the Chinese Techno-Security State*, Cornell University Press, 2022, 47–48; Nis Grünberg, “The CCP’s Nerve Center,” *Mercator Institute for China Studies*, July 1, 2021; Tai Ming Cheung, “Keeping Up with the Jundui: Reforming the Chinese Defense Acquisition, Technology, and Industrial System,” in Phillip Saunders et al., eds., *Chairman Xi Remakes the PLA: Assessing Chinese Military Reforms*, National Defense University Press, 2019, 598, 602–603; Joel Wuthnow and Phillip C. Saunders, “Introduction Appendix: Central Military Commission Reforms,” in Phillip Saunders et al., eds., *Chairman Xi Remakes the PLA: Assessing Chinese Military Reforms*, National Defense University Press, 2019, 30; Joel Wuthnow and Phillip C. Saunders, “Introduction: Chairman Xi Remakes the PLA,” in Phillip Saunders et al., eds., *Chairman Xi Remakes the PLA: Assessing Chinese Military Reforms*, National Defense University Press, 2019, 6.

[‡]“Xi Jinping Thought on a Strong Military” are official formulations representing Xi’s policy guidance on military development. *People’s Liberation Army Daily*, “Xi Jinping Thought on a Strong Military Questions and Answers” (习近平强军思想学习问答), September 14, 2022. Translation; Joel Wuthnow and Phillip C. Saunders, “Introduction: Chairman Xi Remakes the PLA,” in Phillip C. Saunders et al., eds., *Chairman Xi Remakes the PLA*, National Defense University, February 22, 2019, 1–24, 15; Chinese Communist Party Member Network, *Study Platform: Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era: Xi Jinping Thought on a Strong Military* (学习平台: 习近平新时代中国特色社会主义思想: 习近平强军思想). Translation.

[§]Chinese military commentators have similarly called for greater investment in defense technology and efforts to boost self-sufficiency. For instance, one PLA Navy rear admiral argued in 2016 that “despite the fact that the Navy’s strength, weapons and equipment continue to improve, we have weaknesses at the technological level. Our researchers have made breakthroughs in many fields, and what we need now is the government’s determination and investment, otherwise the Navy will lag behind others.” More recently, in 2023, a researcher from the Academy

reflect the success of long-running efforts by previous CCP leaders to modernize the armed forces, Xi's approach to defense technology modernization has emphasized long-term planning, an effort to transition to a model of original innovation, and the appropriation of civilian talent for defense innovation under the country's military-civil fusion strategy.²¹

China's Concept of a "World-Class Military" and the Role of Technological Advancement

In 2017, Beijing announced its goal to build the PLA into a "world-class" military by the mid-21st century, overcoming remaining shortfalls in the force's capabilities to establish China firmly among the ranks of the world's leading militaries.²² This objective is guided by CCP leaders' view that China is approaching the "world's center stage" and represents the military component of a multifaceted goal to establish China's leading global position in every important element of national power.²³ Beijing views a world-class PLA as surpassing the world's other militaries in strength and prestige, especially the U.S. Armed Forces, and being capable of preventing other countries from resisting China's pursuit of its national goals.²⁴

China has identified the technological advancement of its military capabilities as an essential part of becoming a world-class military.²⁵ For example, one 2018 *PLA Daily* article asserted that "building a world-class army in an all-round way is inseparable from the support of modernization of weapons and equipment."²⁶ Noting that the future of technological competition will be intense and complex, the *PLA Daily* warned that "the road to leapfrog development of weaponry and equipment construction has a long way to go."²⁷ It urged the military to address foreign countries' "stranglehold" on "key and core technologies" and to make indigenous breakthroughs in those same areas.²⁸ A November 2022 state media article noted that in order to be successful in future conflicts, the PLA must pay close attention to changes in technology and improve its ability to win "informationized and intelligent wars" in tandem with its transformation into a world-class military.²⁹ The use of AI in weapons systems has become a central focus of China's military reform in recent years and will be a major aspect of its efforts to build a world-class military.³⁰

In recent years, the Chinese leadership has pushed to accelerate the timeline for achieving world-class status. Despite initially laying out the goal of the PLA reaching a world-class standard by mid-century in 2017, Xi has in his recent speeches indicated a desire to shorten this timeline without setting a specific date.³¹ During both the 20th Party Congress in October 2022 and the 14th National People's Congress in March 2023, for example, Xi urged the PLA to reach world-class standards "more quickly."³²

of Military Sciences argued that China should develop indigenous weapons systems in light of Western sanctions on high-tech components already implemented against the Russian military in response to its unprovoked war in Ukraine. Amber Wang, "China Urged to Speed Up Self-Reliance in Military Tech as Western Sanctions Render Old Model 'Unsustainable,'" *South China Morning Post*, April 11, 2023; Zhao Lei, "PLA Officer: Navy Needs More Punch," *China Daily*, March 21, 2016.

China's Concept of a "World-Class Military" and the Role of Technological Advancement—*Continued*

Zhao Xun, a researcher at Beijing's Academy of Military Sciences, asserted that this desire to increase the military's technological capabilities more rapidly has been driven by a perception in China of the West as "suppress[ing] and contain[ing] the development of our country's hi-tech industries," arguing further that "the old path of following and imitating others for the development of our military's weapons and equipment has become unsustainable."³³ Zhao also asserted that the PLA must secure technological choke-points—including raw materials, essential components, and various electromechanical products—"as soon as possible" in order to ensure self-sufficiency.³⁴

Long-Term Planning and Resources for Defense Innovation

According to Tai Ming Cheung, a professor at the University of California, San Diego, China has made such rapid progress in recent decades thanks largely to consistent policy support and ample resourcing.*³⁵ According to Dr. Cheung, five-year plans constitute the primary policy framework for Chinese defense modernization.³⁶ The 14th Five-Year Plan for National Economic and Social Development (2021–2025) vowed to "accelerate weapons and equipment modernization, focus on independent innovation and original innovation in defense S&T, speed up the development of strategic cutting-edge technologies, and speed up weapons and equipment upgrades," among other things.†³⁷ The PLA, Chinese defense industry state-owned enterprises (SOE), and provinces also operate on the basis of complementary five-year plans that outline near-term defense science and technology development goals.³⁸

In addition to the five-year plans, several other key plans, strategies, and programs define the equipment and technologies China will prioritize in future defense acquisition. These include:

- *The Weapons and Equipment Development Strategy (WEDS)* and its corresponding *Weapons and Equipment Construction Plans (WECPs)*, which encompass the "detailed nuts and bolts" of program management, the types of weapons to be designed and developed, funding requirements, and the allocation of funds, purchasing plans, and maintenance plans.³⁹ These planning documents are developed by the CMC's Equipment Develop-

*According to Dr. Cheung, China's defense-related R&D is likely well funded, but actual figures are not released by Chinese authorities and are likely supported by parts of the state budget separate from the defense budget. Tai Ming Cheung, oral testimony for U.S.-China Economic and Security Review Commission, *Hearing on China's Pursuit of Defense Technologies: Implications for U.S. and Multilateral Export Control and Investment Screening Regimes*, April 13, 2023, 11.

†Another important five-year plan is the 13th Defense Science, Technology, and Industry Five-Year Plan (2016–2020), which was focused on developing high-tech weaponry and leveraging civilian innovation for defense purposes. Its tasks included facilitating "leapfrog development" of weapons and military equipment, optimizing the structure of the defense industry, promoting civil-military integration, and boosting exports of Chinese weapons. There is no publicly available information about its successor, the 14th Defense Science, Technology, and Industry Five-Year Plan, which should be in force from 2021 to 2025. Tai Ming Cheung, Barry Naughton, and Eric Hagt, "China's Roadmap to Becoming a Science, Technology, and Innovation Great Power in the 2020s and Beyond: Assessing Its Medium- and Long-Term Strategies and Plans," *University of California Institute on Global Conflict and Cooperation*, 10.

ment Department and come in one-, five-, or ten- year variants, with the WEDS having both national-level and service-level variants.⁴⁰ Although the detailed contents of the WEDS and WECPs are unknown because they are classified documents, Dr. Cheung observes that they likely specify the acquisition of various offensive, asymmetric, and advanced technologies such as precision-guided munitions, antiship ballistic missiles, anti-satellite weapons, cyber weapons, stealth aircraft, hypersonic missiles, and supercomputers.⁴¹

- *The Defense Medium- and Long-Term Science and Technology Development (DMLP) Plan*, which focuses on defense-related basic research and creating conditions for long-term innovation.⁴² DMLP initiatives aim to build up the defense innovation system within China, create incentives for domestic innovation, increase channels for investment in defense-related technology, improve technology transfer from foreign sources, leverage civilian innovation, and cultivate a science- and technology-literate workforce.⁴³ The DMLP has prioritized research related to nuclear energy, new energy, aerospace, aviation, information technology, ship building, and ocean engineering.⁴⁴
- *The New High-Technology Project, or 995 Project*, focuses on advanced, strategic weapons systems the PLA refers to as “trump card” capabilities.⁴⁵ Nicknamed after the accidental bombing of the Chinese Embassy in Belgrade in May 1999, the 995 Project is a long-term plan rarely spoken about in public that has reportedly driven programs related to stealthy, supersonic, and long-range strategic bombers, next-generation fighter jets, new missiles, and electronic countermeasures.⁴⁶ The DF-21D anti-ship ballistic missile and different types of unmanned aerial vehicles have reportedly been produced under the 995 Project.⁴⁷ The 995 Project is likely guided by five-year planning cycles.⁴⁸
- *The Science, Technology, and Innovation 2030 (STI 2030) Major Projects program*, a long-term initiative launched in 2015 that is focused on mastering key technologies.⁴⁹ The STI 2030 program covers at least 16 megaprojects that include aircraft engines and combustion turbines, technologies for deep-sea exploration and stations, quantum communications and computing, neuroscience and brain-related research, cybersecurity, deep-space exploration and in-orbit spacecraft, clean and efficient use of coal, smart power grids, space-earth integrated information networks, intelligent manufacturing and robotics, and key new materials research and applications.⁵⁰ General Secretary Xi has described the STI 2030 program as needed to help China “capture the science and technology strategic commanding heights.”⁵¹

Emphasis on Original Innovation and Self-Reliance

Chinese leaders have also stressed the importance of China’s weapons development system becoming truly innovative and less reliant on Western sources of technology that could be disrupted for political or military purposes. China is seeking to move from an “absorption-based model” of defense innovation—whereby Chinese firms copied, stole, and reverse engineered other countries’ technolo-

gies—to one where these firms are developing novel technologies.*⁵² In his 20th Party Congress speech, Xi claimed China had “joined the ranks of the world’s innovators” with advances in basic research, original innovation, core technologies,[†] and emerging strategic industries.⁵³ By standard measures of inputs to and outputs from innovation, China is indeed rapidly catching up to the United States, with major increases in infrastructure devoted to R&D, patents, and Chinese authors’ standing in citation indices.⁵⁴

Official claims and metrics likely overstate China’s capabilities in original innovation, however. First, China’s R&D expenditures have historically skewed toward applied research rather than basic research, and its gains tend to be in “process innovation” or realizing breakthroughs in production efficiency.⁵⁵ Second, China has historically struggled to catch up in technologies that require integrating different disciplines, such as internal combustion engines.⁵⁶ Third, the monopolistic nature of major state-owned defense conglomerates can also slow adoption of research breakthroughs due to a lack of incentives for innovation (for more, see the next subsection on “China’s Research, Development, and Acquisition (RDA) System”).⁵⁷ More broadly, because China’s policy system incentivizes the pursuit of easily measurable metrics of performance, this creates a situation where proxies for innovation such as patenting and potentially R&D expenditure are often inflated and less likely to reflect true quality than they would in a market economy.⁵⁸

As it emphasizes its progress toward a model of original innovation, Beijing is trying to identify “chokepoints” in the imported technologies used in weapons systems and dual-use infrastructure that the United States and other countries could potentially cut off, aiming to replace them with domestic alternatives.[‡]⁵⁹ Xi has consistently emphasized the importance of technological self-reliance in core and defense-related technologies, most recently interrupting a “Two Sessions” delegate from the Xuzhou Construction Machinery Group in March 2023 to ask whether all the chips it used in its cranes were domestically produced.⁶⁰ Recognition of these vulner-

*Chinese state-sponsored hackers have reportedly stolen designs and other information for a variety of U.S. weapons systems, including the Aegis Ballistic Missile Defense System, the F-35 Lightning II Joint Strike Fighter, the Littoral Combat Ship, and electromagnetic railguns. Independent analysts have noticed striking similarities between the U.S. F-22 Raptor and Chinese J-20 fighter, the U.S. F-35 and the Chinese Shenyang J-31 fighters, the U.S. MQ-9 Reaper drone and the Chinese Caihong-class unmanned aerial vehicle, and the U.S. C-17 Globemaster III and the Chinese Y-20 transport aircraft, which were likely facilitated by espionage. Ellen Ioanes, “China Steals U.S. Designs for New Weapons, and It’s Getting Away with ‘the Greatest Intellectual Property Theft in Human History,’” *Business Insider*, September 24, 2019; Sam LaGrone, “Report: China Hacked Two Dozen U.S. Weapon Designs,” *USNI News*, May 28, 2013.

†Chinese media and state planning documents describe “core technologies” as encompassing a broad range of technologies across many sectors. According to one *Global Times* article, for example, there are around two dozen of these core technologies, “including rockets, batteries, robots, 3D printing, biological innovative medicine and satellites.” In China’s National Medium- and Long-Term Program for Science and Technology Development (2006–2020), which identifies mastering core technologies in the information industry and manufacturing as top priorities, specific core technologies in the information industry include integrated circuits and key components, major software, high-performance computers, broadband mobile telecommunications, and next-generation internet. Xie Jun, “Chinese Manufacturing Industry Leaders Call for Focus on Core Technologies,” *Global Times*, December 26, 2021; China’s State Council, *National Medium- and Long-Term Program for Science and Technology Development (2006–2020)*, 2006, 22. Translation.

‡In 2018, China’s state-run newspaper *Science and Technology Daily* published a series of articles on 35 different Chinese technological import dependencies, ranging from aviation design software to photo-lithography machines for microchips. Ben Murphy, “Chokepoints: China’s Self-Identified Strategic Technology Import Dependencies,” *Center for Security and Emerging Technology*, May 2022, 1–2, 6–9.

abilities has been a key driver of China's dual circulation strategy to reduce dependency on foreign technology, increase domestic consumption, and increase foreign reliance on China.⁶¹ China's 14th Five-Year Plan, released in December 2021, also places self-sufficiency at the core of national development and prioritizes advancements in sectors such as AI, critical materials, advanced manufacturing, aerospace, and agricultural machinery.⁶²

Leveraging Civilian Ingenuity for Defense Innovation

Defense technology innovation in China increasingly relies on the contributions of civilian companies and universities under the auspices of China's military-civil fusion (MCF) strategy.^{*63} According to Ms. Kania, MCF is "an incredibly consequential component of Beijing's agenda to catch up with and surpass the United States," particularly in domains such as space, cyberspace, and the deep seas as well as in strategic technologies like AI and quantum information science.⁶⁴ MCF was elevated to a national-level strategy in 2014, and in 2017 a central national commission known as the Central Commission for Military-Civil Fusion Development was established to oversee its implementation.^{†65}

Today, many Chinese government ministries and agencies implement MCF by developing criteria to identify companies best equipped to supply the PLA or modify university curricula to serve defense needs.⁶⁶ At the same time, numerous local governments have established MCF demonstration bases, where companies can apply for or are chosen for an MCF designation.⁶⁷ This enables them to receive government support, become vendors for the PLA, and form partnerships with MCF-designated research institutions.⁶⁸ Chinese universities are also important contributors to MCF, with many conducting research with defense applications and some even hosting what the Australian Strategic Policy Institute (ASPI) has called "transfer centers" to facilitate the development of technology for MCF.⁶⁹

China's Research, Development, and Acquisition System

The PLA relies on a fairly top-down, centralized, and uncompetitive research, development, and acquisition (RDA) system to acquire weapons for its forces.⁷⁰ According to Mr. Curriden, China's RDA system has made noteworthy progress over the last 30 years in various technologically complex fields such as hypersonic vehicles and

^{*}MCF is a strategy to leverage the capabilities of civilian sectors and commercial innovation to drive military development through a combination of policies and government-supported mechanisms. Under Xi, MCF implementation has pursued three broad goals: spinning on, spinning off, and defense mobilization. "Spinning on" refers to facilitating transfers between the defense and civilian sectors to improve the sophistication of China's military technology, particularly in dual-use sectors such as information and electronics (including AI), aerospace, aviation, and shipbuilding. "Spinning off" refers to driving technological innovation and economic growth, including by declassifying military patents and eroding entrenched state-owned enterprise (SOE) monopolies in defense production. Defense mobilization refers to creating cohesion in industry and academia working with and in support of military objectives, for instance so the PLA can use commercial equipment and civilian infrastructure. (For further discussion, see U.S.-China Economic and Security Review Commission, Chapter 3, Section 2, "Emerging Technologies and Military-Civil Fusion - Artificial Intelligence, New Materials, and New Energy," in *2019 Annual Report to Congress*, November 2019).

[†]The Chinese government has censored mentions of MCF since 2018, likely to evade efforts to place participating civilian entities on the Entity List or other restrictions. Such opacity makes quantifying civilian contributions to the PLA's defense innovation efforts difficult, but the strategy is presumably still in full force. Matt Ho, "Has China Gone into Stealth Mode with Its Military-Civil Fusion Plans?" *South China Morning Post*, June 5, 2020.

carrier-based aviation, demonstrating that the PLA is “clearly capable of producing innovative and advanced platforms.”⁷¹ Still, the RDA system suffers from numerous inefficiencies and bureaucratic obstacles related to the monopolistic structure of the defense industrial base, all of which may constrain Beijing’s ability to innovate rapidly in the future.⁷²

Key Decision-Making Bodies Identify China’s Defense Technology Requirements

Decisions about China’s defense requirements are made at the top of the political system and coordinated through a series of subordinate bodies below.⁷³ The CMC sits atop the RDA system’s hierarchy as the leading policymaking body regarding China’s defense requirements, and it oversees subordinate bodies related to coordination, implementation, and advanced research.⁷⁴ One of the most important of these bodies from the perspective of defense modernization is the leading small group in charge of the aforementioned 995 Project’s implementation, guiding the development of some of China’s advanced strategic weapons systems.⁷⁵ Another is the CMC Science and Technology Commission, which guides China’s defense-related scientific research and promotes indigenous innovation and MCF.⁷⁶ A third is the CMC Equipment Development Department, which handles armaments research and the development, testing, and procurement of systems.⁷⁷ Separate from the CMC chain of command, the State Council is responsible for leading the State Administration for Science, Technology, and Industry for National Defense (SASTIND), which manages China’s defense industrial apparatus by drafting regulations, standards, and long-term plans that state-owned and private enterprises are required to follow.⁷⁸

Key Organizations Developing China’s Weapons Technology

China’s RDA process involves a constellation of military, state, and civilian actors. These include China’s enormous defense SOEs, Chinese universities, defense-related laboratories, and civilian non-state enterprises participating in MCF.

China’s Defense SOEs

Most of the PLA’s major weapons systems and technologies are produced by the country’s state-owned defense conglomerates, which vary by sector and often own dozens of subsidiaries.*⁷⁹ China’s defense industrial sector is closed to outside competition, allowing these SOEs to monopolize defense contracting, with competitive bidding and tendering only taking place for noncombat support equip-

*These include Aviation Industry Corporation of China Limited (AVIC) and Aero Engine Corporation of China Limited (AECC) in the aviation sector; China Aerospace Science and Technology Corporation Limited (CASC) and China Aerospace Science and Industry Corporation Limited (CASIC) in the missile and space sector; China State Shipbuilding Corporation Limited (CSSC) in the maritime sector; China North Industries Group Corporation Limited (NORINCO) and China South Industries Group Corporation Limited (CSGC) in the armaments and ordnance sector; China Electronics Technology Group Corporation Limited (CETC) and China Electronics Corporation Limited (CEC) in the electronic and information technology sector; and China National Nuclear Corporation Limited (CNNC) in the nuclear technology sector. These companies are owned by the State-Owned Assets and Administration Commission of the State Council (SASAC), but their business operations are supervised by SASTIND. Peter Wood and Alex Stone, “China’s Ballistic Missile Industry,” *BluePath Labs for China Aerospace Studies Institute*, 2021, 5.

ment such as logistics supplies.⁸⁰ According to Courtney Weinbaum, a senior management scientist at RAND Corporation, the CCP may direct defense SOEs to prioritize and invest in specific weapons systems or research areas, and Party leaders frequently serve in leadership roles on the boards of these enterprises.⁸¹ According to analysis by the Center for Strategic and International Studies, top Chinese military and civilian leaders also participate in “extra oversight mechanisms” to guide the development of specific weapons deemed a national priority.⁸²

Civilian Universities with Strengths in Science and Technology

China’s civilian universities are vital sources of talent and research for the country’s military advancements, playing a significant role in MCF.⁸³ According to ASPI, as of 2019, there are 61 Chinese civilian universities supervised by SASTIND, the agency that manages China’s defense industrial apparatus.⁸⁴ Many civilian universities conduct classified defense research, host state-affiliated laboratories, support state-sponsored espionage, or train the future personnel of the PLA and defense SOEs.⁸⁵ Among the most important are the “Seven Sons of National Defense,”* a grouping of elite Chinese public universities with deep ties to the military and defense industry.[†]⁸⁶ More than 10,000 students from these seven universities, or 30 percent of their total employed graduates, obtain jobs in the defense research sector annually, with defense SOEs focusing on aircraft, missiles, warships, armaments, and military electronics constituting their top employers.⁸⁷

Defense-Related State Laboratories

China’s system of defense research laboratories, likely managed by both SASTIND and the CMC Equipment Development Department, conducts research involving defense and dual-use technologies.⁸⁸ These labs may be hosted at SOEs, civilian universities, or PLA institutions, and focus heavily on areas such as military aerospace, maritime warfare, and ground warfare.⁸⁹ For example, the National Key Laboratory of Aerodynamic Design and Research based at Northwestern Polytechnical University is reportedly helping to create a new generation of advanced military and civilian aircraft, helicopters, and unmanned aerial vehicles and is known to conduct research collaboration with at least four different PLA military units.⁹⁰ A March 2023 report by DC-based research contractor BluePath Labs studying a subset of defense-related labs known as “defense science and technology key state laboratories” found significant evidence of their collaboration with universities, companies, and research institutions in the United States, Europe, Australia, and Japan.⁹¹

*These seven universities include the Beijing Institute of Technology, Beihang University, Harbin Engineering University, Harbin Institute of Technology, Nanjing University of Aeronautics and Astronautics, Nanjing University of Science and Technology, and Northwestern Polytechnical University. Alex Joske, “The China Defence Universities Tracker,” *Australian Strategic Policy Institute*, November 25, 2019.

†Because of these deep links to the military industrial complex, ASPI argues that “it would be more accurate to describe them as defense universities than as civilian universities.” Alex Joske, “The China Defence Universities Tracker,” *Australian Strategic Policy Institute*, November 25, 2019, 6.

Civilian Nonstate Enterprises Participating in MCF

Civilian nonstate enterprises participating in MCF have increasingly become important contributors to China's military modernization, making the greatest impact in the research phase of the RDA cycle and in the realm of AI (for more, see "Artificial Intelligence: China Leverages AI for Military Use" in this section.)⁹² Compared to other phases, research is less likely to be classified and often involves hardware and knowhow that are not explicitly military related.⁹³ Early-stage research is also less likely to put Chinese civilian nonstate enterprises in direct competition with SOEs, which enjoy administrative monopolies in certain fields of defense production.⁹⁴ Additionally, China's civilian enterprises face fewer restrictions in accessing sensitive foreign technologies and knowhow than Chinese defense contractors.⁹⁵ Civilian nonstate enterprises have yet to become significantly involved in the process of defining technical specifications and operational requirements of PLA weapons or in quality control, as these steps involve more classified information.⁹⁶ Similarly, the PLA's maintenance, support, and servicing of military equipment is largely carried out by the military units themselves rather than by enterprise.⁹⁷ Nonetheless, MCF may provide inroads for China's commercial sector to become more involved in this aspect of military procurement, as the PLA has acquired some AI-enabled predictive maintenance and logistics solutions through civilian sources.⁹⁸

Although Ms. Kania assesses that MCF is "starting to gain traction," civilian enterprises still face significant barriers to full integration with China's defense sector.⁹⁹ China's military industrial complex has deeply embedded inefficiencies that make integration of civilian firms challenging, even with extensive pressure and support from the central government.¹⁰⁰ Because of the high degree of compartmentalization within the defense production establishment, breakthroughs in facilitating MCF in one domain, such as AI, do not guarantee that civilian enterprises will readily be integrated in other fields, like aviation.¹⁰¹ Long approval times for military production licensing, at six months or more, have also inhibited civilian enterprises' participation in MCF initiatives.¹⁰² Moreover, a lack of intellectual property (IP) protections has reportedly discouraged some firms from sharing technology with the PLA or defense SOEs.¹⁰³ Like the implementation of other Chinese industrial and economic development policies, however, China's government has been adapting guidance on MCF implementation as the strategy evolves.¹⁰⁴ Chinese government agencies are taking steps to overcome obstacles and increase the channels for commercial ties to the PLA.¹⁰⁵

China's RDA Process in Comparative Perspective

The Chinese and U.S. acquisition systems have several parallels, but there are also major differences stemming from the legacy structure of China's state-owned defense conglomerates.* One similarity

*Where many of China's state-run sectors undertook market reforms in the 1980s and 1990s and began adopting more market-based practices through corporatizing SOEs and forming joint ventures with foreign investors, China's armaments production remained largely concentrated in a small number of machine-building ministries responsible for specific defense sectors until 1993. Additionally, foreign firms were unlikely to invest in China's defense sector, so China's defense production did not benefit from market practices or technical knowhow shared through foreign

between the Chinese and U.S. acquisition processes is that both systems tend to take more than a decade to develop and produce new weapons systems.¹⁰⁶ As Mr. Curriden noted in his testimony, it took nearly 17 years for China's Y-20 transport aircraft to gain initial operational capability, while its high-profile carrier-borne J-15 fighter jet took between 11 and 13 years to gain initial operational capability.¹⁰⁷ U.S. and Chinese defense firms are also similar in their overall size.¹⁰⁸ Of the top 20 defense firms in the world ranked by defense-related revenue, the United States possesses eight, while China has seven.¹⁰⁹

China's Five-Step Research, Development, and Acquisition Process

As in the United States, China's RDA process can be described in five discrete steps:¹¹⁰

1. The *comprehensive feasibility study stage*, whereby a PLA institution, university, or defense enterprise researcher conducts a study to determine the requirements for a new weapons system, assess lifecycle costs, and inform a future R&D contract.¹¹¹
2. The *project design stage*, during which the entity that won the contract validates designs and models for the given weapons system and makes initial prototypes.¹¹²
3. The *engineering and development stage*, whereby the PLA produces technical designs for the weapon and builds and evaluates test models, potentially revising designs on the basis of testing.¹¹³
4. The *experiment and design finalization stage*, during which PLA units and specialized testing centers conduct tests with the new weapons system to evaluate performance and reliability.¹¹⁴
5. The *batch production stage*, during which the contractor produces the weapon in batches.¹¹⁵ Once a system enters production, the process may repeat itself to develop an incrementally improved version of the same system.¹¹⁶

For some weapons platforms, only small numbers of the new product are initially produced and distributed to operational PLA units for further testing, and their input can result in changes in future versions.¹¹⁷ Mr. Curriden notes that in some cases, such as the Type 98 tank or the Type 052 destroyer, the first version of the platform was so unsatisfactory that the PLA purchased only a relatively small number, opting to wait for improvements before ordering large numbers.¹¹⁸

partnerships (China's defense industry did, however, obtain many weapons systems from Russia). Even after defense-related production was corporatized from state ministries, it remained highly compartmentalized, exacerbating redundant production and limiting potential for research breakthroughs to be shared across firms. Richard Bitzinger, "Reforming China's Defense Industry," *Journal of Strategic Studies* 39:5–6, September 2016, 764–770; Andrew Szamoszegi and Cole Kyle, "An Analysis of State-Owned Enterprises and State Capitalism in China," *Capital Trade* (prepared for the U.S.-China Economic and Security Review Commission), October 26, 2011, 72, 83; Wanda Tseng and Markus Rodlauer, "China: Competing in the Global Economy," *International Monetary Fund*, 2003, 79; Evan Medeiros et al., "A New Direction for China's Defense Industry," *RAND Project Air Force*, 2005, 11–22.

There are also significant differences between the U.S. and Chinese RDA processes, however. As Mr. Curriden points out, many of these differences stem from the relationships Chinese defense firms have with the PLA and the CCP, which differ significantly from the relationship between the U.S. Department of Defense (DOD) and its suppliers.¹¹⁹ Like the PLA, SOEs are important interest groups within the CCP, and their leadership positions are among those controlled by the CCP Central Committee's Organization Department.¹²⁰ These SOEs trace their origins to the 1980s and 1990s, when the CCP broke its old Stalinist command economy into distinct enterprises, and they exhibit certain problems following directly from this past:¹²¹

- *Monopolies:* There is little competition to win major weapons systems and defense equipment because China's defense industry is closed to outside competition, is dominated by SOEs, and allows for little crossover by these conglomerates between sectors.¹²² Contracts for most military equipment are sole-sourced, while only contracts for noncombat-related equipment are subject to a competitive bidding process.¹²³ According to Mr. Curriden, "Attempts to introduce private actors have borne some fruit, but they have not changed the fact that, for most platforms, the PLA has only one firm to turn to as the lead integrator," and Chinese SOEs are still relatively unprofitable and less innovative than their private sector counterparts.¹²⁴
- *Bureaucratic fragmentation:* Bureaucratic fragmentation is another significant issue, because different contractors, research institutes, and PLA units may be responsible for R&D, testing, procurement, production, and maintenance.¹²⁵ Dr. Cheung argues "that linkages among these entities tend to be ad hoc in nature with major gaps in oversight, reporting, and information-sharing."¹²⁶
- *Weak management and quality assurance practices:* The PLA's system for overseeing defense contracts is also hobbled by inefficiencies and conflicts of interest.¹²⁷ The PLA administers oversight through the "military representative system," which stations active-duty PLA officers in factories and research institutes across the country to ensure product quality and contract execution.¹²⁸ These PLA officers, however, lack the technical expertise to rigorously monitor the activities of the contractors because they are generally recent college graduates with only limited technical training, not holders of advanced graduate degrees in scientific subjects.¹²⁹ More broadly, these military representatives are paid by the entities they are supposed to oversee instead of the PLA, a dependency that incentivizes corruption, and it is not uncommon for former military representatives to take posts at the institutions they were overseeing once they retire.¹³⁰ Another problem is that contracts for weapons systems are often vague and short and do not define the contractor's obligations or critical performance milestones, further complicating management and oversight.¹³¹
- *Outdated pricing regime:* China's defense industry practices a cost-plus pricing regime that guarantees 5 percent profit for

contractors on top of their incurred costs, which provides little incentive for innovating or improving efficiency.¹³² According to Mr. Curriden, the PLA released several new policies in 2021 and 2022 related to military procurement and contract management, but it is unclear whether they involve a reform of the cost-plus pricing model.¹³³

- *Corruption*: While there is little public reporting on corruption in the defense industry, PLA leaders have highlighted the RDA system as one of a number of high-risk areas for corruption.¹³⁴ Dr. Cheung notes one rare example of official reporting on an egregious case in which the Central Discipline Inspection Commission sent a team to investigate SASTIND for two months in 2016.¹³⁵ In the aftermath, the ministry was required to set up a “rectification program” involving 100 corrective measures, and a large number of officials were punished.¹³⁶

Case Studies in China’s Defense Technology Modernization

China’s efforts to “catch up and leapfrog” the United States in defense technologies are best exemplified in three areas: missile and space capabilities, undersea warfare capabilities, and AI. These technologies have the potential to directly threaten U.S. forces in the Indo-Pacific region and in some cases could challenge strategic stability more broadly. However, the PLA is also investing considerable resources into the development of weapons in emerging technology fields, such as quantum computing,* directed energy weapons,† and magnetic accelerator cannons (rail guns), among other things.

China’s Missile and Space Capabilities

According to testimony by Kevin Pollpeter, a senior research scientist at the Center for Naval Analyses (CNA), China is now a world leader in missile and space technologies in terms of quantity as well as quality.¹³⁷ China maintains the largest and most diverse missile arsenal in the world, ranging from precision-guided ballistic and cruise missiles to hypersonic weapons, all of which can be used to limit foreign military forces from operating around the second island chain.¹³⁸ China also is modernizing, expanding, and diversifying its nuclear forces, pursuing new delivery vehicles such as hypersonic glide vehicles and potentially exploring nuclear warheads of lower yields that could complicate its adversaries’ missile

*China has invested in its quantum communications technologies, such as satellites, as well as its quantum computing capabilities. U.S. Department of Defense, *Military and Security Developments Involving the People’s Republic of China: 2022 Annual Report to Congress*, November 29, 2022, 90, 152.

†According to the U.S. Government Accountability Office, directed energy weapons, such as lasers, “use energy fired at the speed of light” and “can produce force that ranges from deterrent, to damaging, to destructive.” These weapons use high-power electromagnetic energy, including high-energy laser, millimeter wave, and high-power microwave weapons. In August 2023, the *South China Morning Post* reported that Chinese military scientists claimed they had developed a “new cooling system that allows high-energy lasers to operate ‘infinitely’ without any build-up of waste heat,” which has been a major technological challenge in laser weapon development. The *South China Morning Post* asserted that the technology has the potential to “significantly change the face of battle by extending engagement times, increasing range and damage, and reducing logistics and costs, according to the researchers.” Stephen Chen, “Chinese Military Scientists Claim to Have Achieved a ‘Huge Breakthrough’ on Laser Weapon Technology,” *South China Morning Post*, August 11, 2023; U.S. Government Accountability Office, *Science & Tech Spotlight: Directed Energy Weapons*, May 25, 2023.

defenses and give China more options for limited nuclear use amid a broader conflict.*¹³⁹ China's space capabilities now include satellite constellations,† counterspace weapons,‡ for-profit satellite launches, human spaceflight, a long-term crewed space station, and multi-year programs that aim to explore both the Moon and Mars.¹⁴⁰ China also has an increasing number of commercial space companies that began operations over the last decade.¹⁴¹

China Seeks to Control Access to the Moon for Strategic Aims

Beijing is working to establish a long-term presence in space, which it seeks to accomplish by first dominating the cislunar domain, or the space between Earth and the Moon.¹⁴² The U.S. Air Force Research Laboratory and the Defense Innovation Unit argue that cislunar space is an important domain because it will allow the United States to place its national security space assets beyond low-Earth orbit and geosynchronous orbit and to establish infrastructure that will enable long-term presence on the Moon and elsewhere.§¹⁴³ Zhao Xiaojin, a Party secretary of the China Aerospace Science and Technology Corporation and member of the National Committee of the Chinese People's Political Consultative Conference, said in 2018 that China plans to begin the construction of a lunar base around 2025 and achieve a manned lunar landing sometime in 2030.¹⁴⁴ Furthermore, Beijing wants to create a lunar R&D base by 2050 that will be primarily equipped with robots.¹⁴⁵ Complementing these efforts, China is also focusing on developing its ability to monitor and potentially control the Moon's surface. Dr. Pollpeter argued in a response to

*China has a nuclear triad and is rapidly expanding its stockpile of nuclear warheads, which totaled around 400 as of November 2022 and could reach 1,500 warheads by 2035 if production continues at its current pace. Moreover, U.S. Strategic Command assessed in January 2023 that China possesses more land-based fixed and mobile intercontinental ballistic missile (ICBM) launchers than the United States has ICBM launchers in general, although the United States still has much larger quantities of ICBM missiles and nuclear warheads overall. As of early 2023, the United States maintained an estimated stockpile of around 3,800 nuclear warheads. Arms Control Association, "Nuclear Weapons: Who Has What at a Glance," June 2023; Michael R. Gordon, "China Has More ICBM Launchers than U.S., American Military Reports," *Wall Street Journal*, February 7, 2023; U.S. Department of Defense, *Military and Security Developments Involving the People's Republic of China: 2022 Annual Report to Congress*, 2022, 97–98.

†A satellite constellation (or swarm) is a "network of identical or similar-type artificial units with the same purpose and shared control," according to EOS Data Analytics, a Mountain View, California-based global provider of satellite analytic solutions. EOS Data Analytics says these groups of satellites communicate to ground stations worldwide and typically revolve in low-Earth orbit, transmitting required data with quick signal transmitting times. Compared to single large satellites, these swarms of small units (up to 500 kg) are not only cheaper but also faster to deploy. For more, see EOS Data Analytics, "Satellite Constellations: Existing and Emerging Swarms," October 28, 2022; EOS Data Analytics, "Company."

‡The Defense Intelligence Agency asserts that some counterspace weapons are used to degrade space services temporarily, while others can "damage or destroy satellites permanently." Some of the attacks that can be used for counterspace operations include physical or cyberattacks against ground sites and infrastructure supporting space operations, jamming global navigation and communication satellites, and the deployment of directed energy weapons that target intelligence, surveillance, and reconnaissance satellites, among others. For more, see U.S. Defense Intelligence Agency, *Challenges to Security in Space: Space Reliance in an Era of Competition and Expansion*, April 12, 2022, 4.

§The U.S. Air Force Research Laboratory and Defense Innovation Unit assert that expanding its satellite assets from low-Earth orbit into geosynchronous orbit (GEO) will allow for "a vastly increased number of assets supporting commercial, civil and military applications across a wide range of satellite sizes, constellations sizes and orbits," with a mixed architecture of large GEO satellites and constellations of large numbers of small satellites at lower orbits. Thomas Cooley, Eric Felt, and Steven J. Butow, "State of the Space Industrial Base: Threats, Challenges and Actions," *U.S. Air Force Research Laboratory and Defense Innovation Unit*, May 30, 2019, 7.

China Seeks to Control Access to the Moon for Strategic Aims—*Continued*

a question for the record submitted to the Commission that “the primary security concerns of China’s lunar exploration program have centered on its use of orbits around the Moon,” such as the Earth-Moon L2 Lagrange point.*¹⁴⁶ He explained that satellites placed in an L2 halo orbit are “relatively stable” and allow “for full surveillance and communication of the lunar surface, with near-constant communication to the Earth.”¹⁴⁷ Jeff Gossel, an analyst at the National Air and Space Intelligence Center, assesses that placing a satellite in L2 halo orbit could allow China to fly to the far side of the Moon and attack U.S. satellites in geosynchronous orbits.¹⁴⁸ Dr. Pollpeter also observes that since most U.S. sensors are not focused on deep space, such attacks by China may go undetected.¹⁴⁹ (For more on China’s strategic aims in space, see U.S.-China Economic and Security Review Commission, Chapter 4, Section 3, “China’s Ambitions in Space: Contesting the Final Frontier,” in *2019 Annual Report to Congress*, November 2019.)

China has made rapid gains in these fields over the past 30 years due to internal reforms and in spite of U.S. export controls.†¹⁵⁰ According to Dr. Pollpeter, “China’s success in space and missile technologies can be attributed to a techno-nationalist approach that treats science and technology as a competition between states and a determiner of the fates of nations.”¹⁵¹ Concretely, this approach entailed concerted funding and attention from Chinese policymakers, establishing a modern program management system, and exploiting foreign technology and knowhow wherever it could be found.¹⁵² China’s space program has relied heavily on foreign technology and knowhow since its inception in 1956, and today it continues to leverage foreign technology to advance its space program through a combination of cooperative activities, technology theft, and imitation.‡¹⁵³ Dr. Pollpeter asserts that China’s space and missile programs are “a

*According to the National Aeronautics and Space Administration (NASA), Lagrange points are positions in space “where objects sent there tend to stay put” due to the gravitational pull of two large masses equaling the centripetal force required for a small object to move with them. The L2 point of the Earth-Sun system is ideal for hosting spacecraft that must readily communicate with the Earth, and it can also provide a clear view of deep space for telescopes positioned there. NASA notes, however, that the L2 point is somewhat unstable on a time scale of around 23 days, which necessitates regular course and attitude corrections for satellites in orbit there. NASA, *What Is a Lagrange Point?* March 27, 2018.

†According to the U.S. Department of Commerce, in 1999 Congress passed P.L. 105–261, section 1512, which “requires the President to certify to Congress before any export to China of missile equipment or technology that the specific proposed export is not detrimental to the United States space launch industry and the equipment or technology to be exported, including any indirect technical benefit, will not measurably improve China’s missile or space launch capabilities.” The president delegated the responsibility of certification to the secretary of commerce in 2009. U.S. Department of Commerce, *Privacy Shield Framework: China-U.S. Export Controls*.

‡China’s space industry primarily collaborates with partners in Russia and Ukraine. Following Russia’s unprovoked invasion of Ukraine, Beijing and Kyiv still continued to participate in space cooperation, with the Ukrainian Embassy in China publishing a press release highlighting over two decades of collaboration in May 2022. The country’s technology theft efforts heavily target the United States because it is currently the leading space power. China’s space industry is engaging in what Dr. Pollpeter calls “foreign inspiration,” or the idea of “basing designs on the knowledge that something has been done or been done in a certain way.” Kevin Pollpeter, written testimony for the U.S.-China Economic and Security Review Commission, *Hearing on China’s Pursuit of Defense Technologies: Implications for U.S. and Multilateral Export Control and Investment*

case study in how China has been able to overcome U.S. isolation to become a world-leading technological power,” noting that Beijing was able to circumvent U.S. restrictions by cooperating with other countries.¹⁵⁴ China’s defense technology gains are especially evident in its conventional missile forces, its hypersonic weapons, and its apparent development of a space-based nuclear weapons capability.

China’s Regional Missile Forces

China’s inventory of short-, medium-, and intermediate-range conventional ballistic and cruise missiles presents significant challenges to Taiwan as well as the U.S. military.¹⁵⁵ With this inventory, Dr. Pollpeter argues, China possesses a “multilayered area denial capability out to the second island chain,” meaning the PLA can use its conventional missiles between its shores and Guam to complicate the efforts of enemy ships or aircraft from operating within that area.¹⁵⁶ China’s arsenal features short-range ballistic missiles (SRBM) like the DF-11, DF-15, and DF-16, most likely for use in a Taiwan contingency; medium-range ballistic missiles (MRBM), such as the DF-21, with a range of 1,500–2,000 kilometers (km); and intermediate-range ballistic missiles (IRBM) such as the DF-26, which has a range of 3,000+ km that gives the PLA the ability to strike targets as far as Guam.¹⁵⁷ The PLA’s inventory also includes ground attack and antiship cruise missiles (ASCM) such as the DF-10 ground attack cruise missile (1,500 km range), the DF-100 ground attack cruise missile (2,000 km range), the YJ-83 ASCM (185 km range), the YJ-62 ASCM (277 km range), the YJ-18 cruise missile with variants for land-attack and antiship missions (220–540 km range), and several Russian systems.*¹⁵⁸ Dr. Pollpeter noted in his written testimony that the most common U.S. antiship missile, the Harpoon ASCM, with a range of 130 km, “is out-ranged by most PLA antiship missiles, allowing PLA Navy ships to fire their antiship missiles in relative safety from distances well beyond the range of U.S. surface-fired antiship missiles.”¹⁵⁹ He noted a similar range problem with the PLA air-launched ASCMs, which allow the PLA Air Force and PLA Navy aviation units to launch their missiles from well beyond the defensive ranges of U.S. air defense systems.¹⁶⁰

The U.S. military and lawmakers have expressed concerns about the discrepancy between China’s and the United States’ conventional missile capabilities prepositioned in the Indo-Pacific and the implications of this gap for a potential conflict.¹⁶¹ During a Senate Committee on Armed Services hearing in April 2023, Admiral John Aquilino, commander of United States Indo-Pacific Command, stated that the United States does not have a single ground-launched missile with ranges between 500 and 5,500 km prepositioned in the theater.¹⁶² This deficit is attributable to the fact that the United States was previously a party to the 1987 Intermediate-Range Nuclear Forces Treaty, which required the United States and Russia to

Screening Regimes, April 13, 2023, 10–11. Embassy of Ukraine in the People’s Republic of China, *Scientific & Technical Cooperation between Ukraine and China*, May 16, 2022.

*While exact figures for each missile system are not publicly available, DOD estimated in 2022 that the PLA Rocket Force had 600 or more SRBMs with around 200 launchers, 500 or more MRBMs with around 250 launchers, and 250 or more IRBMs with around 250 launchers. U.S. Department of Defense, *Military and Security Developments Involving the People’s Republic of China: 2022 Annual Report to Congress*, 2022, 167.

permanently eliminate all their nuclear and conventional ground-launched ballistic and cruise systems in this range.¹⁶³

Some lawmakers have likened this situation to a modern day “missile gap” and expressed concern that it could compromise U.S. military operations or deterrence in the Indo-Pacific.*¹⁶⁴ A 2020 study by Jaganath Sankaran, an assistant professor in the Lyndon B. Johnson School of Public Affairs at the University of Texas, illustrates the defensive quandary China’s offensive missile force could create by simulating the way U.S. forward-deployed and allied ballistic missile defense assets would operate against Chinese missile salvos in a large-scale coordinated attack.¹⁶⁵ The simulation revealed that the United States and allied forces would need to make “risky and painful tradeoffs” to protect critical military installations in the Asia Pacific region if early warning systems failed and if U.S. Aegis ballistic missile defense (BMD)-capable ships were not prepositioned in key locations.¹⁶⁶ Dr. Sankaran’s research also found that during a large-scale coordinated attack, the Aegis BMD-capable ships may “quickly run out” of interceptors for incoming missiles because China’s large missile inventory can in principle “saturate a number of key targets.”¹⁶⁷

China’s Hypersonic Weapons Development

China is a world leader in hypersonic weapons development, a technology with both conventional and nuclear applications.†¹⁶⁸ DOD assesses that China fielded its first operational hypersonic weapons system in 2020.¹⁶⁹ Known as the DF-17, the system is an MRBM equipped with a hypersonic glide vehicle (HGV) that has a range of 1,800 to 2,500 km.‡¹⁷⁰ China conducted a test of the DF-41 ICBM with an HGV attached in 2021, making a successful circumnavigation around the globe.¹⁷¹ In 2018, China also tested a nuclear-capable hypersonic prototype named the Starry Sky-2, a design that—once fully developed—could be used to carry warheads capable of penetrating any current missile defense system.¹⁷² Beijing’s

*The “missile gap” is a Cold War-era concept. According to the Central Intelligence Agency, “The Missile Gap was in essence a growing perception in the West, especially in the USA, that the Soviet Union was quickly developing an intercontinental range ballistic missile (ICBM) capability earlier, in greater numbers, and with far more capability than that of the United States. Even as that perception was disproved, it became evident that the Soviets were placing their major effort toward developing strategic missiles against which, once launched, there was no defense. The perceived missile gap that ensued was based on a comparison between U.S. ICBM strength as then programmed, and reasonable, although erroneous estimates of prospective Soviet ICBM strength that were generally accepted.” Central Intelligence Agency, *What Was the Missile Gap?*

†Paul Freithler, the Defense Intelligence Agency’s chief scientist for science and technology, said that “China is leading Russia in both supporting infrastructure and numbers of systems,” while General David Thompson, then vice chief of space operations at the U.S. Space Force, said the United States’ hypersonic missile programs are not as advanced as China or Russia. Vice Admiral Johnny Wolfe, the director of the U.S. Navy’s Strategic Systems program, also asserted that China and Russia have developed hypersonic weapons that the United States has not and explained that “up until just recently, there hasn’t been a real driver for us to take that technology and put it into a weapon system” but that “China and Russia are [now] the driver.” Jeff Seldin, “U.S. Defense Officials: China Is Leading in Hypersonic Weapons,” *Voice of America*, March 10, 2023; Oren Liebermann, “U.S. Is Increasing Pace of Hypersonic Weapons Development to Chase China and Russia, Senior Admiral Says,” *CNN*, November 20, 2022; Paul McLeary and Alexander Ward, “U.S. ‘Not as Advanced’ as China and Russia on Hypersonic Tech, Space Force General Warns,” *Politico*, November 20, 2021.

‡Hypersonic glide vehicles are a special type of reentry vehicle carried by a missile. The primary advantage of attaching a hypersonic glide vehicle to a missile over a traditional ballistic missile is its unpredictable trajectory and ability to fly at lower altitudes, making the missile difficult to spot on ground radars. Simone Fontana and Federica Di Lauro, “An Overview of Sensors for Long Range Missile Defense,” *Sensors (Basel)* 22:24 (December 2022): 6.

talent recruitment programs have likely contributed significantly to its rapid progress in hypersonic technology.*

China's hypersonic weapons directly threaten U.S. forces operating in the Indo-Pacific.¹⁷³ Then Undersecretary of Defense for Research and Engineering Michael Griffin warned in 2018 that China's deployment of a tactical or regional hypersonic system could place at risk the United States' carrier battle groups, surface fleet, and forward deployed forces and land-based forces.¹⁷⁴ Then Undersecretary Griffin argued that the United States faces an "unacceptable situation" in which it presently lacks the ability to defend against or respond in kind to Chinese hypersonic weapons attacks on U.S. forces.¹⁷⁵

China's Exploration of a Space-Based Nuclear Weapon

China's apparent development of a fractional orbital bombardment system (FOBS) raises the possibility that China could permanently deploy nuclear weapons in space, effectively adding a fourth leg to its nascent nuclear triad. According to the Bulletin of the Atomic Scientists, a FOBS is "a payload that is delivered into low-Earth orbit but re-enters the atmosphere to bombard a target before completing a full orbit."[†]¹⁷⁶ China's deployment of such a system would deprive the United States of early warning.¹⁷⁷ DOD reported that China's first test of a FOBS capability mounted with an HGV in July 2021 demonstrated "the greatest distance flown (~40,000 km) and longest flight time (~100+ minutes) of any PRC land-attack weapons system to date."¹⁷⁸ Of special note, China's combination of both the FOBS and an HGV may negate many of the technical downsides of older iterations of the FOBS because the HGV enables the FOBS to adjust the flight path of the projectile following reentry into the atmosphere.¹⁷⁹

The development of the FOBS also illustrates Beijing's commitment to identifying diverse methods of delivering nuclear weapons.¹⁸⁰ The FOBS poses a threat to strategic stability by allowing China to potentially deliver larger nuclear payloads than via ICBMs alone after remaining undetected for long portions of its flight.¹⁸¹ Dr. Pollpeter asserts that the development of an orbital bombard-

*A 2022 report by Strider, a Salt Lake City-based technology company, found that alumni of the Los Alamos National Laboratory have helped China advance key military and dual-use technologies in areas such as hypersonics, deep-earth penetrating warheads, unmanned autonomous vehicles (UAVs), jet engines, and submarine noise reduction. The report highlights Dr. Chen Shiyi, a world-renowned expert in fluid dynamics and turbulence who spent the 1990s at Los Alamos. After returning to China, Dr. Chen served as president of Southern University of Science and Technology (SUSTech), where he recruited additional scientists who had worked at Los Alamos and made major contributions to China's hypersonics and aerodynamics programs. "Chen served as director of a state laboratory that played a key role in developing the PRC's hypersonic glide vehicle," Strider wrote. "Under Chen's leadership, the laboratory undertook projects with military organizations, defense industry enterprises, and PRC universities that collaborate closely with the People's Liberation Army (PLA). These projects have helped to contribute to the PRC passing the United States in hypersonic R&D," Strider Technologies, "The Los Alamos Club," 2022, 5.

†The FOBS is a Cold War-era technology that was previously developed by the Soviet Union in the 1960s but was subsequently abandoned due to the United States' deployment of early warning satellites that diminished the Soviets' element of surprise. The United States also chose not to pursue FOBS for several other reasons, particularly because it was not as precise or accurate as an ICBM. After both the United States and Russia had developed the capability, the two powers agreed to ban orbital bombardment systems in the SALT II treaty. Ritwik Gupta, "Orbital Hypersonic Delivery Systems Threaten Strategic Stability," *Bulletin of the Atomic Scientists*, June 13, 2023; David E. Sanger and William J. Broad, "China's Weapon Tests Close to a 'Sputnik Moment,' U.S. General Says," *New York Times*, November 3, 2021; Vasudevan Mukunth, "China's New Hypersonic 'FOBS' Takes U.S. By Surprise, Arms Race in Outer Space the New Reality," *Wire (India)*, October 18, 2021.

ment system may signal China's "intent to develop its nuclear triad into a nuclear 'quad' based on land-launched nuclear missiles, submarine-launched nuclear missiles, aircraft with nuclear bombs and missiles, and space launched hypersonic glide vehicles," enabling China to possess a global first-strike capability that can evade U.S. missile defenses.¹⁸² Lieutenant General Chance Saltzman, the deputy Space Force chief for operations, said that the FOBS "is a "very forward-edge technology capability" that the Space Force must figure out how to deter swiftly.¹⁸³ China's use of the FOBS to launch a nuclear payload into orbit would violate the Outer Space Treaty, to which it acceded in 1983, and which prohibits "nuclear weapons or any other kinds of weapons of mass destruction" in outer space.¹⁸⁴

China's Evolving Nuclear Posture Raises Possibility of Shifting Strategy

China's evolving nuclear posture may support a new nuclear strategy that envisions the limited first use of a nuclear weapon to achieve its political objectives in the Indo-Pacific region, such as the forcible unification of Taiwan.*¹⁸⁵ Chinese leaders could decide to adopt this new strategy of limited nuclear use against conventional military targets in the Indo-Pacific, such as U.S. aircraft carriers or bases in Guam and Okinawa.¹⁸⁶ The 2020 edition of the authoritative PLA textbook *Science of Military Strategy* discusses launching nuclear weapons as "demonstration strikes," presumably on China's territory or over the open ocean to signal resolve during a crisis, providing some evidence that Chinese military strategists have thought about using nuclear weapons first and in ways that do not cause mass destruction in an adversary's homeland.¹⁸⁷ Several technological developments within China's nuclear force would make this potential shift in strategy possible. The PLA Rocket Force has developed large numbers of the nuclear-capable DF-26 IRBM, a weapon with range and precision that would make it well suited for attacks on U.S. forces.¹⁸⁸ The PLA Air Force has also developed a force of nuclear-capable H-6N bombers which, while limited in range, could nonetheless carry out nuclear missions within the region.¹⁸⁹ Chinese commentators have also discussed the importance of developing nuclear warheads of smaller yields, which they believe could be used in a more limited way against battlefield targets and hypothetically limit nuclear escalation to the region, rather than escalating to an all-out war involving nuclear attacks on the adversary's homeland.¹⁹⁰

Future Prospects for China's Missile and Space Capabilities

Public remarks by Chinese scientists about the focus of their research and reported cases of Chinese espionage indicate that Beijing

*China has abided by a no-first-use policy since 1964 and claimed as recently as December 2022 that it remains committed to this policy in order to maintain the "minimum level" of nuclear capabilities required for national security, despite being on pace to quadruple its nuclear arsenal by 2035. Julia Shapero, "China Reiterates 'No First Use' Policy in Wake of U.S. Report," *Hill*, December 6, 2022; Ankrit Panda, "No First Use' and Nuclear Weapons," *Council on Foreign Relations*, July 17, 2018.

still perceives technological gaps in its missile and space capabilities requiring concerted scientific attention to solve. One example is radiation-hardened microelectronics, a technology that enables missile and space technologies to withstand the harsh radiation of space and which China has struggled to perfect.¹⁹¹ A scientist working for the China Aerospace Science and Technology Corporation Limited (CASC) told Chinese state-owned publication *Sixth Tone* in 2019 that his team had made gradual progress developing the technology and claimed that China's radiation-hardened microelectronics were now at "a world-leading level," though his claims are difficult to verify.¹⁹² A May 2022 report published by the Center for Strategic and Emerging Technology (CSET) also found that Chinese state media had identified aerospace-grade stainless steel typically used in missiles, satellites, and spacecraft as an important potential "choke-point" in Beijing's manufacturing capabilities.¹⁹³

Past federal indictments and export control violations notices suggest that Chinese intelligence officers and companies are still seeking to illegally acquire certain types of sensitive, dual-use, or military equipment with missile and space applications, such as monolithic microwave integrated circuits, accelerometers, gyroscopes, antennas, infrared and thermal imaging systems, and 3-D printed space and missile prototypes.¹⁹⁴ In November 2020, for example, Raytheon electrical engineer Wei Sun received a 38-month sentence from the U.S. Department of Justice for transporting technology related to an advanced missile guidance system to China.¹⁹⁵ More recently, in June 2022, the Bureau of Industry and Security (BIS) at the U.S. Department of Commerce issued a temporary denial order suspending the export privileges of three U.S.-based companies for the unauthorized export of technical drawings and blueprints of satellites, rockets, and defense-related prototypes to China.¹⁹⁶

China's Undersea Warfare Capabilities

The PLA Navy is keenly aware of the U.S. submarine fleet's ability to intervene in a Taiwan conflict by thwarting an amphibious invasion or disrupting a blockade.¹⁹⁷ Consequently, China is investing in both submarine and anti-submarine warfare (ASW) capabilities to break longstanding U.S. advantages in the undersea warfare* domain and specifically to counter the threats U.S. submarines pose to

*Undersea warfare refers to the employment of submarines and other undersea systems in military operations within and from the underwater domain. There are four main categories that constitute undersea warfare, including submarine warfare, ASW, mine warfare, and mine countermeasures. Diesel-electric and nuclear-powered attack and ballistic missile submarines may be equipped with torpedoes, missiles, or nuclear weapons, as well as advanced sensing equipment, to attack enemy targets. The main purpose of ASW is to "locate, neutralize, and defeat hostile submarine forces," using surveillance and attack aircraft, ships, and submarines, according to the U.S. Fleet Forces Command. Mine warfare involves placing a self-contained explosive device in the water to destroy submarines and surface vessels or to deny the enemy access to certain areas. Mine countermeasures involve using vessels such as the Avenger-class minesweeper ship or aircraft like the MH-53E Sea Dragon to detect and eliminate naval mines. Nuclear Threat Initiative, "United States Submarine Capabilities," March 6, 2023; Jan Tegler, "Navy Mine Warfare Teeters between Present, Future," *National Defense*, January 17, 2023; Naval History and Heritage Command, *Naval Mine Warfare*, July 22, 2021; Bryan Clark, "The Emerging Era in Undersea Warfare," *Center for Strategic and Budgetary Assessments*, January 22, 2015, 1; U.S. Navy, Submarine Force Pacific, *Attack Submarines*. <https://www.csp.navy.mil/SUBPAC-Commands/Submarines/Attack-Submarines/>; U.S. Navy, Submarine Force Pacific, *Ballistic Missile Submarines (SSBNs)*. <https://www.csp.navy.mil/SUBPAC-Commands/Submarines/Ballistic-Missile-Submarines/>; U.S. Fleet Forces Command, *At-Sea Training*. <https://www.usff.navy.mil/Organization/Headquarters/Fleet-Installations-and-Environment/At-Sea/At-Sea-Training/>.

a PLA naval blockade or amphibious forces conducting an invasion of Taiwan.*¹⁹⁸ A major reason for China's rapid progress in these areas is its absorption and subsequent development of proprietary technologies and equipment acquired from Western countries and Russia, often through legal commercial transactions or research collaboration.†¹⁹⁹ China also conducts espionage to acquire undersea warfare technologies.‡²⁰⁰ If China succeeds in its ambition to break U.S. advantages in undersea warfare, the balance of power in the Indo-Pacific could be fundamentally transformed.²⁰¹

China's Submarine Warfare Capabilities

China's advancements in submarine warfare capabilities reflect growing technological sophistication and operational range. Sarah Kirchberger, the head of Asia-Pacific Strategy and Security at the Institute for Security Policy at Kiel University, testified before the Commission that China has made "significant strides in the design of more hydrodynamic hulls and better propulsion systems" for both conventional and nuclear platforms.²⁰² Over the last 15 to 20 years, the PLA Navy has extended its areas of operations from almost exclusively within China's near seas into the Northern Indian Ocean area.²⁰³ Due largely to Russian technology imports and consulting services, China has also developed indigenous conventional submarine designs that incrementally incorporate improved stealth features, sensors, and armaments as well as air-independent propulsion (AIP) systems that extend maximum undersea endurance from two to three days to over two weeks.²⁰⁴

Although China has expanded its submarine fleet, it still faces challenges related to the noise produced by its submarines and the relatively limited missions they can perform.¶²⁰⁵ Most of China's

*The U.S. submarine fleet is fast, quiet, and capable of carrying out attack missions against surface ships and land targets, mine warfare, surveillance, and other relevant tasks, which could thwart Chinese amphibious forces from conducting an invasion of Taiwan and disrupt a PLA Navy blockade. U.S. Navy, *Attack Submarines—SSN*, March 13, 2023. <https://www.navy.mil/Resources/Fact-Files/Display-FactFiles/article/2169558/attack-submarines-ssn/>; Nuclear Threat Initiative, "United States Submarine Capabilities," March 6, 2023; David Axe, "The U.S. Navy Submarine Force Could Sink the Chinese Fleet and Save Taiwan, but at the Cost of a Quarter of Its Boats," *Forbes*, January 10, 2023; Kris Osborn, "Could the U.S. Navy Save Taiwan?" *Warrior Maven*, January 4, 2023; Mark F. Cancian, Matthew Cancian, and Eric Heginbotham, *The First Battle of the Next War: Wargaming a Chinese Invasion of Taiwan*, January 2023, 3; U.S. Navy, *Fleet Ballistic Missile Submarines—SSBN*, May 25, 2021; U.S. Navy, *Guided Missile Submarines—SSGN*, November 25, 2020.

†China's latest ASW helicopter, the Z-20F, has been in use for the last five years and was developed based on the American Sikorsky H-60 Black Hawk, which China imported prior to 1989. Sarah Kirchberger, written testimony for the U.S.-China Economic and Security Review Commission, *Hearing on China's Pursuit of Defense Technologies: Implications for U.S. and Multilateral Export Control and Investment Screening Regimes*, April 13, 2023, 11.

‡For example, in 2018, Chinese intelligence officials recruited an Estonian scientist who served as a deputy director of the NATO undersea research center, which is responsible for multi-static and networked ASW research. Sarah Kirchberger, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China's Pursuit of Defense Technologies: Implications for U.S. and Multilateral Export Control and Investment Screening Regimes*, April 13, 2023, 12.

§AIP systems provide greater underwater endurance for diesel-powered submarines by generating electricity without needing to resurface the vessel for external air. China's state-run *Science and Technology Daily* notes that AIP submarines have "long endurance, good concealment, and excellent quieting ability." Augusto Conte-Rios and Juan-Diego Pelegrin-Garcia, "A Revolution in Submarine Propulsion," *U.S. Naval Institute*, October 2020; Zhang Qiang, "Our Military's AIP Submarine Force Breaks Multiple Records, Experts Interpret Technical Advantages" (我军AIP潜艇部队破多项纪录 专家解读技术优势), *Science and Technology Daily*, December 17, 2018. Translation.

¶According to the Nuclear Threat Initiative, "Submarines must operate quietly in order to evade enemy sensors because water is a highly efficient conductor of sound. The main source of noise from a submarine comes from its propulsion system. Countries such as the United States and China have built networks of hydroacoustic sensors to detect submarines that navigate close

submarines are diesel-electric attack submarines, but there are also small numbers of nuclear-powered attack submarines and nuclear-powered ballistic missile submarines.²⁰⁶ According to DOD, the PLA Navy currently operates six nuclear-powered ballistic missile submarines, six nuclear-powered attack submarines, and 44 diesel-powered/AIP attack submarines.²⁰⁷ China also reportedly plans to build 25 or more Yuan-class (Type 039A) AIP diesel-electric attack submarines and to build the new Shang-class (Type 093B) nuclear-powered guided-missile attack submarine by the mid-2020s.²⁰⁸ The Yuan-class submarine is one of the quietest in the PLA Navy's inventory and offers the force a serviceable option to attack U.S. surface ships operating near China, though it is somewhat limited in range.²⁰⁹ The noise created by China's front-line Shang-class nuclear-powered attack submarine, however, is reportedly on par with the Soviet Victor III, a class of submarine widely used by the Soviet navy in the 1970s before it transitioned to the super-quiet Akula-class submarine.²¹⁰ The Shang-class nuclear-powered attack submarines are thus still detectable by U.S. underwater detection networks, which are deployed in a "fishhook" that stretches from Japan to India around the East Asian littoral seas.²¹¹ As George Mason University PhD candidate Michael Sweeney observed in a 2020 article, "It is likely no Chinese nuclear attack submarines can leave that area without detection—a major advantage for the U.S. in undersea competition in the Pacific."²¹²

The United States remains ahead of China in terms of submarine warfare capabilities for the time being.²¹³ Compared to China, the United States currently has 53 fast attack submarines, 14 ballistic-missile submarines, and four guided-missile submarines.²¹⁴ The United States has conducted regular nuclear deterrent patrols around the world for decades, while China's patrols have been limited to adjacent waters in the South China Sea.²¹⁵ Dr. Kirchberger predicts China could struggle to close the gap with the United States in submarine technology if it continues to lack access to Russia's most advanced submarine technology and if the United States and its allies continue to innovate.²¹⁶

China's Anti-Submarine Warfare Capabilities

China's investments in ASW capabilities present a much more urgent challenge to U.S. interests than its progress in submarine warfare.²¹⁷ According to Dr. Kirchberger, China "wants to neutralize [the] technological advantages of adversaries by quickly catching up in anti-submarine warfare."²¹⁸ Following a long period of underinvestment until the mid-2010s, the PLA Navy is now acquiring a variety of ASW capabilities, including specialized surface combatants, acoustic surveillance ships, and fixed and rotary wing aircraft, to perform missions that could threaten U.S. submarines.²¹⁹ Some of the equipment the PLA Navy is now acquiring for ASW includes the KQ-200 maritime patrol aircraft, the Z-9 and Z-18 helicopters, the Type 056 corvette, the Type 927 underwater acoustic survey ship,

to their coastal borders and strategic military locations." Nuclear Threat Initiative, "Submarine Detection and Monitoring: Open-Source Tools and Technologies," March 2, 2021.

*The Akula-class was the first Soviet submarine class capable of evading detection by the U.S. hydrophone network SOSUS. Mike Sweeney, "Assessing Chinese Maritime Power," *Defense Priorities*, October 26, 2020.

new autonomous underwater vehicles, and two networks of sensors in the South China Sea known as the “Great Underwater Wall” and the “Blue Ocean Information Network.”*²²⁰ DOD assessed in 2022 that the PLA Navy is “significantly improving” its ASW capabilities through acquisition of these systems.²²¹

Recent PLA ASW exercises illustrate China’s continued interest in preventing U.S. submarines from thwarting an invasion.²²² For instance, in August 2022, the PLA Eastern Theater Command coordinated a Y-8 ASW aircraft to operate alongside a Changchun Ka-28 vessel-based anti-submarine helicopter for a submarine detection exercise.²²³ The Chinese state-run *Global Times* claimed it was important for the PLA Navy to conduct the exercises in underwater areas around Taiwan because countries like the United States and Japan have more advanced submarines, illustrating that the PLA is keen on inhibiting allied forces in the event of an invasion.²²⁴ The PLA Navy also conducted an additional joint anti-submarine drill alongside police patrol boats in April 2023 as part of a broader set of area denial exercises.²²⁵

Prospects for China’s Future Undersea Warfare Capabilities

Despite the technological hurdles it faces, Beijing is dedicating significant resources to closing the gap with the United States in undersea warfare. China’s most challenging technological gaps are in submarine warfare-related areas of hull design, quieting technologies, and propulsion systems.²²⁶ China has also struggled to create AIP technology utilizing lithium-ion batteries due to safety issues associated with thermal runaway.[†]²²⁷ It is also unclear how capable China is of developing indigenous submarine diesel engines, as underscored by Thailand’s rejection of China’s “unproven” CHD620 engine in March 2023 as part of a contract signed between the two in 2017 for a Yuan-class submarine.²²⁸ Finally, Beijing may perceive vulnerabilities to its stockpiles of certain critical materials that would be used for its undersea warfare programs.[‡]²²⁹ According to Dr. Kirchberger, Chinese technical literature focused on lithium-ion battery technology notes potential supply chain vulnerabilities with nickel and cobalt and recommends instead making iron and phosphate variants of lithium-ion battery technology to prevent import dependencies.²³⁰

*The PLA is developing a fleet of autonomous underwater vehicles to carry out missions related to marine surveying and reconnaissance, mine warfare and countermeasures, undersea cable inspection, and ASW. Ryan Fedasiuk, “Leviathan Wakes: China’s Growing Fleet of Autonomous Undersea Vehicles,” *Center for Security and Emerging Technology*, August 17, 2021.

†According to Dragonfly Energy Corp., a Reno, Nevada-based manufacturer of deep cycle lithium-ion batteries, thermal runaway “occurs when the temperature inside a battery reaches the point that causes a chemical reaction to occur inside the battery” and in extreme cases can “cause batteries to explode and start fires.” Dragonfly Energy Corp., “What Is Thermal Runaway in Batteries?” December 14, 2022.

‡China is dependent on other countries for numerous critical materials that may help sustain its submarine program. China relies on Brazil for niobium, for example, which can provide cathodic protection to submarine structures, which helps prevent corrosion on metal surfaces. Beryllium, which China has obtained from the United States, is used in the U.S. military to control reactors on nuclear-powered submarines and surface vessels. Additionally, lithium, which China is dependent on from Australia, is used by Japan in lithium-ion-powered batteries on submarines. Courtney Weinbaum et al., “Assessing Systemic Strengths and Vulnerabilities of China’s Defense Industrial Base,” *RAND Corporation*, 2022, 56; Eric Wertheim, “Japan’s Advanced Lithium-Ion Submarines,” *U.S. Naval Institute*, December 2022; U.S. Department of Commerce, *National Security Assessment of the U.S. Beryllium Sector*, July 1993, iv–v; “Palladium Coating on Niobium,” *Platinum Metals Review* 17:3 (1973): 89; Cathwell, “Cathodic Protection Explained.”

China will likely continue its efforts to acquire technologies and knowhow relevant to undersea warfare through commercial transactions, academic exchanges, espionage, and joint military exercises. Recent evidence suggests China's commercial exchanges with Western firms are helping it acquire dual-use technologies relevant to undersea warfare.²³¹ For example, a 2021 Chinese research paper stated that the Norwegian-origin multi-beam sonar equipment it had utilized in a deep-sea geography survey improved its awareness of geomorphological features in the seafloor—knowledge that could be used for military purposes.²³² Academic exchanges between foreign and Chinese universities and research institutions are another avenue for transferring technology and knowhow relevant to undersea warfare capabilities. In 2019, for example, an author from Jacobs University in Bremen, Germany, cowrote a study on the software architecture of hybrid underwater robotic vehicles with researchers from several Chinese universities involved in defense research, though it is unclear if the German researcher was aware of the Chinese coauthors' links or the potential defense applications of the research.²³³ Chinese state-sponsored espionage has aggressively targeted undersea warfare-related technologies such as hydrophones, side scan sonar systems, autonomous underwater vehicles, sonobuoys, submarine propulsion systems, maritime raiding craft and engines, and specific systems used on the U.S. Virginia-class nuclear-powered fast attack submarine.²³⁴ China is also gaining further operational experience and knowhow through its anti-submarine exercises with Russia (for more, see Chapter 4, Section 1, "China's Relations with Foreign Militaries").²³⁵ In the July Northern Interaction 2023 exercise, for example, China carried out a practice "search and dislodge" exercise using a Ka-27PL anti-submarine helicopter and shipboard sonars to detect and then attempt to expel a mock submarine from a restricted sea area closed to navigation in the Sea of Japan.²³⁶

Technical assistance from Russia could accelerate the development of China's undersea warfare capabilities.²³⁷ Although Russia has refrained from sharing its most advanced undersea warfare technologies with China, the Kremlin may have no choice but to assist Beijing as it becomes more reliant on the country as a result of the war in Ukraine.²³⁸ Recent signs of collaboration indicate that Russia may be willing to allow greater access to technologies it long held close. For example, Chinese research institutions are reportedly collaborating with Russian counterparts on hydroacoustic communication and fiberoptic hydrophone development in Arctic waters.²³⁹ Furthermore, the two countries have organized "China-Russia Polar Acoustic Symposiums" since at least mid-2019, bringing together over 100 experts from 30 military research facilities and companies in China and Russia.²⁴⁰ According to Dr. Kirchberger, this level of interaction in such a highly sensitive field "points to an institutionalized rather than ad hoc collaboration."²⁴¹ Moreover, Russia could also provide China with access to critical materials for its submarine fleet.²⁴² For instance, in December 2022 the Russian state-owned Rosatom Corp. supplied 6,477 kilograms of highly enriched uranium for a fast-breeder reactor CFR-600 located in China's Changbiao Island.²⁴³ The weapons-grade plutonium it produced could possibly

be used as fuel for future nuclear-powered submarines, although current Chinese submarines are thought to rely on low-enriched uranium for fuel.²⁴⁴

Despite the United States' current dominance in undersea warfare, U.S. officials are concerned that several developments in this area over the next decade could make it more difficult to deter a Chinese invasion of Taiwan.²⁴⁵ The U.S. advantage in undersea warfare will narrow over time if China successfully acquires new technologies for detecting submarines and if the U.S. acquisition process in undersea warfare does not achieve equally significant new breakthroughs.²⁴⁶ A particular focus of Chinese research efforts is satellite-mounted light detection and ranging (LiDAR) technology, which could facilitate ASW by locating submarines at depths of up to 500 meters.²⁴⁷ Moreover, top U.S. military officials and experts have raised concerns that the United States will struggle to maintain undersea superiority as it retires many of its aging submarines faster than they can be replaced, potentially weakening conventional deterrence vis-à-vis China.²⁴⁸ The number of U.S. nuclear-powered fast attack submarines is expected to hit a "trough" of as few as 41 operational submarines between the mid-2020s and the early 2030s because the United States procured a relatively small number of these submarines during the 1990s.²⁴⁹ To help fill part of this projected gap, the U.S. Navy plans to refuel and extend the service lives of up to seven Los Angeles-class attack submarines, even though the remaining 27 Los Angeles-class boats will retire by the mid-2030s.²⁵⁰ The U.S. industrial base will need to build at least two Virginia-class attack submarines a year to meet the U.S. Navy's current requirement of maintaining 50 attack submarines throughout the rest of this decade and its future requirement of 66 to 72 attack submarines.²⁵¹ The September 2021 announcement of a deal between Australia, the UK, and the United States, a strategic grouping also known as "AUKUS," on nuclear-propelled submarine technology may also help to sustain the U.S. advantage in undersea warfare by increasing the number of allied submarines that can operate jointly with U.S. forces, but the newly produced Virginia-class submarines to be purchased by Australia will not be available until the 2030s.²⁵²

Artificial Intelligence: China Leverages AI for Military Use

CCP leadership views AI as a breakthrough technology with the potential to rapidly boost performance in a range of warfighting tasks beyond human capabilities, including navigation, data processing, and targeting. Both military leaders and AI engineers in China perceive AI's application as an inevitability in warfare, and they believe early adoption of AI for military application could provide an opportunity for the PLA to "leapfrog" U.S. military capabilities.²⁵³ Chinese policy documents illustrate this perception, starting with China's national AI development plan in 2017 highlighting the development of AI as a "major strategy to ... protect national security."²⁵⁴ The PLA's most recent defense white paper, published in 2019, assessed that "international military competition is in the midst of a historic change, driven by the new round of technological revolution and industrial transformation" characterized by "the application of cutting-edge technologies such as artificial intelligence

(AI)... in the military field.”²⁵⁵ While the U.S. military leads the PLA in several AI applications, such as in the aerial domain, the PLA has focused on new technologies to become increasingly competitive in certain AI-enabled capabilities, including in AI computer vision and autonomous underwater vehicles.²⁵⁶ These areas of strength in AI application are potentially paradigm-shifting, with the U.S. military increasingly having to contend with sophisticated Chinese AI tools designed to grant the PLA strategic and operational advantages.²⁵⁷ The United States, however, is also a global driver of AI innovation and, with its partners, manufactures many of the components needed to enable AI’s cutting-edge utilization, including by the PLA. This means that in the broadening competition over AI development, the United States will need to effectively manage access to components to develop AI, convert its commercial AI innovation into hard military power, and decouple U.S. dependencies on Chinese raw materials in manufacturing semiconductors, reducing key potential chokepoints in the AI development supply chain.

The CCP has matched its intense interest in AI with expanded investment. To become an AI leader, China’s total government spending on AI development is pegged for 27 percent annual growth, up to \$27 billion by 2026.²⁵⁸ This increased funding in China’s broader AI sector is set to be steered by the Chinese government. While commercial Chinese AI companies may nominally not be state-owned, the CCP maintains influential CCP Committees* in many firms. These committees allow for close CCP control of AI development, keeping technology firms subordinate to the state and ensuring that AI develops in ways that align with Party interests.²⁵⁹ CCP committees and regulators also closely monitor applications of AI, seeking to reduce the risk of commercially available AI, such as AI language models, being used to challenge Party control.²⁶⁰ Instead, the CCP leverages its control of China’s nonstate sector to promote the development of AI technologies that can be deployed for state and military use.²⁶¹

The PLA itself is also spending heavily on AI applications. While many of the most advanced PLA AI contracts are classified, a 2021 analysis of unclassified and publicly available PLA procurement contracts conducted by CSET found that the PLA likely spends at least \$1.6 billion each year on AI-related systems, including direct PLA R&D and contracts with Chinese AI firms.²⁶² A previous CSET report estimated an upward band of PLA expenditures for AI in 2018 at “no more” than \$2.7 billion.²⁶³ With recent advancements in the development and application of AI for military use, however, it is reasonable to consider that PLA AI spending has surpassed this \$2.7 billion upward band in the last five years. Furthermore,

*Within firms in China’s nonstate sector, the CCP’s ability to exert influence is becoming more deeply entrenched through CCP committees, among other mechanisms. CCP committees take on three functions: (1) overseeing personnel appointments and management decision-making; (2) coordinating political and ideological education; and (3) monitoring the behavior of employees, for instance to report on corrupt practices. While these are all existing functions of the CCP administrative apparatus, these CCP committees enhance the ability of the Party to exercise these functions within firms by strengthening coordination between the committees and the larger Chinese government bureaucracy as well as increasing CCP members’ accountability to the Party and their employing firms. Tamar Groswald Ozery, oral testimony for U.S.-China Economic and Security Review Commission, *Hearing on U.S. Investment in China’s Capital Markets and Military-Industrial Complex*, March 19, 2021, 89; Tamar Groswald Ozery, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on U.S. Investment in China’s Capital Markets and Military-Industrial Complex*, March 19, 2021, 13.

the PLA has benefited from commercial and civil advancements in Chinese AI technologies, despite these advancements not being a direct product of PLA-led R&D, a dynamic discussed in this section.

Nonstate Firms Drive Chinese Military AI Development

China has leveraged its nonstate sector* tech environment, combined with top-down data collection policies, to manage AI development and advance the adoption of AI for military use. These nonstate partnerships provide clear demonstrations of MCF, with the PLA harnessing civil AI development. As Ms. Kania testified before the Commission, the PLA in 2017 created the Agile Innovation Defense Unit (AIDU) to operate in a fashion akin to DOD's Defense Innovation Unit (DIU).²⁶⁴ Placed under the CMC's Science and Technology Commission, the AIDU was initially set up in the startup and tech hub of Shenzhen, and it hosts technology competitions and facilitates partnerships between the PLA and China's most innovative firms, contracting for product delivery on a short timeline.²⁶⁵ Ms. Kania identified similar organizations designed to draw together the commercial AI sector with the military, including a "new AI Military-Civil Fusion Innovation Center" in Tianjin spearheaded by the Academy of Military Sciences and the Tianjin government.²⁶⁶

Recent PLA procurement contracts indicate that the majority of the PLA's AI equipment suppliers are nonstate sector Chinese tech firms founded after 2010.²⁶⁷ This includes Anwise Global Technologies, founded in 2016, which has grown to be China's largest intelligent equipment manufacturer, primarily through servicing the military aerospace and electronics industries.²⁶⁸ AI firm Realis, founded in 2015, also develops virtual reality training rooms equipped with AI that allows for multi-person training for PLA personnel.²⁶⁹ The PLA's Strategic Support Force (PLASSF) is particularly well-positioned to seek out AI partnerships, as it strives to fulfill a mission portfolio with high AI applicability, including building algorithms, managing satellite constellations, and conducting potential offensive electronic warfare.²⁷⁰ While total expenditures of the PLASSF are hard to gauge, it too is actively partnering with Chinese space and cybersecurity companies, such as one 2021 contract with Beijing Uxsino Software to build a "geospatial information perception and intelligent analysis subsystem."²⁷¹ The company builds AI-enabled data processing systems akin to products developed by U.S. firm Oracle and could be utilized by the PLASSF for geospatial information gathering, management, and analysis.²⁷²

The growth of these nonstate AI firms counted on to engineer Chinese defense technologies has been aided by a regulatory regime that limits data privacy and mobilizes mass data collection, along

*Although the Chinese government is not the majority shareholder for nonstate Chinese firms, China's corporate governance environment and structure affords the state bureaucracy numerous channels through which to exercise de facto control over enterprises in which it is a minority shareholder, while the central and local government have extensive equity investments in nonstate firms, particularly in the technology sector. Furthermore, the CCP operates numerous extra-legal channels to steer nonstate firms' decision-making, including via CCP committees within companies. For more on the Party-state's influence in corporate decision-making, see Chapter 2, Section 3, "The Chinese Government's Evolving Control of the Nonstate Sector" in U.S.-China Economic and Security Review Commission, *2021 Annual Report to Congress*, November 2021, 214–239.

with willing financing provided by state-led investors. China's extensive surveillance system provides vast datasets where nascent AI firms, partnered with the government, can experiment with and develop technologies, allowing China to grow into a global leader in related AI applications.²⁷³

This allows China's government to gain experience in managing AI development and has spurred on breakthroughs in certain AI fields, such as computer vision, where AI enables information gathering and analysis of image and video data.²⁷⁴ Computer vision is valued by the Chinese government for both its surveillance and military applications. China robustly supports computer vision research; according to a 2022 CSET report, researchers with Chinese institutional affiliations produced more than one-third of publications in both computer vision and visual surveillance research, making China by far the most prolific country in producing research on computer vision and its uses by government actors.²⁷⁵

In one case of government support for R&D in computer vision capabilities, AI firm SenseTime, which provides facial recognition software, has been provided with state capital to pursue advances in computer vision, with state-backed entities comprising two-thirds of SenseTime's initial public offering (IPO) investors.²⁷⁶ SenseTime partners with the Chinese government to develop AI recognition tools to monitor and track Uyghurs across Xinjiang (leading to SenseTime being placed on BIS's Entity List).²⁷⁷ SenseTime can then draw on this government-run surveillance program to build training data for its models, refining its AI recognition capabilities based off of hundreds of thousands of facial scans cultivated by the Chinese government.²⁷⁸ Through this partnership, SenseTime has become a global leader in computer vision on its way to a multibillion-dollar valuation, developing rapid image recognition and remote sensing capabilities that rival U.S. technologies, tools essential for the Chinese government.²⁷⁹ StarSee, another AI-enabled computer vision firm, has leveraged the support of state-owned investment funds and the backing of the Chinese Academy of Sciences to break into the military market.²⁸⁰ Drawing on Chinese advances in computer vision, StarSee builds algorithms for AI mapping tools for the PLA capable of identifying foreign weapons systems, including tracking U.S. naval assets as far away as the coast of California.²⁸¹ StarSee's research team draws from China's wide range of commercial Chinese companies conducting AI research, including Baidu, Alibaba, Tencent, and Microsoft Research Asia.²⁸²

Even commercial-facing AI firms have engaged with the PLA, at times jeopardizing their global markets to do so. Drone-making company DJI has applied machine learning tools for object detection and navigation on its way toward achieving a 76 percent global market share of commercial drones.²⁸³ However, in 2022, DOD labeled DJI a "Chinese military company," due to its links with the PLA and overseas military operations.²⁸⁴ As Ms. Kania testified before the Commission, PLA drones include DJI's "RoboMaster S1," a small unmanned ground vehicle that has been reportedly employed for Eastern Theater Command urban warfare training.*²⁸⁵

*China's Eastern Theater Command trains for and would be involved in operations against Taiwan. Wu Che-yu and Jonathan Chin, "Xi Might Be Doubting PLA Loyalty," *Taipei Times*, July 9, 2023.

AI Military Firms Use U.S. Technologies, Navigate U.S. Sanctions

Despite the partnership of nonstate AI firms with China's military on AI development, many continue to operate as civilian nonstate technology firms, avoiding the scrutiny and sanctions that come with aiding an adversarial military. Of the 273 PLA AI equipment suppliers identified in a study by the Center for the Study of Emerging Technology, only 8 percent, or 22 companies, were named in U.S. export control and sanctions regimes as of 2021.²⁸⁶ Many of these firms drew on U.S. technology advancement—and in some cases U.S.-based funding—during their development.

AI technologies require semiconductors to function, and many aspects, including critical components, of the semiconductor ecosystem are controlled by the United States and its partners.²⁸⁷ As recently as 2020, of the 97 AI chips identified by CSET in public PLA purchase records, nearly all were designed by NVIDIA, Xilinx (now a part of AMD), Intel, or Microsemi, all U.S.-based chip firms.²⁸⁸ Almost all AI models are trained on graphics processing units (GPUs)—chips highly capable of training sophisticated AI models. As of September 2022, NVIDIA and AMD, two U.S. GPU providers, were responsible for 95 percent of China's domestic GPU market, including providing essential chips for the development of Chinese AI, likely including for military use.²⁸⁹

However, the October 2022 restrictions of Chinese access to the United States most advanced chips threatens to slow Chinese AI development. As a result of the introduction of these restrictions, many firms expanded sanction evasion activities, including scaling up thousands of intermediaries to smuggle some of the world's highest-end chips, including from U.S.-based NVIDIA, into China.* Such practices are not likely viable in the long term as the United States and its partners refine their export control regime. This poses challenges for Chinese AI, as experts view China's domestic-produced chips as being a full three generations behind the cutting-edge foreign chips many advanced defense technologies rely on, risking the development of AI-enabled equipment falling behind.²⁹⁰

The October 2022 restrictions play into a point of concern the central government has highlighted since 2018, when Chinese state media outlined 35 “chokepoints” where China is outpaced by the international community in technological development.²⁹¹ Seven of these chokepoints reflect China's relatively immature chip standards and highlight how the country's reliance on foreign technologies poses “national security concerns” for China.²⁹² Facing U.S.-led curbs on chip access, the Chinese government at the end of 2022 introduced a \$149 billion (1 trillion RMB) incentive program for its semiconductor industry to boost domestic research activity and production over the next five years.²⁹³ Despite these planned investments, it remains to be seen whether domestic Chinese investment

* For example, in Shenzhen's Huaqiangbei subdistrict, the world's largest electronics wholesale market, vendors marketed NVIDIA's A100 GPUs, a chip banned for export to China, charging \$17,700 per chip (128,000 RMB), a \$7,000 dollar markup from NVIDIA's suggested retail price. Che Pan and Iris Deng, “Tech War: Strong Demand in China for Advanced Chips Used in AI Projects Creates a Growing Market for Smuggled Nvidia GPUs,” *South China Morning Post*, June 27, 2023.

can rapidly replace decades of international advancements in semiconductor innovation and design.

Capital from the United States has also boosted the development of these Chinese AI defense tech firms. This includes funds connected to prominent U.S. venture capital funds, such as Sequoia Capital China, which has formerly been affiliated with Sequoia Capital, the Silicon Valley venture capital firm.²⁹⁴ While Sequoia Capital is in the process of separating and rebranding its China firm from its United States and Europe operations by March 2024, Sequoia Capital China continues to draw investments from U.S. university endowments and charitable trusts.²⁹⁵ Sequoia Capital China was an early investor in Eversec, which currently provides AI-based open-source data mining and information technology support to the PLA.²⁹⁶ In November 2021, the PLA Strategic Support Force awarded a contract to Eversec for an AI-based “cyber threat intelligent sensing and early warning platform.”²⁹⁷ In 2020, Goldman Sachs invested in 4Paradigm, one of the largest AI firms in China, just months after it received contracts to design AI software to boost PLA operational abilities.²⁹⁸ 4Paradigm currently serves PLA contracts including working to provide a “battalion and company command decision-making model and human-machine teaming software.”²⁹⁹ Goldman Sachs has also acted as a joint sponsor on multiple applications by 4Paradigm for an IPO on the Hong Kong Stock Exchange (HKEX).³⁰⁰ Sponsorships have been as recent as September 2022, with Goldman Sachs Asia serving as a joint sponsor for 4Paradigm’s IPO application.³⁰¹ Goldman withdrew its sponsorship of 4Paradigm’s IPO in April 2023, following the company’s March 2023 addition to the Entity List.^{*302} Sequoia Capital China was also an early investor in 4Paradigm and its largest outside shareholder in 2021.³⁰³

U.S.-led advancements in AI Large Language Models (LLMs), which generate text and fulfill tasks in ways that mimic human production, also stand to be a point of interest for the Chinese military, given these LLM’s potential capabilities to analyze data points rapidly, author advanced algorithms, and formulate disinformation campaigns.³⁰⁴ Chinese firms have aggressively recruited international AI scientists to boost Chinese AI LLM capabilities. Additionally, according to research from CSET, as of 2020 10 percent of the total AI research labs for Facebook, Google, IBM, and Microsoft are located in China.³⁰⁵ Microsoft notably maintains Microsoft Research Asia, its largest non-U.S. research base† in China’s tech hub cit-

*In a disclosure with HKEX in April 2023, 4Paradigm indicated the partial state-owned China International Capital Corporation had become its sole IPO sponsor. In July, 4Paradigm became one of the first Chinese firms to complete the China Securities Regulatory Commission’s new offshore listing procedures, which have slowed overseas IPOs to a near halt since the securities regulator introduced the requirement at the end of March 2023. For more on changes to China’s overseas listing requirements, see Chapter 1, Section 1, “U.S.-China Bilateral and China’s External Economic and Trade Relations,” Kane Wu, “Chinese AI Startup Fourth Paradigm Receives China’s Nod for Hong Kong IPO,” *Reuters*, July 5, 2023; Hong Kong Stock Exchange, “Beijing Fourth Paradigm Technology Co., Ltd.” April 24, 2023; China Securities Regulatory Commission, *Trial Measures for the Administration of Overseas Issuance and Listing of Securities by Domestic Companies* (境内企业境外发行证券和上市管理试行办法), February 17, 2023. Translation.

†Microsoft’s China-based operations were impacted by a round of broader company layoffs announced in January 2023. However, the layoffs were most fully felt in Microsoft’s U.S. operations, with comparably fewer China-based employees impacted. Microsoft Research Asia also canceled a lease on a new building in Beijing meant to add to its research headquarters. Li Jingya and She Xiaochen, “Microsoft Announces That It Will Lay Off 10,000 People, Human Resources De-

ies including Beijing, Shanghai and Shenzhen.³⁰⁶ Microsoft also acts as a leading investor in OpenAI, having exclusive access to the underlying codes and algorithms that assist some of their cutting-edge LLMs, such as GPT-3.³⁰⁷ These close ties between leading U.S. AI research firms and China lead to emerging risks, including continued technology transfers in the most strategic areas of AI research.³⁰⁸ Already, Chinese state entities have leveraged their formidable hacking abilities to target advances in AI models made by private U.S. firms—U.S.-led advances that could be applied for the benefit of the Chinese government and its military.*³⁰⁹

Data and Talent Inhibit Military AI Development

China's development of AI-enabled defense technologies faces further drag due to both limited access to training data for specific warfighting scenarios and a shortage of AI engineers. While China's development in computer vision expanded in part thanks to China's nation-wide surveillance program, providing AI firms millions of use cases through which to develop and test the operational uses of their AI computer vision technology, it provided little training data for other critical areas.³¹⁰ With China rarely engaging in foreign conflict to directly test its AI, it has limited data through which to develop, train, and refine its AI-enabled warfighting capabilities.³¹¹ As Gregory Allen of the Center for Strategic and International Studies testified before the Commission, "China may have data advantages related to facial recognition for domestic surveillance applications... but these data sets have limited relevance for military applications. For some military AI applications, such as precision missile targeting or autonomous drone navigation, China may have no data advantage whatsoever compared with the United States."³¹²

Furthermore, many of China's most talented engineers are trained abroad and seek employment and possible emigration overseas following their education.³¹³ Retention of AI talent is a decade-long problem for China, as the United States routinely draws in top Chinese talent. A 2019 study from China-focused think tank MacroPolo surveyed a pool of 2,800 elite Chinese AI engineers and found that about three quarters now reside outside of China, and 85 percent of those have come to the United States to work at firms such as Google and IBM or to take up prominent positions in U.S. academia.³¹⁴ The United States is a hub for AI research, with U.S. engineers leading several AI breakthroughs in military applications, including AI researchers in California developing breakthroughs in autonomous fighter jet navigation and researchers affiliated with Virginia-based General Dynamics developing advanced unmanned ground vehicles.³¹⁵

China has moved to close this gap by offering incentive programs for Chinese AI researchers returning to China and for foreign AI researchers coming to China. Recruitment efforts have targeted talent hubs for semiconductors, including Taiwan. Between 2014 and 2019,

partment May Be the Most Impacted, China Will Be Affected" (微软官宣裁员1万人, 人力资源部或成重灾区, 中国区将受波及), *Jiemian News*, January 18, 2023. Translation.

*Despite Microsoft's research and relationship with China, the company has already been targeted by Chinese hacking attacks on its digital infrastructure this year. Jenna McLaughlin, "China Accused of Massive Hack into U.S. Government and Microsoft," *NPR*, July 12, 2023.

over 3,000, or 7 percent, of Taiwanese semiconductor technicians moved to the Mainland.*³¹⁶ China has also expanded the presence of defense technology research at Chinese universities, hosting conferences—such as the formative, “first forum on military-civil fusion in the AI industry,” convened by Harbin Engineering University in 2018—featuring discussions of partnerships between Chinese academia and the PLA in the fields of intelligent underwater robots and high-speed unmanned boats.³¹⁷ Since then, links between the PLA and Chinese academia have only accelerated, with the PLA seeking to ensure that Chinese science, technology, engineering, and mathematics (STEM) research aligns with defense technology ambitions. As a result, the PLA now relies on university partnerships for critical AI development, particularly in the field of autonomous underwater vehicles (AUV).³¹⁸

The PLA Prioritizes AI Use in Autonomous Underwater Vehicles

China’s application of AI to underwater sensing and navigation has advanced in recent years, seeking to challenge U.S. power in the undersea domain, although substantial challenges remain in integrating these advances into practical and reliable warfighting capabilities. The PLA has leveraged AI capabilities in an attempt to offset geographic challenges in its surrounding maritime environment, where from the Taiwan Strait to the South China Sea, shallow reefs and complex littorals pose challenges to the PLA’s operating abilities. To meet this challenge, the PLA has focused heavily on the development of AI-powered AUV, viewing them as critical to achieving area dominance on China’s periphery.³¹⁹ In seeking AI dominance in the undersea domain, the PLA has turned to its university base to spur advanced research in AUV. A 2021 report by China technology expert Ryan Fedasiuk for the Center for International Maritime Security outlined how by 2019, China had established 159 AUV projects at over 40 universities.³²⁰ Another report by a professor at Hebei University of Science and Technology listed 48 universities engaged in research on unmanned and autonomous underwater vehicles, working on submersibles that have relevant military applications.³²¹

Through these partnerships, the PLA Navy has secured advances in underwater mapping and reconnaissance, using AI-enabled AUV to monitor China’s surrounding waters for foreign vessels and other activity. AI-enabled AUV may be deployed to augment the PLA’s “Smart Ocean,” initiative which seeks to incorporate satellite sensing, intelligent buoys, AUV, and other AI-enabled technologies to increase undersea awareness.³²² Research papers published by the PLA Navy indicate an intention to also add AUV to China’s “Great Underwater Wall” monitoring system, utilizing

*Taiwan’s government has launched multiple initiatives to combat Chinese attempts to steal top talent. In May 2022, Taiwan’s Legislative Yuan amended the National Security Act in May 2022 to prohibit Taiwan workers in key industries from traveling to the Mainland without prior permission. Taiwan’s Bureau of Investigation has also launched a number of raids on Chinese companies operating in Taipei and Hsinchu, Taiwan’s hubs for semiconductors. For more on Taiwan’s efforts to combat China’s economic espionage, see U.S.-China Economic and Security Review Commission, Chapter 4, “Taiwan” in *2022 Annual Report to Congress*, November 2022, 628.

The PLA Prioritizes AI Use in Autonomous Underwater Vehicles—*Continued*

small and medium-sized AI-enabled AUV to detect and identify potential enemy undersea vehicles.³²³

Advances in ultralight Chinese underwater “glider” AUV have further bolstered PLA maritime reconnaissance capabilities. These AI-enabled vehicles demonstrate both the technological capabilities to conduct surveying and reconnaissance of deep waters, and the endurance to travel far beyond China’s littorals. Their appearance across the Indo-Pacific region reflects a PLA ambition to deploy glider AUV with broad capability to detect and identify undersea objects, including potential U.S. submarines.³²⁴ Advances in AUV and similar AI-enabled undersea vehicles provide further capabilities in mine laying and in accessing underwater cables, with China recognizing the advantage that both capabilities provide in combat scenarios, such as in a conflict over Taiwan.³²⁵

However, barriers persist in China’s AUV technology, largely stemming from technological roadblocks. China’s largest AUV are energy intensive and constrained by a 24-hour battery life, limiting their range of travel.³²⁶ Its undersea gliders must surface in order to transmit information to PLA operators, becoming vulnerable to detection from adversaries.³²⁷ Despite recent advancements, PLA AI technology supporting Chinese AUV in mapping underwater geography still has inconsistencies and is not yet mature enough to reliably identify undersea targets.³²⁸ This casts doubts on the prospect that AI-enabled AUV will be able to effectively engage foreign undersea vehicles in the near future without human assistance.³²⁹ This means the PLA has yet to achieve true AI-enabled dominance in the undersea domain, especially in a contested environment or during a conflict. As indicated by CSET, despite strides in the state of current Chinese AUV AI technology, “the complexity of antisubmarine warfare, and the sheer scale and physics-based challenges of undersea sensing and communications all suggest these [AI] systems have a long way to go.”³³⁰

Still, Chinese investment in AI-enabled undersea capabilities provides serious challenges to the U.S. military and that of its partners in the region. The United States has long been assessed by experts to have an advantage in the Taiwan Strait in undersea capabilities, due to its ability to operate submerged military assets efficiently and quietly in the surrounding waters.³³¹ Chinese advancements in AI-equipped AUV may soon begin to erode this advantage. While China may not be able to produce cutting-edge submarines at the level of the United States, AI-enabled AUV provide new capabilities in tracking and reconnaissance and may challenge the U.S. military’s previously assumed ability to operate quietly in China’s undersea periphery. With the range of PLA AUV broadening, and their capabilities increasing, the PLA may soon be able to track military activity on an increasingly wide scale, including along the Japanese archipelago, near U.S. military installations in Guam, and beyond.³³²

The PLA Prioritizes AI Use in Autonomous Underwater Vehicles—*Continued*

Furthermore, in a combat scenario, these AUV threaten to strike at infrastructure essential to U.S. capabilities. PLA AUV have been designed to identify and access undersea cables, posing an emerging threat to digital infrastructure.³³³ As Mr. Fedusiak outlines, this includes a looming danger to a concentration of fiber-optic cables near northern Taiwan that are essential for information dissemination on Taiwan, as well as trans-Pacific data exchanges, including for internet access in parts of the United States.³³⁴ However, China also relies on these and nearby fiber-optic cables for its own internet access and data needs.³³⁵ This means that while the PLA has designed AUV capable of striking cables relied on by Taiwan and the United States, doing so would also likely cause disruptions to China's own digital infrastructure.

Export Control and Investment Screening

Current U.S. export controls and investment restrictions, even when coupled with multilateral export control and the investment screening regimes of U.S. allies and partners, are insufficient to stem the flow of U.S. and foreign technology, expertise, and capital to China's defense sector. MCF presents a unique challenge to export controls, requiring a renewed focus on dual-use technologies where foundational frameworks, particularly in the multilateral regimes, focus on counterproliferation. This is compounded by the pace at which technology evolves, as well as the increasing globalization of R&D of new technologies and the supply chains used in those technologies. Slow development and implementation of export controls has allowed Chinese firms to develop workarounds. For instance, in March 2023, the *Australian Financial Review* reported that Chinese voice recognition firm iFlytek, added to the Entity List in 2019, was skirting controls on buying advanced U.S. chips by renting time on cloud computing servers powered with advanced NVIDIA chips to train its AI models.³³⁶ These challenges are exacerbated by the difficulty reaching consensus with allies and partners on which technologies need to be controlled and at what level of maturity they should be controlled.

Beyond controlling transfer and development of discreet technologies with clear specific potential for military end uses, the United States faces broader strategic questions of whether and how to control China's acquisition of technology and knowhow that advance its economic competitiveness at the expense of U.S. workers and producers and undermine the resilience of the U.S. defense industrial base. China's dual circulation strategy and related efforts to increase self-reliance, localize production, and secure global access to critical inputs like minerals could exacerbate U.S. dependence on Chinese components and strengthen China's ability to employ economic coercion. Additionally, many challenges that work against controlling exports for military end use also apply to controlling exports of U.S. hardware and software to surveillance technology firms

involved in human rights abuses, such as the Chinese government's mass repression in the Xinjiang Uyghur Autonomous Region.

Progress and Limits in Addressing China's Challenge to Export Controls

Since the Export Control Reform Act (ECRA) became law in 2018, application of U.S. export controls to end users based in China or affiliated with Chinese entities has expanded substantially, though they face significant and growing limitations, including in developing tighter controls, sharing information, and monitoring end use. In contrast to controls that regulate export of a specific technology or to a jurisdiction regardless of the recipient, end user-based controls are more targeted and narrower (for an overview of U.S. export control authorities and implementing regulations, see Appendix). Additionally, the October 7, 2022, restrictions on exporting advanced semiconductors and semiconductor manufacturing equipment to China constitute a step-change in U.S. export control policy toward the country.³³⁷

Despite increasing the number of specifically named Chinese entities barred from receiving technology, the U.S. Department of Commerce's BIS has made limited progress in expanding the scope of technologies controlled. In 2018, ECRA tasked the agency with identifying "emerging and foundational" technologies and imposing controls where necessary, but BIS has not identified any foundational technologies, and in a May 2022 statement it announced it would no longer attempt to do so.³³⁸ In testimony before the Commission in 2021, then Acting Undersecretary for Industry and Security Jeremy Pelter indicated that BIS did not want to outpace U.S. allies and partners in regulating developing technologies and inhibit multilateral coordination.³³⁹

United States Expands Export Controls on Chinese Firms and Chips

Heightened controls on the export of U.S. technology and software to Chinese companies have foremost been implemented via Commerce's Entity List, and since 2018 Commerce has modified the Export Administration Regulations (EAR) to more precisely target specific Chinese companies and activities via the list. Transfer of all items controlled by the EAR* to designees on the Entity List is prohibited without first receiving a license from BIS, and such licenses are subject to a presumption of denial.† There are currently 611 China-based entries on the Entity List, 525 of which have been add-

*This includes not just dual-use items and munitions on the Commerce Control List that have an Export Control Classification Number but also items regulated under EAR99, a designation for low-tech consumer goods that are not subject to licensing requirements except for embargoed countries or end users of concern. U.S. Department of Commerce Bureau of Industry and Security, "Frequently Asked Questions to Export Licensing Requirements," November 2018, 4.

†Exporters may nonetheless apply for and receive a license to continue transferring specified products to a designated entity if their application demonstrates exclusive civil end use, consistent with U.S. national security interests. For instance, between November 2020 and April 2021, BIS approved 113 export licenses involving Huawei, valued at up to \$61 billion. Additionally, some entries on the Entity List specify exemptions to the presumption of denial, ranging from particular export control classification numbers to the entirety of the EAR99 (see prior footnote), though often with a case-by-case review. Kate O'Keefe, "U.S. Issued \$100 Billion in Export Licenses to Suppliers of Huawei, SMIC," *Wall Street Journal*, October 21, 2021; U.S. Department of Commerce International Trade Administration, *Consolidated Screening List*.

ed since January 2018.*³⁴⁰ Inclusion of Chinese firms, government agencies, research institutes, and individuals on the Entity List has principally sought to prevent their acquisition of dual-use technologies and application of these technologies to military end uses. However, the Trump and Biden Administrations have also used the list for broader purposes, primarily targeting entities involved in:

- *China's military modernization:* Numerous Chinese defense conglomerates, research institutes, and nonstate firms have been added to the Entity List for their role in advancing specific PLA capabilities, including hypersonics, technology used in missiles, and other advanced weapons systems.³⁴¹ Other entities have been added for acquiring dual-use technology for military purposes. For instance, Chinese supercomputer manufacturer Sugon and two of its subsidiaries were added to the Entity List in June 2019 for assisting in China's development of supercomputers that could be used for military applications, including cryptography and complex simulations like nuclear weapons testing simulations.³⁴²
- *China's MCF program:* Beyond entities advancing specific defense capabilities, BIS has added Chinese firms and research institutes participating in MCF and other ostensibly civilian companies transacting with China's military industrial complex to the Entity List. Chief among these is Semiconductor Manufacturing International Company (SMIC), which was added in December 2020.† Additions within the past year have focused especially on AI, including a final rule from December 2022 that added 21 firms involved in AI chip R&D, manufacturing, and sales.³⁴³
- *Diversion to military end users:* BIS's monitoring activities also encompass potential diversion to military end uses and supporting other blacklisted entities. Many recent additions include Chinese firms attempting to acquire goods in support of the PLA. Notably, three subsidiaries of Chinese biotech giant BGI Group were also added to the Entity List in March 2023, partly due to concerns that they were collecting and analyzing genetic data for the PLA.³⁴⁴
- *Aiding other militaries:* The Entity List also includes Chinese firms assisting other potential adversaries in violation of U.S. export controls, including by supplying the Russian military following the imposition of U.S. restrictions on Russia for its

*The Entity List is arranged by destination country according to U.S. customs territories, so affiliates of the same corporation may be treated as separate entities. As of July 26, 2023, the list includes 2,523 total entries in all jurisdictions. The 611 China-based entries consequently do not include overseas affiliates of other Chinese firms but do include Hong Kong-based entities. For instance, over 100 subsidiaries of Huawei based outside of China have been added to the Entity List. Five China-based entities do not have dates of addition listed. U.S. Department of Commerce, *Department of Commerce Adds Dozens of New Huawei Affiliates to the Entity List and Maintains Narrow Exemptions through the Temporary General License*, August 19, 2019; U.S. Department of Commerce International Trade Administration, *Consolidated Screening List*.

†The entry only applied a presumption of denial for "items uniquely required for production of semiconductors at advanced technology nodes," however, and BIS approved 118 licenses valued at up to \$42 billion involving SMIC between its addition to the Entity List and April 2021. Kate O'Keefe, "U.S. Issued \$100 Billion in Export Licenses to Suppliers of Huawei, SMIC," *Wall Street Journal*, October 21, 2021.

unprovoked invasion of Ukraine as well as by providing U.S. electronics to Iran's military.³⁴⁵

- *Human rights abuses:* Dozens of Chinese technology firms and government agencies have been added to the Entity List for their role in advancing mass surveillance and arbitrary detention against Uyghurs and other Muslim minority groups in Xinjiang. These include state-owned camera maker Hikvision and AI startups SenseTime and Cloudwalk, among other venture-based tech firms.³⁴⁶
- *Other activities contrary to U.S. interest:* BIS has also sought to advance other U.S. foreign policy objectives through the Entity List. For instance, in August 2020, it added 24 Chinese companies involved in artificial island building in the South China Sea,* including subsidiaries of state-owned infrastructure conglomerate China Communications Construction Corporation.³⁴⁷ Additional entities were added for the same reason in December 2020.³⁴⁸ It has also added China-based firms and individuals to the Entity List for involvement in industrial espionage.³⁴⁹

Extending U.S. Export Controls through the Foreign Direct Product Rule

To inhibit companies from circumventing Entity List restrictions by offshoring production, the U.S. government has strengthened extraterritorial regulations on exports made using U.S. technology. Foreign direct product rules prohibit foreign countries from exporting or reexporting controlled items made with a certain portion of U.S.-origin technology or software, as defined by the EAR, to restricted end users unless the exporter receives a license or license exception.† Following Huawei's addition to the Entity List in 2019, Commerce introduced two rules to prevent Huawei's purchase of advanced semiconductors made using U.S. technology. The rules blocked chip design subsidiary HiSilicon from contracting Taiwan Semiconductor Manufacturing Company (TSMC) to fabricate chips for its devices by restricting TSMC from using U.S.-made electronic design automation software in chips made for Huawei, damaging the company's handset busi-

*China claims 90 percent of the South China Sea as its historic sovereign territory in a demarcation called the nine-dash line, and it initiated aggressive land reclamation program on features it occupies in the Spratly and Paracel Islands in 2013. Construction of runways and other facilities has enabled China to deploy advanced military equipment on the islands since 2015. In July 2016, a tribunal at the Permanent Court of Arbitration in The Hague issued a ruling on the merits of a case brought by the Philippines that overwhelmingly ruled against multiple claims China had made in the South China Sea. The tribunal concluded that the nine-dash line had no legal basis, that none of the land features China claimed were actually islands, and that China had violated the Philippines' sovereign rights by interfering in its exclusive economic zone (within 200 nautical miles of its coast). China's land reclamation projects attempt to establish both that the features are actual islands and that China has a sovereign claim to them. For more on China's excessive maritime claims in the South China Sea, see Chapter 2, Section 1, "Rule by Law: China's Increasingly Global Legal Reach." Shannon Tiezzi, "Why Is China Building Islands in the South China Sea?" *Diplomat*, September 10, 2014.

†De minimis rules establish that items produced outside the United States incorporating certain controlled U.S. goods that do not exceed a certain de minimis threshold (10 percent or 25 percent depending on the technology) are not subject to the EAR. Some controlled technologies, including certain software, are ineligible for de minimis rules and some restricted countries are excluded. 15 C.F.R. §734.4 - De Minimis U.S. Content, 1996.

Extending U.S. Export Controls through the Foreign Direct Product Rule—*Continued*

ness.*³⁵⁰ Because of the rules, the UK government also reversed its decision to permit Huawei in its telecommunication networks, noting “the new restrictions make it impossible to continue to guarantee the security of Huawei equipment in the future.”³⁵¹ The October 7 restrictions also make use of foreign direct product rules, prohibiting export of advanced graphics processing units used in AI applications to China if they were made using U.S. technology or software.³⁵² Additionally, export controls on Russia and Belarus following Russia’s invasion of Ukraine apply foreign direct product rules.³⁵³

The U.S. government has also developed and expanded other end user-based tools to complement the Entity List, including the Military End User List and the Unverified List. The former, introduced at the end of 2020, encompasses entities BIS has identified as military end users in denying license applications or in case-by-case license exemption reviews.³⁵⁴ In publishing the list, BIS is effectively providing a screening tool to industry to assist in identifying transactions with prohibited parties, though not removing exporters’ requirement to ensure they are not aiding potential adversaries’ militaries. The list’s creation followed an April 2020 rule from BIS expanding the definition of “military end use” to lower the threshold for restricting exports to military end users from China.[†]³⁵⁵ The list included 71 China-based entities as of July 2023.³⁵⁶ Parties on the Unverified List (UVL) are ineligible to receive items subject to the EAR with a license exemption because BIS cannot complete an “end use check” either verifying the identity of the party or confirming it is acquiring U.S. goods for its stated purposes.³⁵⁷ As of July 2023, there are 126 China-based entities on the Unverified List.³⁵⁸

October 7 Controls Attempt to Restrain China’s Access to Advanced Semiconductors, for Now

BIS’s October 7, 2022, export controls on advanced computing and semiconductor manufacturing equipment substantially impact China’s AI, computing, and semiconductor industries and represent a major advancement in the United States’ approach to curtailing China’s technology development. The controls limit access to advanced chips for AI and supercomputer development as well as semiconductor manufacturing equipment that can further China’s domestic

*Huawei’s addition to the Entity List also prevented it from licensing Google’s Android operating system and Google’s apps like Gmail, further damaging its handset business. Arjun Kharpal, “Google Cuts Ties with Huawei. That May Be a ‘Kill Switch’ for the Chinese Firm’s Global Smartphone Ambition,” *CNBC*, May 20, 2019.

†The rule also applies to exports to Russia and Venezuela and prohibits transferring certain items on the Commerce Control List if the exporter believes they may be used for military end use. Where the EAR defines “military end use” as encompassing a full product lifecycle, including “operation, installation (including on-site installation), maintenance (checking), repair, overhaul and refurbishing” of military items, under the broadened definition any one of these functions constitutes military end use. U.S. Department of Commerce Bureau of Industry and Security, “Expansion of Export, Reexport, and Transfer (in-Country) Controls for Military End Use or Military End Users in the People’s Republic of China, Russia, or Venezuela,” *Federal Register* 85:82 (April 28, 2020).

capacity to produce advanced semiconductors.* Where prior controls had informally sought to keep China's semiconductor fabrication capabilities two generations behind those of the United States, the new restrictions seek to hold China's domestic capabilities at current levels.³⁵⁹ The rationale for applying broad-based controls to a sector, rather than to specific end users or end uses, focuses on AI and semiconductors' nature as general purpose technologies that assist in multiple defense applications, including using machine learning to improve the speed and accuracy of China's autonomous military systems and complex simulations used in designing and testing weapons systems.³⁶⁰

Semiconductor analysts, however, question the efficacy of the current U.S.-led export controls, particularly in light of advances at SMIC and Huawei. First, preventing China from importing advanced "commodity chips" or mass-manufactured chips that are not designed for a highly specialized application is extremely difficult due to their prevalence.³⁶¹ Second, given the way in which the rules are written, as well as the difficulty of enforcing controls via end-use checks, Chinese semiconductor fabrication plants are likely still obtaining equipment needed to manufacture chips one or two generations behind the leading edge, beyond the threshold imposed by the controls.³⁶² When news first broke in 2022 that SMIC had produced a 7 nm processor, many were skeptical of their ability to scale production with good yield (i.e., percentage of nondefective chips on a wafer).³⁶³ Analysts have increasingly converged on the view that SMIC's yield is better than skeptics initially held and represents a genuine feat, as evidenced by mass production capacity for SMIC's Kirin 9000, the 7 nm processor used in the new Huawei Mate Pro.³⁶⁴ Underestimation of SMIC's progress prior to the October controls may account for some of the recent surprise, but several analysts also believe recent achievements reflect fundamental flaws in the new restrictions. Dylan Patel, a leading semiconductor analyst, argues that the current restrictions on U.S. semiconductor manufacturing equipment are ineffective because "equipment companies... are selling basically every tool they offer to China... most deposition, etch, metrology, cleaning, coaters, developers, ion implant, epitaxy, etc. tools for 7nm and even 5nm can also plausibly be used in 28nm."³⁶⁵ With BIS using a 14nm restriction limit, importers are often able to purchase the equipment if they claim it is being used on an older production line, and with limited capacity for end-use inspections it is difficult to verify the equipment is not being used to produce more advanced chips.³⁶⁶ Douglas Fuller, pro-

*The rules introduce five new license requirements: (1) to sell top-end chips necessary for training machine learning models and building supercomputers; (2) to sell certain advanced semiconductor manufacturing equipment; (3) expanding the scope foreign direct product rules to cover advanced computing chips, supercomputers, and advanced semiconductors for high performance applications in China or to 28 firms that aided China's military in developing high performance computing capabilities; (4) for all items subject to the Export Administration Regulations when there is "knowledge" that the item is destined for end use in the "development" or "production" of chips in China at facilities fabricating advanced chips; and (5) for U.S. persons, including U.S. citizens, passport holders, green card holders, juridical citizens, U.S. residents, and others, to "support" the "development" or "production" of advanced chips in China without a license from BIS. Roughly, BIS has set the threshold for advanced chip fabrication as follows: for logic chips, 16 nm or 14 nm, or below; for DRAM memory chips, this is 18 nm; for NAND flash memory chips, this is 128 layers or more. U.S. Department of Commerce Bureau of Industry and Security, *Commerce Implements New Export Controls on Advanced Computing and Semiconductor Manufacturing Items to the People's Republic of China (PRC)*, October 7, 2022.

fessor at Copenhagen Business and School and multidecade analyst of China's semiconductor ecosystem, initially believed SMIC's yield for its 7 nm chips was extremely low, but in September of 2023 altered his assessment after receiving industry insider information that Chinese fabrication plants were still able to obtain semiconductor manufacturing equipment due to porousness of the controls.³⁶⁷

To the extent such controls are effective, it is only possible because of plurilateral coordination with other major players in the global semiconductor supply chain.³⁶⁸ Following its unilateral imposition of the controls, the U.S. government secured cooperation from Taiwan, which uses U.S. technology in its foundries.* Subsequently, the Netherlands and Japan, both of which also control chokepoints in the semiconductor supply chain, agreed to impose related controls.†³⁶⁹ Dutch firm ASML is the world leader in advanced photolithography equipment, machines that use lasers to etch circuitry onto silicon wafers, producing semiconductors.³⁷⁰ Japan similarly has substantial market share in some of the specialized tools used in semiconductor fabrication and is also a leading supplier of chemicals used in the process.³⁷¹

Limitations in U.S. and Multilateral Export Controls

Despite the increased application of end user-based controls, U.S. export controls face a series of challenges in inhibiting transfer of defense and dual-use technology to China. First, export controls are, in the words of former Acting Undersecretary of Commerce for Industry and Security Cordell Hull, a "time-limited solution" that can at best delay China's acquisition and development of key technologies but will not completely prevent it.³⁷² Second, the end user-focused approach requires extensive resources to track a proliferation of new firms acting on behalf of the PLA, and data on ownership and transactions to identify these firms may be inaccurate or impossible to obtain. Third, for many technologies, the United States does not have sufficient control over the supply chain to introduce effective controls unilaterally. Fourth, multilateral coordination is difficult, as the existing regimes focus on nonproliferation rather than constraining transfer of dual-use technology and require consensus of all members. Each of these challenges is discussed in further detail below.

- *Export controls are a time-limited and often reactive solution:* As Giovanna Cinelli, fellow at the National Security Institute at George Mason University Antonin Scalia Law School, explained in testimony before the Commission in 2021, the U.S. government has shifted from a "deny and delay" approach that sought to prevent potential adversaries from obtaining U.S. technology to a "run faster" approach.³⁷³ The latter assumes the United

* BIS granted South Korean chipmakers SK Hynix and Samsung, both of which have foundries in China, a one-year reprieve from the October 7 restrictions through a temporary general license. Erika Na, "South Korea Caught in the Middle of U.S.-China Chip War, but American Export Control Requests Unlikely," *South China Morning Post*, November 14, 2022.

† Although Japan and the Netherlands have broadly agreed to cooperate with the United States on imposing controls on exporting chips, equipment, and software to China, the countries have not agreed to apply a key provision of the U.S. restrictions to their own citizens: U.S. restrictions prohibit U.S. persons from aiding or providing knowhow to facilitate China's development of advanced semiconductors without a license. Toby Sterling, "Dutch Curb Chip Equipment Exports, Drawing Chinese Ire," *Reuters*, June 30, 2023.

States can allow a certain degree of transfer because U.S. industry will maintain several generations' lead in development. However, the increasingly global nature of R&D and production networks has shortened or altogether dissolved U.S. industry's lead in many technology areas. Additionally, U.S. export controls often react after a concerning transfer has occurred.³⁷⁴ Even when the U.S. government takes a proactive approach to identifying technologies with security implications, Chinese industry may maneuver to stockpile vital components or otherwise evade controls. As noted above, sanctioned Chinese voice recognition firm iFlytek has worked around the controls to rent cloud computing time on servers powered by chips from NVIDIA.³⁷⁵

- *Corporate shell games, poor data visibility, and capacity constraints make end user-based controls less effective:* Restricted end users can evade controls by acquiring items through intermediaries, whether independent resellers or shell companies connected to the restricted entities.³⁷⁶ For tracking exports to China in particular, this has created a substantial administrative burden and vast expansion of the Entity List to include problematic affiliates, especially as BIS often relies on time-intensive manual inputs to update the list.³⁷⁷ The Entity List includes numerous firms and institutes associated with the major state-owned defense groups, such as Aviation Industry Corporation of China (AVIC) and China Electronics Technology Company (CETC).³⁷⁸ Tracing connections between military end users and seemingly civilian affiliates can be especially challenging in China and other jurisdictions, where obtaining information is difficult.³⁷⁹ The Chinese government's recent restrictions on foreign access to domestic corporate registry databases and crack-down on due diligence firms compounds this challenge (for more on China's efforts to limit data access, see Chapter 1, Section 1, "U.S.-China Bilateral and China's External Economic and Trade Relations"). Last, but not least, BIS faces capacity constraints in enforcement. Of the 41,446 licenses it issued in fiscal year 2021, only 1,030 received end use checks.³⁸⁰
- *Unilateral controls are ineffective in many technologies:* The example of the October 7 restrictions on semiconductors demonstrates the difficulty of inhibiting China's ability to acquire and develop a discreet technology in a relatively straightforward case: the U.S. government was able to impose controls viewed as effective, at least in the short term, with cooperation from the governments of the Netherlands and Japan and compliance with U.S. foreign direct product rules from Taiwan and South Korean fabrication plants.³⁸¹ Coordinating controls with allies and partners may not always be as straightforward, and for many mature technologies and their supply chains, effectively slowing China's acquisition could require policy alignment between a broader group of countries.³⁸² For emerging technologies, coordination challenges become even more complex, as it is not yet clear how related industries will evolve as commercial and potential defense applications develop, which countries possess the greatest capabilities or chokepoints in the technologies, and at what stage of technological maturity controls should be

imposed.³⁸³ In a nascent technology, such as quantum computing, for instance, imposing restrictions may undermine promising research that could lead to breakthroughs in developing the technology.*³⁸⁴ Even for technologies in which the United States retains a decisive lead and control over the related supply chain, controls can put stress on U.S. firms and their suppliers.

- *Multilateral coordination is difficult:* As Martijn Rasser, managing director at Dutch due diligence firm Datenna, Inc., described in testimony before the Commission, “The fundamental hurdle to crafting more aligned and effective export control policies among the leading techno-democracies remains diverging views on the nature of the China challenge.”³⁸⁵ The four current multilateral regimes are consensus based, constraining their ability to implement new controls if one member dissents, and Russia is in three out of four (see Table 1 below).³⁸⁶ Additionally, the current regimes have limited mandates, so they are constrained in responding to emerging challenges, including supply chain resiliency and China and Russia’s MCF policies.³⁸⁷ Additional multilateral groupings like the G7 and Organization for Economic Cooperation and Development tend to have too broad of mandates and membership to align on controls.³⁸⁸ Emerging plurilateral groupings like the U.S.-EU Trade and Technology Council have made progress in key areas, such as coordinating on evasion and diversion efforts in exports to Russia and Iran, but their remit is far from sufficient to encompass the breadth of novel and emerging technologies China seeks to acquire from participating countries.³⁸⁹ Moreover, a proliferation of contending plurilateral groups could create additional administrative and coordination challenges for U.S. government and business.³⁹⁰

Table 1: Overview of Multilateral Export Control Regimes

Regime	Purpose, Membership, and Controlled Items
Nuclear Suppliers Group (NSG)	Founded in 1974 in response to India’s first nuclear test, the NSG consists of 48 participating governments, including nuclear supplier states and nonnuclear weapons states. The NSG has two lists: Part 1 covers nuclear materials, facilities, and equipment for nuclear reactors; and Part 2 includes technology, equipment, and components with dual-use applications in nuclear and nonnuclear industries.
Australia Group	Formed in 1985 in response to concerns about the spread of chemical and biological weapons, the Australia Group includes 43 chemical and biological exporters. It controls exports of dual-use items, including chemicals, toxins, and biological agents that could be used to develop chemical or biological weapons.

*Quantum computing is a subfield of quantum information science. Currently, within quantum information science, some export controls are only imposed on quantum sensing, which is more mature and has clear defense applications, such as detecting stealth technologies. Martijn Rasser, written testimony for the U.S.-China Economic and Security Review Commission, *Hearing on China’s Pursuit of Defense Technologies: Implications for U.S. and Multilateral Export Control and Investment Screening Regimes*, April 13, 2023, 5.

Table 1: Overview of Multilateral Export Control Regimes—Continued

Regime	Purpose, Membership, and Controlled Items
Missile Technology Control Regime (MTCR)	The MTCR aims to limit the proliferation of missiles, rocket systems, and related technologies. Founded in 1987, it counts 35 members who control export of items that could contribute to missile systems capable of delivering nuclear, chemical, and biological payloads.
The Wassenaar Arrangement	Founded in 1996 to succeed the Coordinating Committee for Multilateral Export Controls (COCOM),* the Wassenaar Arrangement is more general purpose than the other regimes detailed above. It seeks to promote transparency and responsibility in the transfer of conventional arms and dual-use technologies. The arrangement comprises 42 participating arms exporters and technology suppliers and controls a broad range of conventional arms and dual-use items, including electronics, software, telecommunications equipment, and sensors.

Source: Paul Kerr and Christopher Casey, “The U.S. Export Control System and the Export Control Reform Act of 2018,” *Congressional Research Service* R46814, June 7, 2021, 17.

Progress and Limits in Investment Screening

With the passage of the Foreign Investment Risk Review Modernization Act (FIRRMA) in 2018, the United States has a well-established legal framework to screen inbound foreign investments for national security risks, including targeted Chinese investment and acquisitions designed to appropriate U.S. innovation.³⁹¹ FIRRMA brought significant reforms to the Committee on Foreign Investment in United States (CFIUS), including expanding its jurisdiction to encompass noncontrolling investments and greenfield real estate transactions.³⁹² FIRRMA also introduced mandatory notifications for certain transactions involving critical technology and facilitated international cooperation.³⁹³

In testimony before the Commission, Emily Kilcrease, senior fellow and director of the Center for a New American Security’s Energy, Economics, and Security Program, noted that CFIUS is facing capacity constraints in fully utilizing its expanded jurisdiction. Additionally, inbound investment review has sometimes struggled to articulate risks associated with emerging technologies, as their applications are not yet fully understood.³⁹⁴ CFIUS has traditionally defined critical technologies through reference to export control authorities rather than developing a separate list of sensitive technologies.³⁹⁵ In other words, it looked to technologies already subject to export controls, such as those on the Commerce Control List or U.S. Munitions List. These lists focus more narrowly on potential adversaries’ acquisition of specific capabilities, but they exclude other questions relevant to national security that may merit consideration for an investment rather than simply the purchase of an export, such as the implications of China gaining significant market share in an emerging technology or supply chain control over a legacy technology.³⁹⁶ Additional-

*COCOM was established in the years following World War II to restrict arms exports to the Council for Mutual Economic Assistance led by the Soviet Union. It was implemented in the United States via the Arms Export Control Act, which tasked the State Department with regulatory supervision of the International Traffic in Arms Regulations (ITAR).

ly, while CFIUS has the authority to review any covered transaction, its authority to review noncontrolling investments is limited to those engaged in critical technologies already encompassed by U.S. export controls, certain infrastructure, or processing data of U.S. citizens.³⁹⁷ Additionally, new FIRRMA authorities mandate notification of transactions in critical technologies, so CFIUS may not have visibility into transactions with potential national security implications that are not captured under existing export control categories.³⁹⁸

Scoping and Objectives for Outbound Investment Screening

An outbound investment screening mechanism could inhibit the flow of U.S. capital, technology, and knowhow to potential adversaries and build on and potentially mirror inbound investment restrictions that prevent foreign companies from obtaining specific capabilities through U.S. acquisitions. Such a mechanism could also complement export controls, which prevent the transfer of technology to potential adversaries but not its development overseas. Various proposals for restricting outbound investment frequently focus on three main areas:

1. *Technology development*, particularly in emerging fields through venture capital and private equity investments as well as corporate foreign direct investment and joint ventures that typically include transfer of IP and knowhow;
2. *Offshoring and supply chain development concerns*, including risks that the United States does not maintain sufficient domestic capacity in critical sectors to the economy beyond those required for ensuring technological competitiveness (e.g., the COVID-19 pandemic revealed U.S. dependence on foreign sources of personal protective equipment); and
3. *Financial flows*, also including venture capital, private equity, and potentially portfolio investments that fund activities and entities acting contrary to U.S. interests and values.*

Proponents of an outbound investment screening mechanism argue that there are clearly outbound capital flows that advance potential adversaries' technological capabilities, and the U.S. government should be able to track and block such investments. Foremost, capital and technology flows are often accompanied by technical expertise, managerial acumen, and business networks to support the investment target's development—and U.S. investors are incentivized to leverage all tools at their disposal to guarantee the success of their overseas investments. These intangible benefits of investment help foreign firms build operational capabilities, such as how to run advanced manufacturing processes, that current controls

*Such restrictions are imposed by the investment prohibitions on publicly traded securities of roughly 60 Chinese defense contractors, surveillance technology companies, and their affiliates under the June 2021 Executive Order 14062. The EO replaced EO 13059 introduced by the Trump Administration on a similar set of companies in November 2020. EO 13059 faced legal challenges from firms on the list successfully obtaining preliminary injunctions against the EO's enforcement under the Administration Procedure Act, described in the second footnote on the next page. Executive Office of the President, "Addressing the Threat from Securities Investments that Finance Certain Companies of the People's Republic of China," *Federal Register* 86:107 (June 7, 2021).

may be insufficient to target* and into which the U.S. government currently has limited visibility.³⁹⁹ Advocates for outbound screening argue that the potential difficulty in establishing a regime is not a compelling reason not to try, and moreover the difficulty may be overstated. Many have urged a narrow scope, either indefinitely or as a first step, suggesting that outbound investment screening will be most effective if it examines technology chokepoints in supply chain networks where U.S. firms currently have the advantage.⁴⁰⁰

Skeptics of outbound investment screening argue that any regime is likely to cause more harm than good and that modifications to existing structures like CFIUS can address many concerns. A primary challenge of developing an outbound screening mechanism is the legal complexity of defining its authorities and the potential enforcement difficulties on transactions outside U.S. jurisdiction. In contrast with existing restrictions on investing in Chinese companies with military ties, which rest on the International Emergency Economic Powers Act (IEEPA) authorities,[†] the potential scope of a completely new outbound investment screening mechanism may be vague and abstract. The mechanism's notifications could require extensive legal review by private sector firms, and its determinations may be subject to legal challenges requiring additional government resources to address.[‡]

From an enforcement perspective, limiting outbound flows is also much more difficult than controlling market access. U.S. multinationals could decide to route prohibited investment through a third country, for instance. Additionally, China may block attempts by the U.S. government to obtain information on a China-based investment target of a U.S. outbound transaction. By contrast, the U.S. government can more easily compel a U.S.-based acquisition target to provide CFIUS with sensitive nonpublic information to consider national security risk.⁴⁰¹ Given the challenges, detrac-

*There are some avenues to target intangibles. Aside from licensing requirements, the EAR prohibits U.S. persons from knowingly providing "support," broadly defined, for the development or production of missiles, nuclear weapons, chemical, and biological weapons, as well as foreign maritime nuclear projects. Additionally, BIS also has the authority to inform U.S. persons that their activities could support these end uses and impose a licensing requirement on the activities. The October 7 restrictions use this authority to prevent U.S. persons from supporting advanced semiconductor development in China. Thomas J. McCarthy et al., "International Trade Alert: BIS Imposes New Controls to Limit the Development and Production of Advanced Computing and Semiconductor Capabilities in China," *Akin Gump*, October 27, 2022, 4.

†IEEPA grants the president sweeping authority to "nullify, void, prevent, or prohibit" transactions in response to "any unusual and extraordinary threat... to the national security, foreign policy, or economy of the United States." Importantly, the Supreme Court has held that the president is not a U.S. government agency under the Administrative Procedure Act (see next footnote), creating a very high threshold for challenging EOs that invoke IEEPA authorities. Jared Cole and Daniel T. Shed, "Administrative Law Primer: Statutory Definitions of 'Agency' and Characteristics of Agency Independence," *Congressional Research Service* R43562, May 22, 2014, 11.

‡For instance, Chinese smartphone maker Xiaomi and big data processor Luoking both successfully challenged prohibitions on U.S. investment in their publicly traded securities. The prohibitions relied on IEEPA authority invoked under EO 13059, which restricted investment in Chinese companies designated as contributing to China's military by DOD. The U.S. District Court for the District of Columbia granted Xiaomi and Luoking preliminary injunctions in March and May 2021, respectively, arguing that the designation by DOD failed the "arbitrary and capricious test" established by the Administration Procedure Act (APA), Section 706(2)(A) of the APA indicates courts reviewing regulation may overturn agency actions if they find factual assertions or underlying rationale "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." United States District Court for the District of Columbia, *Xiaomi Corporation v. Department of Defense*, et al., *Memorandum Opinion: Granting Plaintiffs' Motion for Preliminary Injunction; Granting Plaintiffs' Motion for Leave to File Supplemental Declaration*, March 12, 2021, 7–9.

tors fear that a poorly coordinated outbound screening process could hamper U.S. competitiveness by encouraging foreign start-ups to seek capital from other countries and encouraging investors to move to less restrictive countries. Former CFIUS Lead Counsel Ben Joseloff has also observed that several proposals cut from FIRRMA would have given CFIUS more expansive authority to review select outbound transactions and that revisiting these proposals would be less disruptive than establishing a completely new process.⁴⁰²

Biden Administration Executive Order Takes First Step in Narrowly Scoped Screening Mechanism

On August 9, 2023, the Biden Administration released an executive order (EO) requiring notification of, and in some cases prohibiting, U.S. persons making certain investments in China related to semiconductors and microelectronics, quantum information technologies, and AI systems (see Table 2). The EO on “Addressing United States Investments in Certain National Security Technologies and Products in Countries of Concern” directs the secretary of the treasury to develop regulations identifying categories of: (1) notifiable transactions that may contribute to a national security threat; and (2) prohibited transactions that “pose a particularly acute national security threat because of their potential to significantly advance the military, intelligence, surveillance, or cyber-enabled capabilities of countries of concern.”⁴⁰³ The EO also requires the U.S. Department of the Treasury to evaluate whether to amend the investment screening program and to submit a report on its effectiveness after one year. It invokes the president’s authority to declare a national emergency under the International Emergency Economic Powers Act (IEEPA) and the National Emergencies Act and allows for Treasury to submit reports to Congress on the status of the emergency declared in the order.⁴⁰⁴

Concurrent with the EO’s release, Treasury issued an advanced notice of proposed rulemaking (ANPRM) seeking public comment on implementation of the EO, particularly on definitions for “U.S. persons,” “covered foreign persons,” and “covered transactions.”⁴⁰⁵ The questions in the ANPRM indicate that implementation of the EO is in its nascent stages but that Treasury and relevant agencies are focused on closing potential loopholes and could interpret the scope of key definitions quite broadly.⁴⁰⁶ For instance, the ANPRM indicates the rules will also apply to indirect investments to prevent U.S. persons from purposely designing transactions to circumvent investment prohibitions or notification requirements.⁴⁰⁷ For the present, the ANPRM proposes using definitions taken from related extant regulation, such as the definition of “U.S. person” from IEEPA and the definition of “covered transaction” and “foreign person” from CFIUS.⁴⁰⁸ Treasury has signaled that its focus for “covered foreign persons” is to capture parent

⁴⁰²The EO indicates that China’s advances in “sensitive technologies and products critical for the military, intelligence, surveillance, or cyber-enabled capabilities” constitute a grave threat to U.S. national security and that China’s MCF strategy facilitates U.S. outbound investments in China enabling these advances. White House, Executive Order 14105 of August 9, 2023, “Addressing United States Investments in Certain National Security Technologies and Products in Countries of Concern,” *Federal Register* 88:154 (August 11, 2023).

companies and their subsidiaries, where a broad interpretation might include a joint venture with a non-Chinese company employing Chinese nationals.⁴⁰⁹

Table 2: Technology Areas Potentially Prohibited for Investment or Requiring Notification

Technology Category	Potentially Prohibited	Requires Notification Only
Semiconductors and microelectronics	Investments in developing or producing electronic design automation software; developing or producing front-end semiconductor manufacturing equipment for volume chip fabrication; designing chips that exceed certain thresholds subject to export controls; fabricating certain advanced chips;* packaging chips that support three-dimensional integration; and installing chips for or selling them to customers likely using them for supercomputers.	All other investments that involve chip design, fabrication, and packaging.
Quantum information technologies	Investments in producing quantum computers and components; developing quantum sensing platforms designed exclusively for military end use, intelligence, or mass surveillance; and developing quantum networks or communication systems designed exclusively for secure communications.	Not applicable
AI systems	Investments in developing software that uses AI and is designed exclusively for (though the definition may expand to “primarily for”) military end use, government intelligence, and mass surveillance.	Investments in developing software that uses AI designed exclusively for (though the definition may expand to “primarily for”) cybersecurity, digital forensics, penetration testing, controlling robotic systems, covert listening devices, location tracking, and facial recognition.

Note: The thresholds for advanced chips are the same as those defined in October 7 restrictions.

Source: Adapted from Reva Goujon, Charlie Vest, and Thilo Hanemann, “Big Strides in a Small Yard: The U.S. Outbound Investment Screening Regime,” *Rhodium Group*, August 11, 2023, 4–5.

Treasury officials have described the EO as taking a “small yard, high fence” approach, and notably the initial scope excludes many technology areas China has prioritized for development in industrial policy documents that may have national security implications.⁴¹⁰ For instance, China’s 14th Five-Year Plan emphasizes innovation in space and aviation, airplane engines and gas turbines, ships and maritime equipment, advanced energy equipment, high-end new materials, high-end medical equipment and innovative drugs, the

Beidou navigation satellite system,* major technical equipment, and smart manufacturing and robotics.⁴¹¹ These technology areas are largely consistent with the areas prioritized in *Made in China 2025*, a 2015 blueprint to gain dominance in high-tech industries.⁴¹² In an analysis of the implications of the EO, researchers at Rhodium Group note that U.S. investors in China have already started to avoid semiconductors and quantum information sciences, as these are under scrutiny for national security concerns.⁴¹³ However, biotechnology startups have been a key focus of investors for the past five years.⁴¹⁴

Implications for the United States

The PLA has long feared technological surprise and is now trying to create that danger for the United States.⁴¹⁵ As Ms. Kania points out, the United States' historical advantage in many decisive military technologies "is neither assured, nor unassailable."⁴¹⁶ China's pursuit of advanced defense technologies therefore has several implications for the United States.

First, technological breakthroughs by the PLA in certain warfighting domains could change the balance of power in the Asia Pacific region and challenge strategic stability. China's dedicated efforts to improve its ASW capabilities could ultimately enable the PLA to detect U.S. submarines and prevent them from operating near China during a war over Taiwan, undermining the deterrent effect of U.S. dominance in this domain. More broadly, China's pursuit of a space-based nuclear weapons capability threatens to undermine strategic stability by creating uncertainty and depriving the United States of early warning against an incoming nuclear attack. Future Chinese gains in AI could erase the United States' historic advantages in information technology and make U.S. warfighting systems and processes in all applications more vulnerable to attack. For example, the PLA's significant investments in autonomous undersea and surface vehicles, as well as AI-enabled ISR systems, may someday enable it to limit U.S. Navy and allied access to the undersea space between the first and second island chains. More broadly, the application of AI to information and electronic warfare, such as through cyberattacks, data manipulation, and electromagnetic spectrum interference, could compromise U.S. situational awareness and command and control systems. Some of these capabilities, even if developed with the intention of enabling or protecting a PLA force invading Taiwan, clearly have global applications.

Second, China's MCF strategy accelerates Chinese defense innovation, contributes to the development of emerging capabilities, and may confer operational advantages in wartime.⁴¹⁷ MCF has the potential to lower costs and minimize redundant development efforts in the PLA weapons development process, conserving resources while allowing the more expeditious deployment of new weapons systems that could target U.S. forces.⁴¹⁸ By providing a civilian substitute for military functions, such as logistics, MCF could also obscure early indicators of a potential attack on Taiwan related to military mo-

*Beidou is China's global navigation satellite system and has achieved global coverage as of 2020 with 35 satellites worldwide. Beidou is operated by the China National Space Administration. GPS, "Other Global Navigation Satellite Systems."

bilization and contribute to the sustainment of PLA equipment or personnel amid a protracted conflict.⁴¹⁹

Third, China's efforts to become more innovative in defense technology pose a distinct challenge to the United States, even if China does not close the gap in overall innovativeness. Because of the Party-state's role in steering R&D activity toward policy goals, much more of R&D conducted in China may be geared toward establishing specific capabilities for defense applications than would be the case in another country.⁴²⁰ Beijing is prioritizing reducing foreign dependence in areas it has identified as "chokepoint" technologies, reducing the number of avenues through which the United States can constrain the growth of its military-industrial complex. Despite China's efforts to achieve original innovation, it also continues to aggressively acquire technology from foreign countries through licit and illicit means in an effort to narrow the capability gap with the United States.

Lastly, despite increased export controls against China and strengthened investment screening, transfer of technology, capital, and expertise to China continues to undermine U.S. national security, economic competitiveness, and values. The evolving nature of technology heightens this challenge, as export controls increasingly target digital goods, such as software, and the cycle between R&D versus commercial deployment becomes shorter and blurrier between general purpose applications of technologies like AI and their military use. Moreover, the United States is unable to effectively restrict China's access to many technologies through unilateral controls. China's commercial environment poses additional challenges for the end user-based controls the United States has used extensively toward Chinese entities for the past five years. End-user and end-use verification is particularly difficult in a data-poor environment like China in which the government restricts access to information that may be used to implement economic restrictions and penalizes due diligence efforts.

Appendix: Overview of U.S. Export Controls

The United States controls the export, reexport, and transfer of U.S.-produced hardware, software, commodities, and services for a number of reasons, including to fulfill national security, economic competitiveness, and foreign policy objectives. Foremost, U.S. export controls seek to prevent potential adversaries, including other countries, rogue states, and terrorists, from obtaining capabilities that could threaten U.S. interests. China's technological development and mercantilist trade practices have also driven increased consideration of more expansive export controls to shore up U.S. economic competitiveness or inhibit China's economic and technological development. Additionally, the United States has placed a number of restrictions on exports that could aid in human rights abuses, including exports to numerous Chinese surveillance technology firms facilitating repression in the Xinjiang Uyghur Autonomous Region.

U.S. export controls are primarily managed and enforced by two key U.S. government agencies, BIS within the Department of Commerce and the Directorate of Defense Trade Controls (DDTC) within the U.S. Department of State (see Table 3). Commerce is authorized to regulate and license exports of dual-use goods and technologies, or products and technologies that have both civilian and military applications, as well as some defense articles, under the EAR (see Figure 1). The State Department is authorized to regulate and license exports of munitions under the International Traffic in Arms Regulation (ITAR). Additionally, the U.S. Department of Energy and independent Nuclear Regulatory Commission are authorized to regulate and license various exports relating to nuclear technology. Each of these agencies is responsible for administrative enforcement, while Treasury administers restrictions on exports based on U.S. sanctions,* and criminal penalties for export control violations are issued by units within the U.S. Department of Homeland Security and the U.S. Department of Justice.

Table 3: Overview of U.S. Export Control Authorities and Administration

Characteristic	Dual-Use	Munitions	Nuclear
Legislative Authority	Export Control Reform Act of 2018 (ECRA); International Emergency Economic Powers Act of 1977 (IEEPA)	Arms Export Control Act of 1968, 1976 (AECA)	Atomic Energy Act of 1954

*The United States restricts exports to countries on which it imposes economic sanctions, such as Cuba and Iran.

Table 3: Overview of U.S. Export Control Authorities and Administration—Continued

Characteristic	Dual-Use	Munitions	Nuclear
Agency of Jurisdiction	Bureau of Industry and Security (BIS) (Commerce)	Directorate of Defense Trade Controls (DDTC) (State)	<ul style="list-style-type: none"> • Nuclear Regulatory Commission (NRC) (facilities and material) • Department of Energy (DOE) (technology) • BIS (“outside the core” civilian power plant equipment) • DDTC (nuclear items in defense articles)
Implementing Regulations	Export Administration Regulations (EAR) (15 C.F.R. 730 et seq)	International Traffic in Arms Regulations (ITAR) (22 C.F.R. 120 et seq)	<ul style="list-style-type: none"> • 10 C.F.R. 110—Export and Import of Nuclear Material and Equipment (NRC) • 10 C.F.R. 810— Assistance to Foreign Atomic Energy Activities (DOE)
Control List	Commerce Control List (CCL)	Munitions List (USML)	<ul style="list-style-type: none"> • List of Nuclear Facilities and Equipment; List of Nuclear Materials (NRC) • Nuclear Referral List (CCL) • USML • Activities Requiring Specific Authorization (DOE)
Relation to Multilateral Controls (see Table 2)	<ul style="list-style-type: none"> • Wassenaar Arrangement (dual use) • Missile Technology Control Regime (MTCR) • Australia Group (AG) • Nuclear Suppliers Group 	<ul style="list-style-type: none"> • Wassenaar Arrangement (munitions) • MTCR • AG 	Nuclear Suppliers Group
Licensing Policy	Based on item, country, or both. Antiterrorism controls proscribe exports to four countries for nearly all CCL listings	Most Munitions List items require licenses; 20 proscribed countries	<ul style="list-style-type: none"> • General/Specific Licenses (NRC) • General/Specific Authorizations (DOE)

Source: Paul Kerr and Christopher Casey, “The U.S. Export Control System and the Export Control Reform Act of 2018,” *Congressional Research Service* R46814, June 7, 2021, 39.

Figure 1: Commerce Control List (CCL) Categories and Function Groups

CCL Categories		CCL Functional Groups	
1	Nuclear materials, facilities, and equipment	A	Equipment, assemblies, and components
2	Materials, organisms, microorganisms, and toxins	B	Test, inspection, and production equipment
3	Materials processing	C	Materials
4	Electronics	D	Software
5 Part 1	Computers	E	Technology
5 Part 2	Telecommunications and information security		
6	Lasers and sensors		
7	Navigation and avionics		
8	Marine		
9	Propulsion systems, space vehicles, and related equipment		

Source: Paul Kerr and Christopher Casey, “The U.S. Export Control System and the Export Control Reform Act of 2018,” *Congressional Research Service* R46814, June 7, 2021, 7.

Deemed Exports Regulate Transfer of Technology within the United States

Deemed exports refer to the release of controlled technology or technical data to a foreign national within the United States. They are considered “deemed” because the transfers are treated as if they were actual exports to the foreign national’s home country and are subject to the same regulations and licensing requirements as traditional exports. Exporters, whether employer, research institutions, or other organizations, are responsible for ensuring deemed exports are appropriately controlled and licensed. For example, if a U.S. company employs foreign nationals and these foreign employees gain access to controlled technology or technical data, it is considered a “deemed export” of that technology to the foreign employees’ home countries. Similarly, if a U.S. university allows foreign students or researchers access to controlled technology or technical data during their studies or research, it is also deemed as an export of that technology to the foreign students’ home countries. In both these situations, release of controlled technology to foreign persons, even within the United States, may require a license from BIS, DDTC, or one of the nuclear regulatory agencies, depending on the specific technology involved and the nationality of the foreign person.

Implementing Export Controls

The U.S. government’s process for enforcing export controls and ensuring compliance can be divided into three stages: monitoring and enforcement, auditing and assessing compliance, and penalizing noncompliance.

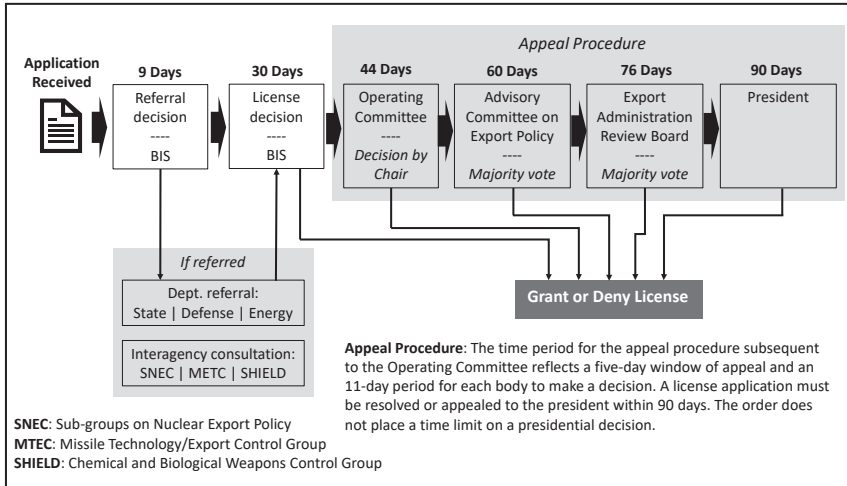
1. *Monitoring and Enforcement:* BIS and DDTC continuously monitor export activities to prevent unauthorized exports of controlled items or technology. They conduct investigations

and cooperate with other government agencies to identify potential violations. For instance, BIS might investigate an aerospace company suspected of exporting restricted technology to a blacklisted entity. The investigation could include reviewing export documentation, interviewing employees, and examining the company's compliance practices.

2. *Auditing and Assessing Compliance:* The government may audit exporters to assess their compliance with export control regulations. They may also perform compliance checks at ports of export to verify that shipments comply with the applicable licenses and regulations. For example, DDTC might conduct an audit of a defense contractor to assess the company's compliance with ITAR requirements. The audit could focus on how the company handles technical data and ensuring proper controls are in place for foreign national employees.
3. *Penalizing Noncompliance:* If an exporter is found to have violated export control regulations, the government can impose penalties, including fines, denial of export privileges, and criminal prosecution.

From the exporter's perspective, complying with export controls often involves five steps:

1. *Determining Export Control Classification:* Exporters must first determine the Export Control Classification Number (ECCN) or the appropriate regulatory control for their product or technology. This involves identifying whether the item is listed on the Commerce Control List (CCL) managed by BIS or the United States Munitions List (USML) overseen by the DDTC in the State Department. For example, encryption software designed for commercial use falls under the Commerce Control List, while military-grade night vision goggles are controlled under the U.S. Munitions List. Exporters may seek guidance from BIS or DDTC if they are unsure about the classification or licensing requirements for an item (see Figure 2).
2. *Determining License Requirements:* If the item or technology is listed on the CCL or USML, it may require an export license from the respective agency (BIS or DDTC) before being sent to a foreign destination or shared with foreign nationals. Exporters can consult the ECCN or USML entry to check if a license is needed or use the "Commerce Country Chart" to determine license requirements based on the destination country. For example, if a U.S. company wants to export advanced semiconductor manufacturing equipment (ECCN 3B001) equipment, which is on the CCL, to China, the exporter must obtain a license from BIS before shipping it.
3. *Applying for a License:* The application with BIS or DDTC typically requires detailed information about the item, its intended use, end user, and the destination country. For example, a commercial space company exporting satellite communication systems to a country subject to export restrictions would need to submit a detailed application to BIS, including information about the end user and the system's intended use (see Figure 2).

Figure 2: The Export License Application Process for BIS

Source: Paul Kerr and Christopher Casey, "The U.S. Export Control System and the Export Control Reform Act of 2018," *Congressional Research Service* R46814, June 7, 2021, 10.

4. *Restricted Party Screening:* Exporters must conduct "restricted party screening" to ensure they are not transacting with individuals, companies, or organizations that are prohibited from receiving U.S. exports due to national security concerns or other restrictions. For example, before exporting sensitive electronics components, an exporter must check whether the foreign customer or recipient is listed on the Denied Persons List maintained by BIS.
5. *Compliance Management:* Exporters must maintain records, monitor changes in controls, and implement internal compliance programs to ensure ongoing adherence to regulations. A robust compliance program often requires regular training for employees, recordkeeping of all export transactions, and internal audits to ensure adherence to export control regulations.

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CHAPTER 5

CHANGING RELATIONS WITH EUROPE, TAIWAN, AND HONG KONG

SECTION 1: EUROPE-CHINA RELATIONS; CONVERGENCE AND DIVERGENCE IN TRANSATLANTIC COOPERATION

Abstract

Accounting for nearly 25 percent of global gross domestic product (GDP) and 10 percent of the world's population,* Europe has deep economic ties to both China and the United States. Consequently, the continent serves as a locus of geostrategic competition between the United States and China. Europe's approach to China affects the scope and impact of U.S. policies, including those that seek to limit U.S. exposure to and dependence on China, maintain a free and open Indo-Pacific region, and protect the rules-based international order. China views Europe as an important region for supporting its economic rise and other political and geostrategic goals—but also one that is increasingly pushing back against its actions and moving into greater convergence with the United States. China's continued disregard for the rules-based international order, increasingly aggressive economic actions, and support for Russia's unprovoked invasion of Ukraine present direct risks to European economic and security interests. In light of these challenges, the EU and most of its member states are shifting their assessments of China from viewing it primarily as an economic partner to perceiving it increasingly as a multidimensional systemic rival. While these shifts create the potential for greater convergence in U.S. and European approaches to dealing with China, important differences remain. The EU is a collection of 27 member states, and "European" policy toward China is at best viewed as a juxtaposition of EU policy alongside its member states' positions as well as the positions of non-EU European countries. This complexity is a defining feature of European policy, which creates challenges for the United States and

*These statistics are based on the European region, as defined by the UN's regional geoscheme, which had a GDP of \$23.7 trillion accounting for 23.5 percent of global GDP and a population of 735 million accounting for 9.3 percent of global population in 2022. Countries identified as part of this region include: Åland Islands, Albania, Andorra, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czechia, Denmark, Estonia, Faroe Islands, Finland, France, Germany, Gibraltar, Greece, Guernsey, Hungary, Iceland, Ireland, Isle of Man, Italy, Jersey, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Svalbard and Jan Mayen Islands, Sweden, Switzerland, Ukraine, the UK, and Vatican City. United Nations Statistics Division, "Methodology," World Bank, "World Development Indicators," 2022.

may constrain its response to China by limiting the space for viable policy cooperation. The diversity in European approaches also presents China opportunities to undermine EU action through selective engagement with member states. At the same time, many of the EU's trade defense and other economic policies fail to adequately address China's practices and also present challenges for the United States. Taiwan is also a topic of growing importance in Europe; however, European governments and publics have yet to reach conclusions about the threat the Chinese government's aggression toward Taiwan may pose to their interests and how they should respond.

Key Findings

- China's policies present a range of economic and security challenges to the EU and European countries. Unbalanced trade and substantial Chinese infrastructure investment on the continent undermine economic security and leave European countries potentially vulnerable to China's economic coercion. China seeks to interfere and stoke division in the EU and its member states' politics through media influence, disinformation campaigns, subversion of EU institutions, coercion of individual member states and policymakers, and the uneven provision of economic incentives. China also undermines European security by providing political and economic support for Russia.
- The EU and individual European states' strategic assessments of China are rapidly shifting from primarily seeing China as a potential policy partner and geographically distant economic competitor to increasingly seeing it as a systemic rival with an active presence in Europe. This shift is bringing European policy approaches into greater convergence with the United States, particularly as it relates to China's growing economic threat via unfair trade practices and strategically motivated investments in sensitive infrastructure and technologies.
- Diversity in views between and within EU countries makes consensus-building slow and may limit the scope, speed, and depth of fundamental change in the EU's collective policy approach to China. This complexity in European approaches may affect the U.S. response to China and limit the space for viable policy cooperation with the EU.
- Europe is an important locus of geostrategic competition between the United States and China. Like the United States, the EU seeks to bolster its economic resilience and reduce dependence on China. While it is developing some economic tools to mitigate China's unfair trade practices and economic coercion, these tools are often voluntary and narrower in scope than corresponding U.S. mechanisms, limiting the effectiveness of transatlantic coordination. Significant disagreements over economic policy between the EU and the United States, including differences over preferential subsidies, also complicate policy coordination on China.
- Russia's invasion of Ukraine has increased European governments' focus on challenges from China. Beijing's support for Russia throughout the war has highlighted the threat China

poses to European countries across a variety of issue areas, including through its use of disinformation and its willingness to provide diplomatic, economic, and military assistance to other hostile, aggressive powers. It also draws attention to the EU's and its member states' vulnerabilities, such as economic dependency on and supply chain risks from China and the potential economic costs of a conflict in the Taiwan Strait.

- China's leadership perceives increasing challenges to its economic, geostrategic, and political goals in Europe, including increasing economic rivalry with the EU and European economies, greater coordination between the EU and the United States, hardening views of Russia among European governments, and the EU and its member states' intensifying focus on a values-based China policy. Chinese leaders have grown more pessimistic about their ability to prevent further convergence between the United States and its European allies, and they have decided to accept some damage to their relations with the EU and European countries to maintain their strategic partnership with Russia.
- Chinese aggression against Taiwan would have serious economic and strategic consequences for the EU and European countries. Although Taiwan is a topic of growing importance in Europe, European governments and publics have not yet reached definitive conclusions about their interests and possible potential responses to a conflict stemming from Chinese aggression toward Taiwan. Despite deepening ties between Taiwan and Europe and statements from both the EU and individual state governments about their support for stability in the Taiwan Strait, a remaining lack of a coherent European policy toward Taiwan weakens the extent to which these positive steps can contribute to deterrence.

Recommendations

The Commission recommends:

- Congress direct the U.S. Department of Defense to work with European partners to protect the movement of U.S. military equipment, supplies, and personnel from Chinese surveillance via China's National Transportation and Logistics Public Information Platform (LOGINK) and any other logistics platform controlled by, affiliated with, or subject to the jurisdiction of the Chinese Communist Party or the Government of the People's Republic of China or any logistics platform that shares data with such a system. Coordination with European partners should include:
 - Identifying ports in NATO countries that currently utilize or intend to utilize LOGINK or similar systems from China or other countries of concern;
 - Assessing the U.S. military's current and past potential exposure to Chinese surveillance via LOGINK or similar systems and the risks to U.S. interests and national security resulting from such exposure;

- Identifying and assessing the feasibility of adopting alternative shipping routes through ports that do not currently utilize or intend to utilize LOGINK or similar systems, including by identifying any risks to U.S. military programs, activities, and movements that would be created by attempting to avoid exposure to such systems; and
- Implementing joint measures to mitigate the identified risks of exposure to LOGINK and similar systems in European ports.
- Congress direct the Administration to engage in discussion with European allies on plans and preparations to impose economic sanctions on China in the event of a confrontation over Taiwan, an escalation in China's support for Russia, or other contingencies. Congress also direct the Administration to consult with Congress on the progress of these discussions.
- Congress direct the U.S. Trade and Development Agency, the Development Finance Corporation, and the National Institute of Standards and Technology (NIST) to report on how they are incorporating promotion of U.S.-supported technical standards into U.S. funded development projects or technical assistance provided abroad.
- Congress direct the Administration to establish a secure electric vehicle (EV) and new energy vehicle (NEV) supply chain by considering legislation that would foster U.S.-EU-UK coordination on:
 - Raising or maintaining tariffs on Chinese EV, NEV, and related inputs and technology; and
 - Promoting supply chain diversification and resilience in the EV and NEV markets.

Introduction

China's leadership perceives the U.S.-EU partnership as a significant challenge to its strategic objectives in Europe and beyond, and it is campaigning to weaken transatlantic ties and intra-European cohesion. Intensifying competition with the United States specifically and the rules-based international order broadly, Russia's unprovoked invasion of Ukraine, and deepening ties between the United States, the EU, and various European countries have significantly changed the dynamics between China and Europe. Simultaneously, China's increasingly aggressive approach to its economic interactions with the EU and many of its member states has prompted pushback and resistance across the region. As a result, China has shifted from viewing the EU as an independent pole to balance against U.S. objectives to viewing it as part of a hostile "Western" bloc with the United States at its helm.

The EU's strategic assessment of China is quickly evolving as well, shifting from one that views Beijing as an economic "competitor" in open and fair international exchange and attempts to engage China as a policy "partner" on shared global issues to seeing China as a "systemic rival" in opposition to democratic norms and values. This shift is bringing the EU into closer alignment with the United

States, but the transition is not yet complete or guaranteed. For the better part of three decades, the EU and its member states elevated trade and investment considerations over security and values-based concerns, believing that engagement would encourage China to open its markets and increase transparency. The EU's hopes for China, however, have failed to materialize. China's industries have moved up the global value-chain while strategic market access barriers have remained. China has intensified the abuse of its citizens' human rights while providing support to authoritarian leaders who threaten EU security. European countries are now moving to protect themselves from China's expanding influence, while the EU is developing a strategy to "de-risk" its most sensitive economic ties to China. Some of the EU's and its member states' responses to China lack depth and coordination, however. The EU's trade defense tools* and other economic policies often have high thresholds for action, require consensus, or are voluntary, and national governments can choose if and how they implement the guidelines. In addition, these policies take years to craft and are often reduced in scope and magnitude through the EU's consensus-building process. So far, this has resulted in a patchwork of slow-moving and limited initiatives.

The United States, the EU, and individual European countries face similar challenges from China, including bilateral trade deficits, a lack of market reciprocity, widespread theft of intellectual property, uncooperative diplomacy, and the Chinese Communist Party (CCP) leadership's pervasive disinformation campaigns. By coordinating a response to China's rising economic and security threat, as well as pursuing joint U.S.-EU development in critical and emerging technologies like artificial intelligence (AI), EU and U.S. policy toward China will be more effective. Latent tensions in U.S.-EU relations and divergence between EU member countries, however, remain an impediment to effectively coordinating to confront China. Beijing's increasingly aggressive actions toward the EU, as well as the EU and European countries' changing views of China, present a window of opportunity for the United States to expand and strengthen the transatlantic partnership.

This section describes China's objectives in and policies toward the EU and European countries, evaluates the EU's and European countries' perceptions of and responses to China, and provides an assessment of the implications of China's relations with the EU and European countries for the United States. First, the section describes China's approach to Europe, outlines how China's goals in the region have evolved, and discusses China's strategies to attain these goals and the challenges they present. Second, the section outlines the EU's and European countries' approaches to China, focusing on the nature, impact, and limitations of European partners' attempts to de-risk their relations with China. Third, the section provides an overview of European countries' approach to the In-

*The EU describes trade defense policy as a means to protect European production from international trade and market distortions. Specific instruments of this policy include antidumping and antisubsidy duties, the antisubsidies regulation, and the antic coercion instrument. Some of the EU's trade defense policies are analogous in nature to U.S. trade remedies, which also include antidumping and countervailing duties. Andy Bounds, "EU Agrees Trade Defense Tools against China," *Financial Times*, March 28, 2023; Eszter Balázs, "New Trade Defense Tool to Protect EU Foreign Subsidies," *European Parliament*, April 25, 2022; European Commission, "Trade Defense."; United States International Trade Administration, "An Introduction to U.S. Trade Remedies."

do-Pacific region, considering these countries' potential responses to a Taiwan contingency. Fourth, the section discusses the implications of these trends for the United States. This section is based on the Commission's May 2023 fact-finding mission to Europe and its June 2023 hearing titled "Europe, the United States, and Relations with China: Convergence or Divergence?" as well as consultations with experts and open source research and analysis.

China's Approach to Europe

China views Europe not only as an important region for supporting China's economic rise and its political and geostrategic goals but also one fraught with increasing challenges. Andrew Small, senior fellow for the Indo-Pacific Program at the German Marshall Fund, argued in his testimony before the Commission that China "sees [a] combination of Europe's transatlantic ally-oriented security needs, greater anxiety about economic competition, and ... western ideological affinity beginning to converge in ways that are detrimental to its interests."¹ As China has deepened its interaction and integration with the region over the last 20 years, conflicting economic and political interests have become more pronounced.² Over the last few years, China's relations with the EU and individual European countries have become more heavily influenced by relations with the United States and Russia.³ In this environment, China continues to seek economic and political benefits from European countries while discouraging transatlantic cooperation as much as it is able. Meanwhile, China's continued disregard for the rules-based international order, increasingly aggressive economic actions, support for Russia's unjustified war in Ukraine, and other policies present risks to the EU's and European countries' economic and security interests.

China's Major Objectives in Europe

Economically, China seeks to expand trade volume with the EU's single market and its member states' economies as well as to broaden Chinese market access in Europe.⁴ Maintaining and growing access to the EU's market has been particularly important to China as its economy has transitioned into higher-value-added production. China has historically supplied the EU market with inputs and consumer goods, but China's composition of exports to the EU has gradually begun to include higher-value and technologically advanced goods like telecommunications equipment.⁵ In 2000, approximately 23 percent of China's total export value to the EU was generated by high-tech products;* by 2017, this share had increased to 35 percent of total value.† While the total value share of these products has declined slightly since 2017, high-tech goods continue to comprise approximately one-third of China's total export value to the EU.⁶ In fact, in 2022, four of the EU's top five imported goods

*High-tech products were identified using SITC Rev. 4 codes provided by Eurostat, the European Commission's data sharing platform. Products include exports related to aerospace, computer office machines, electronics and telecommunications, pharmaceuticals, scientific instruments, electrical machinery, chemistry, nonelectrical machinery, and armaments. For a full list of products included, please see Annex 5 of Eurostat, "High-Tech Industry and Knowledge-Intensive Services (htec)," January 3, 2020.

†This expansion in share of high-tech goods occurred as China's total export value to Europe increased nine-fold, indicating that Europe's imports of high-tech Chinese goods grew at a faster rate than its imports of Chinese goods overall.

from China were high-tech, including telecommunications equipment, automatic data processing machines, electrical machinery, and electronic components. As China continues to dominate clean technology industries, the EU is likely to be reliant on the export of Chinese products, particularly in electric vehicles (EVs) and other green technologies.⁷ These are two areas in which China tends to excel and where the EU's demand is expected to rise due to the region's "green transition" and the EU's 2035 ban on vehicles with combustion engines that do not run on CO₂-neutral fuel, passed by the European Council in March 2023.⁸

China also seeks to gain access to European technology through targeted acquisitions made in key countries and industries, like German robotics and Dutch semiconductors production equipment.⁹ While Chinese investment flows into the EU have declined from a peak of approximately \$36.9 billion (34.7 billion euro) in 2016 to just \$5.9 billion (5.6 billion euro)* in 2022, the value of Chinese investment into Germany, France, and Hungary has declined less rapidly.[†]¹⁰ Within Germany and France, in particular, Chinese companies have sought to gain access to Europe's most sensitive technologies. In 2016, the nonstate Chinese firm Midea purchased the German robotics firm Kuka. Later that year, China's state-owned Fujian Grand Chip Investment Fund was forced to drop its bid for the German chip equipment manufacturer Aixtron following objections by the Obama Administration.[‡]¹¹ These events catalyzed support for a unified EU approach to foreign investment screening and eventually led to the creation of such a mechanism in 2020.

Although heightened investment screening appears to have contributed to reduced Chinese investment in Europe, in some cases Chinese companies appear to be shifting acquisitions from the United States before European legislatures strengthen screening regimes.¹² In January 2019, the Chinese e-commerce giant Alibaba acquired Data Artisans, a Berlin-based startup that provides distributed systems and large-scale data streaming services for enterprises, for \$103 million (90 million euro). This purchase was made three months before the EU adopted its Foreign Investment Screening Regulation that set minimum requirements for EU member states developing their own foreign direct investment (FDI) screening mechanisms§ and more than one year before Germany approved an expansion to its investment screening laws.¶¹³ More recently, the private firm Nexperia—which is headquartered in the Netherlands

*This section uses the following exchange rates throughout: In 2022, \$1 U.S. dollar = 0.95 euro; In 2019, \$1 U.S. dollar = 0.89 euro; In 2017, \$1 U.S. dollar = 0.89 euro; In 2016, \$1 U.S. dollar = 0.94 euro; In 2012, \$1 U.S. dollar = 0.78 euro.

†Hungary's economy is less than one-tenth the size of the UK, French, and German economies. Nonetheless, it is an attractive location for Chinese investment due to Hungary's deepening economic and political connections to China as well as its support for China in EU policymaking. World Bank, "World Development Indicators - GDP (current US\$)."; Tamá Matura, "Chinese Influence in Hungary," *Center for European Policy Analysis*, August 18, 2022.

‡The deal collapsed after the Obama Administration stopped China's Fujian Grand Chip Investment Fund from purchasing Aixtron's U.S. subsidiary based on an assessment by the Committee on Foreign Investment in the United States (CFIUS).

§The EU's investment screening regulation is voluntary, though strongly encouraged, and EU member states may determine if and how they choose to implement these regulations.

¶The EU's Regulation on Foreign Direct Investment Screening was adopted in March 2019 and entered into force in October 2020. For more information on this mechanism, see the subsection titled "Europe Seeks to Reduce Economic Vulnerability and Increase Economic Resilience" in this text. Jay Modrall, "EU Regulation on Foreign Direct Investment Screening," *Norton Rose Fulbright*, January 2022.

but owned by the nonstate Chinese firm Wingtech—purchased the Dutch semiconductor startup Nowi in November 2022. Shortly following the purchase, the government of the Netherlands announced a retroactive review of the acquisition under a new investment screening law that took effect in June 2023.*¹⁴

From a geostrategic standpoint, China's leaders have long sought to encourage European governments to act in ways that benefit China in its competition with the United States. In his testimony before the Commission, Mr. Small argued that 20 years ago, China sought to encourage Europe's evolution into a neutral pole that could serve as a counterweight to the United States in the international system.¹⁵ This objective was expressed in three high-level policy papers published by China's government in 2003, 2014, and 2018 that highlight the EU's value to China as a partner in promoting the "democratization of international relations" and in furthering the evolution of a "multipolar" system.¹⁶ In the past few years, Chinese diplomats have increasingly encouraged the EU and its member states to interpret their own policy of "strategic autonomy"† to mean distancing themselves from policies that challenge China's interests and refraining from coordination with the United States over such policies.¹⁷ In his April 2023 meeting with French President Emmanuel Macron and President of the European Commission Ursula von der Leyen in Beijing, General Secretary of the CCP Xi Jinping reportedly expressed to his guests China's "hope [that] the European side [would] form a more independent and objective understanding of China," strongly suggesting they adopt positions further from those of the United States.¹⁸

China's leadership seeks to influence European policies on issues it considers sensitive, such as Taiwan, Hong Kong, Tibet, and human rights concerns more broadly.¹⁹ On Taiwan, for example, China's three policy papers‡ instruct the EU and its member states to "handle Taiwan-related issues with caution" and to avoid engaging in official diplomatic visits, selling weapons or military technology, engaging in military exchanges, or supporting Taiwan's membership in certain international organizations.§²⁰ Additionally, Beijing has not hesitated to impose punishments on European actors, both state

*This law grants the government authority to review and potentially block investments related to critical infrastructure or sensitive technology on national security grounds. Peter Haeck, "Netherlands to Probe Chinese Chip Takeover," *Politico*, June 1, 2023.

†An explanation of the term "strategic autonomy" by the European Parliament states in part: "EU strategic autonomy... refers to the capacity of the EU to act autonomously—that is, without being dependent on other countries—in strategically important policy areas. These can range from defense policy to the economy, and the capacity to uphold democratic values." It goes on to explain that usage of the term has varied since its first introduction in 2013. It has at times been used to refer specifically to the EU's ability to act on defense matters, to the EU's capacity to defend European interests in a hostile geopolitical environment, and to the EU's capacity to mitigate economic dependence on foreign supply chains. By 2021, use of the term had been broadened to encompass essentially all policy domains as well as values. European Parliament, *EU Strategic Autonomy 2013–2023: From Concept to Capacity*, July 8, 2022.

‡The three policy papers were published in 2003, 2013, and 2018. Central People's Government of the People's Republic of China, *China's EU Policy Paper (Full Text)* (中国对欧盟政策文件(全文)), December 2018. Translation; China's Ministry of Foreign Affairs, *China's EU Policy Paper: Deepening China-EU Comprehensive Strategic Partnership Relationship of Mutual Benefit and Win-Win* (中国对欧盟政策文件:深化互利共赢的中欧全面战略伙伴关系), April 2, 2014. Translation; Central People's Government of the People's Republic of China, *China's EU Policy Paper* (中国对欧盟政策文件), 2003. Translation.

§The most recent paper from 2018 even instructs the EU to "clearly oppose any form of 'Taiwan independence,' [and] support the great cause of China's peaceful unification." Central People's Government of the People's Republic of China, *China's EU Policy Paper (Full Text)* (中国对欧盟政策文件(全文)), December 2018. Translation.

and nonstate, for perceived transgressions. In 2010, China cut off official diplomatic ties with Norway over the decision of the independent Nobel Committee to honor Chinese dissident Liu Xiaobo.²¹ In 2016, Chinese Foreign Ministry spokesperson Lu Kang threatened countermeasures against the EU in retaliation for the Dalai Lama speaking at the European Parliament and meeting with its president, Martin Schulz.²² In March 2021, when the EU imposed sanctions on Chinese targets for human rights abuses in Xinjiang, China's government portrayed the action as severely damaging to its interests and retaliated with countersanctions on European parliamentarians, government institutions, and think tanks.²³ Later that year, China launched a campaign of severe economic coercion against Lithuania after the country opened a Taiwanese Representative Office (for more on China's objection to Lithuania's Taiwanese Representative Office and ensuing economic coercion, see the section below on "Europe's Shifting Views on China").²⁴ A 2021 report on China's subnational diplomacy in Europe by the Mercator Institute for China Studies also pointed out that Chinese diplomats "regularly criticize" local government officials in Europe for getting involved on issues such as Taiwan or Tibet.²⁵

China's Divide and Conquer Strategy

China seeks to sow division within Europe along two dimensions: between EU institutions and member states and between EU member states themselves. To this end, China employs four primary tactics. First, it creates alternative regional institutions that compete against the EU's influence and provide China with the ability to forum shop for economic outlets and political supporters. Second, China stokes division between the EU and its members by undermining EU authority while elevating individual states when their perspectives align with China's own. In addition to actively inflaming tension, China capitalizes on ongoing conflict between the EU and its member states by providing countries an alternative to participation with the EU. Finally, China leverages its extensive economic ties to create competing incentives between individual European countries to reduce their capacity and propensity to respond to China through their national policies.

China Creates Competing Regional Fora to Undermine EU Institutions

China is attempting to subvert EU institutions and policies through the creation of competing China-led regional fora. Alternative institutions are a central component of China's global strategy, as Beijing is able to build these venues around its preferences while the presence of the alternative weakens the power of established institutions that do not align with China's aims.²⁶ The creation of the China-Central and Eastern Europe Cooperation (China-CEEC) forum, a China-led framework founded in 2012 for deepening Beijing's economic ties with Central and Eastern European countries, offers a clear example.*²⁷ China established the forum to capital-

*Initially and informally known as the "16+1," the original 16 European participants included 11 EU member states (Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia) and five non-EU states (Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, and Serbia). The name was adjusted to "17+1" after

ize on Central and Eastern European countries' desire to diversify economic relations outside of the EU following the 2008 global financial crisis and subsequent eurozone crisis.²⁸ Since creating the forum, China has attempted to use it to stoke division between the EU and Central and Eastern European countries by suggesting the region does not fully benefit from engagement with the EU.²⁹ In his keynote speech at the 2021 China-CEEC summit, Xi stated, "China will work with Central and Eastern European countries to help the region share in the benefits of China-EU cooperation as early as possible," implying these countries were not benefiting from EU economic engagements and policies.³⁰ In addition, despite its ostensibly multilateral nature, the forum has operated more like a platform through which China manages its collection of bilateral relationships with Central and Eastern European countries and even benefits from competition between them.³¹ Due to unrealized economic promises and concerns over China's political motivations, Lithuania left the forum in May 2021, six months before China's attempted economic coercion of the country.³² Latvia and Estonia followed suit in 2022, citing economic and political concerns as well as displeasure over China's failure to condemn Russia's invasion of Ukraine.³³ The Czech Republic has also stated it is no longer an active member, though it has not formally exited.³⁴

China Aims to Divide the EU by Stoking and Capitalizing on Conflict between the EU and Member States

China also stokes division between EU member states and institutions to decrease the EU's ability to act collectively and respond to China's increasingly aggressive foreign policy. In written testimony for the Commission, Mr. Small assessed China's objective is for Europe to be "a continent whose aspirations to act collectively could readily be undermined."³⁵ While Beijing claims to have "consistently supported the European integration process," its efforts to foment disunity among EU nations were on full display during President Macron and President von der Leyen's joint visit to Beijing in April 2023. While President Macron was greeted by a lavish reception and given a full schedule of high-level meetings—including a tea session with Xi Jinping in the former Guangdong residence of Xi's father—President von der Leyen was given a significantly lighter schedule and excluded from Xi's state dinner with President Macron.³⁶ Following these meetings, China offered France and the EU few concessions, while China received a considerable benefit: President Macron advising Europe to avoid being a "vassal" to the United States and getting "caught up in crises that are not ours" in reference to a possible Taiwan contingency.³⁷ President Macron also suggested the EU should retain "strategic autonomy" between China and the United States by reducing its reliance on both parties.³⁸ President Macron's statements following the visit conflict with the EU's overall hardening approach to China and undermine the appearance of

Greece joined the group in 2021. The group once again became "16+1" after Lithuania exited in 2021 and then "14+1" after Estonia and Latvia exited in 2022. Milda Seputyte and Ott Tammik, "Baltic States Abandon East European Cooperation with China," *Bloomberg*, August 11, 2022; Andreea Brinză, "How China's 17+1 Became a Zombie Mechanism," *Diplomat*, February 10, 2021.

* France is the only EU country to hold territory in the Indo-Pacific region, which is home to 1.5 million French—and thus EU—citizens. Ambassade de France en Indonésie, au Timor Oriental et Auprès de l'ASEAN, "The Indo-Pacific Region: A Priority for France," January 12, 2022.

EU unity on China, although there is evidence that leaders in some EU countries agree.³⁹ Hungarian Prime Minister Viktor Orbán publicly backed President Macron, stating that “it is necessary to think through whether the American foreign policy interests coincide with the European ones.”⁴⁰ Benjamin Haddad, a Member of the French Parliament, suggests that there is more agreement in private, asserting that “Macron is saying out loud what many European partners quietly believe. Behind closed doors, European leaders genuinely worry about walking in lockstep with Washington into an open conflict with Taiwan.”⁴¹

In addition to stoking division, China also capitalizes on latent tensions by presenting disaffected member states an alternative to EU partnership. China leverages financial distress and political changes within EU countries to its advantage, as seen with Greece and Hungary. Greece has the highest debt burden of any EU country, with its debt-to-GDP ratio at 171 percent compared to the EU average of just 84 percent in 2022.⁴² Greece’s heavy financial obligations stem in part from a series of widely unpopular EU bailouts to the country following the eurozone crisis, which imposed significant austerity measures.⁴³ Sensing opportunity to expand its influence, China launched a campaign of economic persuasion. In 2018, Greece joined the Belt and Road Initiative and in 2019 the China-CEEC.*⁴⁴ In 2021, China’s state-owned shipping firm COSCO increased its stake in Piraeus port from 51 percent to 67 percent.†⁴⁵ In exchange for this economic support, Greece has provided China political support vis-à-vis the EU, including blocking EU attempts to criticize China’s human rights record and resisting EU efforts to ban Chinese 5G provider Huawei.⁴⁶ Similarly, China has leveraged Hungary’s democratic backsliding to its advantage. Prime Minister Viktor Orbán has systematically eroded democracy in Hungary through a variety of autocratic policies and practices, including using public funds as political patronage.⁴⁷ China has supported this autocratic transition by financing Prime Minister Orbán and his allies’ patronage networks. For example, in 2021, Hungary purchased \$181.5 million worth of Sinopharm vaccines from China for \$35.50 per unit, a significantly higher price than the going market rate of \$15.83.⁴⁸ Payment for the vaccines was passed from Hungary to China via an intermediary, Danubia Pharma Kft, a previously unknown firm that received a profit of \$49.5 million for its role.⁴⁹ Although there is no direct evidence, experts at the Prague-based think tank Association for International Affairs believe that Danubia was used a vehicle to siphon public funding for private patronage, a scheme in which China willingly participated.⁵⁰ Like Greece, Hungary has promoted China’s interests in the EU, including blocking an EU statement criticizing China’s treatment of Hong Kong.⁵¹

*Despite being a multilateral forum, the 16 European members of the China-CEEC were not consulted on Greece’s membership bid until after China had nearly finalized negotiations with Greece. This late notification further demonstrates how the forum centered China’s preferences while engaging with the region through bilateral relations rather than through a true multilateral framework. Horia Ciurtin, “The ‘16+1’ Becomes the ‘17+1’: Greece Joins China’s Dwindling Cooperation Framework in Central and Eastern Europe,” *Jamestown Foundation*, May 29, 2019.

†COSCO initially purchased its 51 percent stake in the port in 2016 after it was offered to public sale as part of the privatization efforts mandated under the EU’s bailout. Momoko Kidera, “Sold to China: Greece’s Piraeus Port Town Cools on Belt and Road,” *Nikkei Asia*, December 10, 2021.

China Leans on Its Economic Ties to Create Divides within Individual European Countries

China's extensive economic relations with the EU's largest economies create competing incentives for these countries, reducing their willingness to address China through their national policies and further undermining the EU's approach. Germany is particularly important in this regard, as it is highly influential in the EU and has deep economic ties to China.⁵² Germany has the largest economy in the EU, and in 2022 it was the second-largest EU importer of Chinese goods and the largest EU exporter of goods to China.^{*53} That same year, German FDI into China attained a record high of \$10.5 billion (10 billion euro) in new investments in the first half of 2022 alone, which exceeds the total annual value of investments in any single year since 2000.^{†54} Germany also received one-third (\$1.9 billion) of all Chinese FDI inflows into Europe that same year.^{‡55} Sensitive to these ties, Germany has taken a more muted approach to China relative to the EU and other member states. In July 2023, Germany released its first China strategy, which recognizes that China aims to make itself "less dependent on other countries, while making international production chains more dependent on China" and that "de-risking is urgently needed."⁵⁶ The German Federal Government, however, will only work to "raise awareness of risks relating to China," and it "expects" companies to primarily lead and manage the de-risking process.⁵⁷ Many large German firms, however, seek to reduce their exposure to political risk by localizing and siloing production in China, a strategy that requires expanded investment. For example, the German chemical firm BASF plans to spend \$10.5 billion (10 billion euro) to increase production at its chemical complex in Guangdong.⁵⁸ By expanding its footprint in China, the firm hopes to generate two-thirds of its future growth there.^{§59} Such a position removes responsibility from the German government to act while undermining the effectiveness of the EU's de-risking approach, given large German firms' willingness to sustain investment in China despite rising political risks and continuing barriers to market participation.⁶⁰

China Perceives Mounting Challenges to Its European Objectives

Chinese leaders perceive a challenge from growing economic competition with the EU as well as growing EU efforts to insulate their economies from China. China's most recent policy paper on China-EU relations from 2018 contains significant new emphasis

*In 2022, Germany imported \$202 billion (192 billion euro) of goods from China, and it exported \$113 billion (107 billion euro) to China. *Reuters*, "China Remains Germany's Main Trading Partner for Seventh Year," February 8, 2023.

†This record is particularly noteworthy due to low rates of international travelers entering China in 2022 as a result of its strict COVID-19 quarantine policies. This means German investors continued funneling money into the Chinese market despite substantial barriers to physically assessing acquisitions, investment targets, and joint ventures.

‡China's FDI flows into the EU were valued at \$6 billion in 2022. Agatha Kratz et al., "Chinese FDI in Europe: 2022 Update," *Rhodium Group*, May 9, 2023, 3, 22.

§In 2022, BASF posted total sales of \$92 billion (87.3 billion euro), with sales to greater China accounting for \$12.2 billion (11.6 billion euro) or approximately 13 percent. For more on European firms' localization and siloing activities in China, see the passage in this section titled "Despite De-Risking, Large and Powerful European Firms Remain Embedded in China." BASF, "BASF Report 2022," February 24, 2023; BASF, "BASF in Greater China 2022."

on a perceived need to constructively manage growing economic frictions between the two powers.⁶¹ This represents a slight escalation from the 2014 version, which contained the first mention of competition between similar Chinese and European industries, and it presents an acute contrast with the 2003 document, which based its positive economic outlook on an assessment that China and the EU had complementary market characteristics.⁶² Recent assessments from key state-affiliated think tanks also signal a potential shifting of official views on China's relations with the EU. Analyses from the China Institutes of Contemporary International Relations (CICIR)* and Chinese Academy of Social Sciences (CASS)† assess that the EU increasingly sees China as both an economic competitor and a technological rival, resulting in greater frictions over reciprocity of market access and fairness of competition.‡⁶³

Chinese leaders view Europe and the United States as increasingly aligned against China.⁶⁴ In a speech in March 2023, Xi Jinping reiterated a view that “Western countries led by the United States have implemented all-around containment, encirclement, and suppression of China,” a characterization that includes many European powers.⁶⁵ Other Chinese sources, including Party-aligned academics and state-funded think tanks, also point to growing alignment between Europeans and the United States as a strategic challenge for China and that relations with Europe are growing increasingly tense as a result.⁶⁶ European states and institutions are implicated within the Chinese government's harsh anti-“Western” and anti-NATO rhetoric, reflected in China's accusations against countries allegedly clinging to a so-called “Cold War mentality” and its criticism of the United States playing “group politics” with “small circles” aimed at China.⁶⁷ Feng Zhongping, head of the Institute of European Studies at CASS, argued in 2022 that intensified strategic competition between the United States and China has driven European countries to increase their focus on China and the Indo-Pacific.⁶⁸ As a result, he assessed, European states now also increasingly seek to coordinate their positions with the United States.§⁶⁹

*CICIR is a leading international relations think tank under the direction of China's primary foreign intelligence-gathering institution, the Ministry of State Security. Experts assess that it has significant influence in informing Party-state leadership opinions on foreign policy issues. Center for Strategic and International Studies, “Contemporary International Relations.”

†CASS operates under the auspices of China's State Council.

‡Another example of this assessment can be seen in a 2022 article from *World Affairs*, an academic publication that presents international and regional politics through the lens of the Party line. The author, the director of the Center for EU Studies at Shanghai International Studies University, assesses that China's growing economic strength relative to Europe and the narrowing gap between the two sides' technological and industrial development has generated anxiety over China-Europe economic relations, leading to the creation of policy tools specifically aimed at China. Xin Hua, “Sino-European Relations: Awaiting the Next Spring while Riding a Roller Coaster” (中欧关系:在过山车般起伏中等待下一个春天), *World Affairs*, March 1, 2022. Translation; Center for Strategic and International Studies, “Sino-European Relations: Awaiting the Next Spring while Riding a Roller Coaster” (中欧关系:在过山车般起伏中等待下一个春天). Translation.

§As another example, in August 2022, China's Vice Foreign Minister Deng Li lodged “stern representations” against certain European officials for issuing supportive statements following then Speaker of the House of Representatives Pelosi's visit to Taiwan. A following description of the exchange from China's Ministry of Foreign Affairs displayed palpable anger and frustration at the European policymakers for aligning with the U.S. action rather than condemning it. China's Ministry of Foreign Affairs, *Ministry of Foreign Affairs Lodged Solemn Representations with Relevant European Countries and EU Diplomatic Envoys in China over the Taiwan-Related Statements Issued by the G7 Foreign Ministers and the EU High Representative for Foreign Affairs and Security Policy* (外交部就七国集团外长和欧盟外交与安全政策高级代表发表涉台声明向有关欧洲国家和欧盟驻华使节提出严正交涉), August 5, 2022. Translation.

China's actions and statements throughout Russia's war in Ukraine suggest Beijing is willing to tolerate damage to its relations with Europe in order to sustain its strategic partner, Russia.⁷⁰ China has continued to engage diplomatically with European governments and increased its diplomatic activity in Europe over the course of the war, potentially as a means of limiting the damage to its relations with the EU and other European countries.⁷¹ Nevertheless, Xi has at the same time continued to engage in high profile diplomatic exchanges with Putin, including at a lavish state visit to Moscow a year into the war, which featured a red carpet, a mounted welcome committee, a welcome ceremony with a military band, and a grand banquet at the Kremlin.⁷² EU and European countries have also gained few concessions from Beijing during this time beyond reiteration of past agreements, such as a statement from Xi and German Chancellor Olaf Scholz that they both "jointly oppose the use or threat of use of nuclear weapons."⁷³ Instead, Xi has responded by increasing support for Russia's war.⁷⁴ At the same time, Chinese diplomats have made statements further alienating European audiences,* and European countries in NATO have repeatedly been painted by China's Ministry of Foreign Affairs as responsible for the war in Ukraine.⁷⁵ In his testimony, Mr. Small assessed that these actions should not be seen as "mistakes" on the part of Beijing, as European leaders have been quite clear about how certain positions on the war would harm relations.⁷⁶ Instead, he argues, given the strategic value of China's partnership with Russia, "Beijing has essentially decided to accept some level of collateral damage to its relationships in Europe as the price for deepening and elevating its ties with Moscow."⁷⁷ Xi himself reportedly stated during his March 2023 visit to Moscow that "consolidating and developing long-term good-neighborly and friendly relations with Russia is in keeping with historical logic, is China's strategic choice, and will not change simply due to a temporary incident."⁷⁸

Finally, Chinese observers have expressed concern over a gradual rise in European countries' emphasis on values-based approaches to China policy. As described further below (see section on "Europe's Shifting Views on China"), European governments and publics are increasingly vocal about the Chinese Party-state's human rights abuses. Europe's growing focus on these issues is mirrored by China's increasingly sharp rhetoric concerning China-Europe dialogue over the past 20 years. For example, in its 2003 policy document, China expressed relatively little concern over the differences between China and the EU regarding human rights and other political issues.⁷⁹ By 2014, China elevated the intensity of its charac-

*As in other regions, Chinese representatives have made use of "wolf warrior" diplomacy, a confrontational and assertive brand of diplomacy that calls for Chinese representatives to be aggressive, forceful, and occasionally disruptive in their response to international events. Some of China's most prominent and controversial wolf warrior diplomats have been deployed to Europe, including the Chinese ambassador to France Lu Shaye who—just three weeks after President Macron's trip to Beijing—claimed that former Soviet countries like Ukraine have no "effective status" in international law. When asked if Crimea belongs to Ukraine, Ambassador Lu stated that "it depends how you perceive the problem," further arguing that it was historically Russian territory that was only transferred to Ukraine by the former Soviet leader Nikita Khrushchev. Antonia Zimmermann, "Baltics Blast China Diplomat for Questioning Sovereignty of Ex-Soviet States," *Politico*, April 23, 2023; Kathrin Hille, "Wolf Warrior Diplomats Reveal China's Ambitions," *Financial Times*, May 11, 2020; Ben Westcott and Steven Jiang, "China Is Embracing a New Brand of Foreign Policy. Here's What Wolf Warrior Diplomacy Means," *CNN*, May 29, 2020.

terization of these discussions to “frictions,” and in 2018 it alluded to increasing tensions by exhorting the EU to choose dialogue over “confrontation.”⁸⁰ Mr. Feng at CASS argued in 2022 that a particularly important recent shift in the China-Europe relationship was the EU’s designation of China as a “systemic rival” in 2019, a label he assessed to be “mostly about values... and differences in domestic governance models between the two sides.”⁸¹ Analysis from CICIR similarly describes this shift as reflecting a growing perception in Europe that China’s Party system goes against so-called “Western” universal values of freedom, democracy, rule of law, and human rights.⁸²

China’s Challenges to Europe

China’s continued disregard for the rules-based international order and its increasing risk to European economic and physical security presents a series of challenges for Europe and a number of implications for the United States. Primarily, Europe must confront and mitigate the strategic impact of an increasingly aggressive China while balancing its economic dependence on the Chinese market. For its part, the United States may be confronted with consequences from China’s actions through their impact on European markets and security calculations as well as potential spillover effects from European governments’ policy responses to China.

China’s Economic and Political Support for Russia Undermines European Security

China’s provision of economic, logistical, and diplomatic support to Russia enables President Vladimir Putin’s war of aggression in Europe and also undermines European security in other ways. By providing Russia an economic lifeline, China’s trade with Russia is undermining the effectiveness of European and U.S. sanctions and export controls and helping to prolong the war in Ukraine by enabling Russia’s military offensive.⁸³ In 2022, total bilateral goods trade between China and Russia rose by almost 30 percent.⁸⁴ By increasing its imports of Russian crude oil, China helped support and stabilize the Russian state budget by providing revenue to offset Russia’s war spending.⁸⁵ Chinese direct exports of semiconductors to Russia more than doubled in 2022, undermining the effectiveness of export controls by providing Russia with chips needed to help rebuild its dwindling missile stocks.⁸⁶ China also provided significant dual-use logistics support to Russia through an 11-fold increase in export of super-heavy trucks capable of moving military equipment.⁸⁷ Additionally, 70 Chinese exporters are reported to have sold Russia drones, including those for commercial use, that could be used in military operations against Ukrainian forces.⁸⁸ Diplomatically, China has supported Russia by refusing to condemn the invasion and instead echoing Russia’s groundless claims that it acted on the basis of “legitimate” security concerns.⁸⁹ Finally, China has provided rhetorical support for Russia in the information domain by amplifying Russian disinformation and downplaying reports of Rus-

*The U.S. Department of the Treasury estimates that the Russian government’s oil revenue constitutes 23 percent of its budget in 2023. Elizabeth Rosenberg and Eric Van Nostrand, “The Price Cap on Russian Oil: A Progress Report,” *U.S. Department of the Treasury*, May 18, 2023.

sian war crimes.⁹⁰ (For more on the China-Russia relationship and China's support to Russia's war in Ukraine, see Chapter 1, Section 2, "U.S-China Security and Foreign Affairs.")

Unbalanced Trade and Investment with China Undermines Europe's Economic Security

China's trade relationship with Europe undermines European competitiveness through market distortions caused by China's unfair trade practices. These practices include anticompetitive actions like firm subsidies and below-market price distortions, intellectual property theft through malicious cyber activities and forced technology transfers, and protectionism through market access restrictions and nonmarket interventions that bolster and concentrate production within China. Due to these practices, the EU's aggregate trade deficit with China tripled (in euro) from \$151 billion (118 billion euro) in 2012 to just under \$417 billion (396 billion euro) in 2022.⁹¹ This expansion was primarily driven by China's increasing exports to the EU, including in high-value products like green technology, EVs, and telecommunications equipment.⁹² While Europe also sells some high-value goods to China, including machinery and vehicles, which comprise 52 percent of China's imports from Europe, the benefits of this trade accrue unevenly and tend to concentrate within a small set of firms and countries.⁹³ Of the \$242 billion (230 billion euro) in goods the EU exported to China in 2022, 46.4 percent were from Germany, 10.3 percent were from France, and 8.1 percent were from the Netherlands.⁹⁴ The other 24 EU countries contributed the remaining 35 percent.⁹⁵ Moreover, these large economies tend to specialize in high-value and high-tech exports. For example, 80 percent of the EU's car exports were made in Germany.⁹⁶ Excluding exports from these select countries, Europe's export basket to China consists primarily of agricultural commodities and raw materials and looks virtually indistinguishable from China's trade with many low-income countries.⁹⁷

The impact of China's unfair trade practices is becoming apparent as European producers face rising export competition with Chinese producers in high-tech sectors, including in wind turbines and EVs. Chinese wind turbine manufacturers are gaining a significant foothold in European markets, taking market share from European and U.S. manufacturers like Vestas Wind Systems, Siemens Gamesa Renewable Energy, and General Electric.⁹⁸ China already dominates the global market for rechargeable batteries, and it has become the world's top auto exporter at the expense of European carmakers' global market share in terms of total units sold.⁹⁹ While China still imports more vehicles from Europe than it exports to Europe, the CEOs of the French and Dutch car producers Peugeot and Stellantis have both publicly recognized the competitive threat posed by Chinese EV makers.¹⁰⁰ China's growing success in Europe is due to China's unfair trade practices as well as European policy inducements. Chinese EV producers operate in a highly protected and sub-

*According to data by the International Organization of Motor Vehicle Manufacturers, in 2019 the EU and UK produced 19.5 percent of motor vehicles globally, while China produced 28 percent. By 2022, Europe produced only 16.2 percent, while China's market share rose to 31.8 percent. International Organization of Motor Vehicle Manufacturers, "2022 Statistics."

sidized market at home,* encounter low EU tariffs when exporting their cars to the European market, and also reap the benefit of EU subsidies since many EU countries' EV subsidies apply to imports as well as locally produced autos.¹⁰¹ Moreover, the EU's 2035 ban on the sale of new combustion engines that do not run on CO₂-neutral fuels has sharply increased demand for EVs, particularly Chinese EVs, which are highly competitive with European cars due in part to these Chinese and European policies.[†]¹⁰²

China's Infrastructure Investments Increase Europe's Vulnerability to Economic Coercion

China is expanding its coercive capacity over Europe through investments in critical European infrastructure, including logistics networks, ports, and 5G capabilities. Chinese logistics companies are expanding into European transportation networks to capitalize on Europe's booming e-commerce market and move outside of China's slowing domestic economy. Cainiao, an affiliate of the internet giant Alibaba, has significantly increased its EU footprint by expanding air cargo and trucking networks, building a regional hub in Belgium, and establishing a partnership with Germany's DHL.¹⁰³ Additionally, Chinese investments in European ports have increased as China seeks to expand sea trade traffic to accommodate its growing economic power and influence under the Belt and Road Initiative.¹⁰⁴ Two Chinese state-owned enterprises—COSCO and China Merchants Group—maintain sizable shares in four of Europe's top five busiest ports.[‡]¹⁰⁵ Several European ports have also entered into agreements with LOGINK, China's state-run logistics data management system, granting access to international shipping data that China could aggregate for commercial or security advantage.¹⁰⁶ Finally, Chinese telecommunications play a prominent role in several European countries' 5G networks. Countries like Austria, Germany, Italy, Poland, Portugal, and Spain have continued to buy large amounts of Chinese-made 5G equipment despite efforts by the EU and European countries to limit Huawei and ZTE's presence in

*For more information on China's EV subsidy program, see U.S.-China Economic and Security Review Commission, Chapter 2, Section 2, "CCP's Economic and Technological Ambitions: Synthetic Bio, New Mobility, Cloud Computing, and Digital Currency," in *2021 Annual Report to Congress*, November 2021, 165–213.

†In March 2023, following resistance from Bulgaria, Germany, Italy, and Poland, the EU revised the proposed ban to allow for the sale of new vehicles with combustion engines past 2035 as long as the vehicles run on CO₂-neutral e-fuels. E-fuels are created in part by capturing atmospheric CO₂ and hydrogen and using it to make a burnable fuel. While the burning of e-fuel creates some emissions, in the case of CO₂-neutral fuels, the amount of CO₂ released into the atmosphere is equal to the amount removed from the atmosphere in the synthesis process. Not all e-fuels are 100 percent carbon neutral. The final legislation for the 2035 ban was approved by the European Council in late March after a two-week delay in voting, with ongoing efforts to draft rules allowing for the sale of vehicles running on e-fuels. In September, a draft of the rules indicated that the EU would only allow the sale of 100 percent CO₂-neutral e-fuels. That month, Lühmann Gruppe—a German company that sells e-fuels—also announced its intent to pursue legal action against the EU if the rules do not allow for the sale of all e-fuels, including those that are not 100 percent CO₂-neutral. Nik Martin, "German Firm to Sue EU over Ban on Polluting Cars," *Deutsche Welle*, September 23, 2023; Kate Abnett, "EU Set to Demand E-Fuel Cars Have No Climate Impact," *Reuters*, September 22, 2023; Jason Eden, "EU Approves 2035 Ban on Internal Combustion Engines," *Energy Intelligence*, March 28, 2023; Victoria Waldersee and Kate Abnett, "Explainer: What Are E-Fuels, and Can They Help Make Cars CO₂-Free?" *Reuters*, March 22, 2023; Hanne Cokelaere, "Approval of EU's 2035 Combustion Engine Ban Postponed," *Politico*, March 3, 2023.

‡These include the Netherlands' port of Rotterdam, Belgium's port of Antwerp-Bruges, Germany's port of Hamburg, and Spain's port of Valencia. Eurostat, "Top 5 Ports for Volume of Containers—Volume (in TEUs) of Containers Handled in Each Port."

their networks.¹⁰⁷ China's growing investments in European critical infrastructure gives it access to and leverage over Europe's communications networks and supply lines, which leaves Europe vulnerable to attempted economic coercion through pressure on these networks.¹⁰⁸ This indirectly impacts the United States, which also depends on European logistics networks to source and deliver goods from Europe and other trade partners.

Adoption of LOGINK in European Ports Creates Economic and Strategic Risks

To increase China's influence in international logistics, China's Ministry of Transportation is promoting a unified logistics platform formally called the National Transportation and Logistics Public Information Platform and abbreviated as LOGINK (a portmanteau of "logistics" and "link").* The state-sponsored and -supported platform has agreements with at least 24 ports across the world, of which nine are located in Europe.¹⁰⁹ These include the three busiest ports in the EU: Rotterdam, Antwerp-Bruges, and Hamburg.¹¹⁰

LOGINK's expansion in Europe presents several shared security concerns for the EU and United States. State control of the LOGINK platform provides the CCP access to data collected and stored on the platform and could enable the Chinese government to gain insights into shipping information, cargo valuations via customs clearance forms, and destination and routing information, including for military cargo shipped via commercial freight. This undermines EU security as it provides China insight into sensitive information on European consumer and military supply lines, including military support being shipped into the EU for Ukraine's defense.

European ports' adoption of LOGINK also has consequences for the United States and NATO allies, which depend on European ports to ship military equipment throughout the region. For example, in July 2022, the United States used a commercial cargo vessel to transport 2,700 items of military equipment—including light tactical vehicles—through the port of Antwerp-Bruges,† which has had a cooperation agreement with LOGINK since 2017.‡¹¹¹ It is possible that these items, which were provided in fulfillment of U.S. obligations to NATO and in support of Ukrainian defense, were observed by the Chinese government via the LOGINK platform.¹¹² Finally, LOGINK is just one Chinese platform

*LOGINK provides users with a unified platform for logistics data management, shipment tracking, and information exchange needs between enterprises as well as from business to government. China's government is encouraging international ports, freight carriers and forwarders, and other countries and entities to adopt LOGINK by providing it free of charge. For more on LOGINK's background and risks to U.S. interests, see U.S.-China Economic and Security Review Commission, *LOGINK: Risks from China's Promotion of a Global Logistics Management Platform*, September 20, 2022.

†In the media release regarding the shipment, the U.S. Army described Antwerp-Bruges as "one of the largest and busiest seaports in the world with a long tradition of supporting U.S. Army forces." United States Army, *U.S. Armor Arrives in Europe for Unit Deployment*, July 22, 2022.

‡The LOGINK cooperation agreement was initially signed with the port of Antwerp in 2017. In 2022, the port of Antwerp merged with the port of Zeebrugge and is now called Antwerp-Bruges. U.S.-China Economic and Security Review Commission, *LOGINK: Risks from China's Promotion of a Global Logistics Management Platform*, September 20, 2022; Ship Technology, "Belgium's Antwerp and Zeebrugge Ports to Merge," April 29, 2022.

Adoption of LOGINK in European Ports Creates Economic and Strategic Risks—*Continued*

that is gaining a foothold in the European logistics market. Other Chinese firms are also expanding in Europe, including Alibaba's logistics arm, Cainiao, which is also developing a warehouse and shipping network in Europe.¹¹³

China's Growing Influence in Technical Standards-Setting Could Undermine European Industries

As part of its efforts to gain a dominant position in key emerging industries, China is increasing its leadership roles and committee participation in international standards-setting bodies at the expense of some EU countries. By acquiring leadership positions in standards-setting organizations, including the prominent International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), China is better positioned to set the technical agenda and shape the standardization process toward its interests, in some cases to the detriment of European industries.* To this end, China's share of leadership positions in the ISO has increased from 6.1 percent in 2011 to 10.4 percent by 2022.¹¹⁴ While its share is still below that of leading EU countries and the United States, China is gaining a relatively greater share of leadership positions over time as some EU countries' and the United States' representation in the organization declines.¹¹⁵ In 2011, of the 737 total ISO technical committee and subcommittee chairs, the United States held 117 Secretariats (16 percent), China held 45 Secretariats (6 percent), and EU countries held 286 Secretariats (39 percent of total).¹¹⁶ By 2022, the number of chairs increased to 759; however, U.S. representation declined to 92 Secretariats (12 percent), while China's representation increased to 79 Secretariats (10 percent).¹¹⁷ Although the EU's aggregated representation remained constant at 294 Secretariats (39 percent), nine EU participants either lost chairs or had not gained chairs at a rate proportional to the expansion of the number of Secretariats.† In addition to expanding its leadership positions, China is also increasing its participation in standards development committees within the ISO and IEC to exploit first-mover advantage by establishing its preferred technical standards in key industries, including rare earths, transaction assurance in e-commerce, and smart grid user interface, among others.‡¹¹⁸

*For information on China's participation in the International Telecommunication Union (ITU), another prominent technical standards organization that tends to have more traction in developed countries, including the United States and the EU, see Chapter 2, Section 1, "Rule by Law: China's Increasingly Global Legal Reach."

†From 2011 to 2022, five EU countries—including Denmark, the Netherlands, Poland, Slovakia, and Spain—lost ISO Secretariats. Three countries—Austria, Finland, and Portugal—had no change in their count of Secretariats. While Germany's number of Secretariats increased by one over this period, this rate of increase is not commensurate with the rate of increase in the total number of ISO Secretariats or with China's rate of increase and thus represents a slight decline in Germany's relative representation in the ISO. International Organization for Standardization, "ISO in Figures 2022," January 2023; International Organization for Standardization, "ISO Annual Report 2011," 2012.

‡For more information on China's strategy for domestic and international standards-setting, see U.S.-China Economic and Security Review Commission, Chapter 1, Section 2, "The China Model: Return of the Middle Kingdom," in *2020 Annual Report to Congress*, December 2020, 80–135.

By joining these bodies, China seeks to make its exporting firms more competitive and induce European dependence by locking European firms into Chinese technical standards. China seeks to promote its own set of technical standards for critical and emerging technologies, such as in 5G, through the adoption and enforcement of Chinese standard-essential patents (SEPs) in international and regional standards-setting bodies. SEPs protect firms that develop novel standards by requiring firms that adopt these standards to pay royalties to the SEP holder. By popularizing Chinese-developed standards in international organizations, China can force foreign companies to pay royalties to Chinese SEP holders and induce dependence on Chinese technology.* This practice presents significant challenges to European firms working in emerging technology fields, like the Swedish telecommunications firm Ericsson, which faces strong and increasing competition in international standards organizations from the Chinese firm Huawei.†¹¹⁹ Moreover, if Chinese standards are not interoperable with European products, then European firms will either need to adjust to Chinese standards or lose market share.¹²⁰ If left unaddressed, U.S. and EU companies both face the potential of becoming dependent on Chinese technology that is incompatible with U.S.- and EU-produced goods. In addition, a lack of coordination between the United States and EU on technical standards vis-à-vis China may lead to fragmentation in standards, thus reducing the pace of shared technological development and limiting the potential for economic growth.

Europe's Evolving Approach to China

Europe's Shifting Views on China

Diverse, evolving, and not yet consolidated, European attitudes toward China vary from regarding Beijing simultaneously as a policy partner and economic competitor to seeing it as a systemic rival, with the latter view becoming more salient in recent years. The European Commission's March 2019 Strategic Outlook first defined China as being "simultaneously ... a partner for cooperation and negotiation, an economic competitor and a systemic rival."¹²¹ The inclusion of the label "systemic rival," even alongside two less confrontational descriptors, is a notable departure from previous EU statements that took a "business first" approach to relations.¹²² Although this three-fold descriptor remains the EU's official position, in light of many challenging developments in EU-China relations over recent years, the EU acknowledges its policies have been increasingly informed by the "systemic rival" element of this framework and that the bloc may even be reexamining this policy position.¹²³ While the

*For more on China's use of standard-essential patents, see Chapter 2, Section 1: "Rule by Law: China's Increasingly Global Legal Reach."

†Due in part to the proliferation of SEPs held by both firms, in August 2023, Ericsson and Huawei renewed a multiyear global patent cross-licensing deal that gives the two companies access to each other's patented, standardized technologies. The deal involves numerous international standards-setting bodies like 3GPP, the primary standards-setting body for telecommunications standards like 5G, as well as ITU and two other major international standards-setting organizations. The agreement replaces a previous deal struck between the two companies in 2016. Dominic Chopping, "Ericsson and Huawei Renew License Deal, Giving Access to Each Other's Patents," *Wall Street Journal*, August 25, 2023; Robert Clark, "Huawei, Ericsson Renew Cross-Licensing Deal," *LightReading*, August 25, 2023.

EU as an institution appears to be hardening its views, several of Europe's largest economies maintain a more favorable attitude.

China as a "Systemic Rival"

Since the 2019 Strategic Outlook, the EU has identified China as not only a "partner" and a "competitor" but also a "systemic rival."¹²⁴ While the "partner" label reflects the EU's desire to maintain dialogue with China on global challenges, such as climate change, and the "competitor" label aptly describes increasing frictions between the EU and China in the economic and technological realms, the "systemic rival" label is especially relevant in the political and geopolitical domains.¹²⁵ The 2019 Strategic Outlook describes China more fully as "a systemic rival promoting alternative models of governance," indicating that China's authoritarian political model and the implications of that model for the international system lie at the base of the "systemic rival" distinction.¹²⁶ Tim Rühlig, then a research fellow at the Swedish Institute of International Affairs, explained this point in a report in November 2020, assessing that "on political values, China clearly is a 'systemic rival' of the EU."¹²⁷ At the same time, he argued that the term was associated with the European Commission's push to take a more "geopolitical" approach to its policy on China.¹²⁸

Although the Strategic Outlook presents the three domains separately, some European observers have argued that the EU's systemic rivalry with China has the potential to influence the other two domains of partnership and competition because of its association with the EU's fundamental values.¹²⁹ For example, Janka Oertel, director of the Asia Program at the European Council on Foreign Relations, argued in 2020 that "a European China policy that takes systemic rivalry seriously means to clearly define red lines in certain areas and to actively decide against cooperating if it increases dependence and reduces Europe's strategic sovereignty."¹³⁰ In his 2020 report, however, Dr. Rühlig assessed that there was not a full consensus among the branches of EU government† on how integrated the three domains should be.¹³¹ He explained that the European Council "contributes to keeping separate the three pillars" by facilitating a "pragmatic" approach to China.¹³² The European Parliament, by contrast, tends to fall on the opposite side of the spectrum, "demanding that the systemic rival-

*In a speech in June 2021, President von der Leyen similarly identified China's human rights record as the main issue defining the systemic rivalry between the two powers. *Reuters*, "EU Says China Is a Systemic Rival, Human Rights Is Main Issue," June 15, 2021.

†The EU is governed by a set of institutions that reflect its simultaneous supranational and intergovernmental character. These include the European Council, European Commission, Council of the European Union (also known as the Council of Ministers), and the European Parliament. The European Council is composed of the heads of state or government of the EU's member states and acts as the strategic guide for EU policy. The European Commission acts as the EU's executive and upholds the common interest of the EU as a supranational body. It is made up of 27 commissioners, among whom one serves as the commission president. The Council of the European Union, by contrast, represents the interests of the national governments and is composed of different ministers from each member state. The European Parliament represents EU citizens and is composed of directly elected Members of the European Parliament (MEPs) who caucus according to political affiliation rather than nationality. Congressional Research Service, "The European Union: Questions and Answers," February 6, 2023, 2.

China as a “Systemic Rival”—*Continued*

ry on political values cannot be ignored in other issue areas,”* while the European Commission has similarly “taken office with a view to overcoming policy silos and striving to strategically link issues.”¹³³ The ultimate balance of these differing views in the EU’s China policy, he observed, remains undetermined.[†]¹³⁴

Europe’s hardening view of China is informed in part by an increasingly values-based approach to relations as well as rising tension from escalating retaliatory sanctions. In March 2021, the EU sanctioned four Chinese officials and one Chinese entity involved in the mass internment of Uyghurs in Xinjiang. China retaliated with countersanctions targeting five Members of the European Parliament, the European Council’s Political and Security Committee, and a number of EU member state Members of Parliament, think tanks, and academics.¹³⁵ In response, the European Parliament voted to freeze a proposed agreement with China that would open bilateral investment and trade by addressing a number of European concerns regarding economic engagement with China, including opening areas of the Chinese economy for European investment, theoretically banning the forced transfer of technology, mandating transparency in subsidies, and requiring state-owned enterprises to not discriminate against foreign firms in procurement and sales, among other provisions.¹³⁶ The Comprehensive Agreement on Investment (CAI) had been in negotiation since 2014, and while an initial deal was reached in December 2020, it was frozen before it could be ratified.¹³⁷ China has since attempted to revive the deal, proposing that Beijing and Brussels simultaneously lift the sanctions it claims caused the deal to derail.[‡]¹³⁸ Lack of discussion on the CAI during President von der Leyen’s April 2023 trip to Beijing, however, is a strong indication that the deal is unlikely to be revived.¹³⁹

China’s increasingly coercive approach to relations with Europe heightened European awareness of Beijing’s threat to economic security. In 2021, Lithuania opened a Taiwanese Representative Office in Vilnius, the first in any European country to bear the name “Taiwan” rather than “Taipei.”[§]¹⁴⁰ Beijing retaliated by downgrading

* Member of the European Parliament Reinhard Bütikofer illustrated this view in an interview in 2020 when he said, “The [Strategic Outlook] does not bid good-bye to cooperation with China, even though we are systemic rivals. It ends, however, the dominance of the win-win rhetoric... cooperation and competition with China have to be shaped by understanding what it means that we are systemic rivals.” Katrin Altmeyer, “Between Cooperation and Systemic Rivalry: The EU-China Relations,” *Heinrich Böll Stiftung*, July 24, 2020.

† In their respective 2020 interviews, both Dr. Oertel and MEP Bütikofer agreed that because of the strategic implications of the systemic rivalry, a simple juxtaposition of the three elements side by side was increasingly insufficient, and their integration was also not yet a reality in practice. Katrin Altmeyer, “Between Cooperation and Systemic Rivalry: The EU-China Relations,” *Heinrich Böll Stiftung*, July 24, 2020.

‡ From the European perspective, China’s abuse of human rights in Xinjiang and its retaliatory sanctions on European individuals and entities is what ultimately stalled the CAI. European Parliament, “MEPs Refuse Any Agreement with China Whilst Sanctions Are in Place,” May 20, 2021.

§ Beijing objects to the international use of the name “Taiwan,” considering it inappropriately suggestive of official recognition or independence for the democratic island and a violation of its One China principle. For this reason, it is common for international representation of Taiwan to occur under the name “Taipei” as a concession to avoid backlash from Beijing. Matthew Reynolds and Matthew Goodman, “China’s Economic Coercion: Lessons from Lithuania,” *Center for Strate-*

diplomatic relations with Lithuania and launching a campaign of economic coercion.¹⁴¹ China removed Lithuania from its customs system, effectively blocking all imports of Lithuanian goods and exports to Lithuania.¹⁴² Beijing also threatened several European multinational firms, including the large German auto parts manufacturer Continental, with exclusion from the Chinese market if they did not partake in China's efforts to cut off Lithuania from international trade.¹⁴³ While Continental and the German-Baltic Chamber of Commerce called on Lithuania to seek a "constructive solution" with China, the EU took measures to support Lithuania by filing a complaint with the WTO and developing an EU-wide anticoercion instrument (ACI).¹⁴⁴ European policymakers also strengthened their rhetorical approach to China. In a speech before her departure for Beijing in April 2023, President von der Leyen stated that "the imperative for security and control now trumps the logic of free markets and open trade," adding, "the Chinese Communist Party's clear goal is a systemic change of the international order with China at its center."¹⁴⁵

China's attempts to undermine the EU's response to the COVID-19 pandemic contributed to a significant hardening in European views on China. During the pandemic, authorities in Beijing aroused suspicion in Brussels by continually bypassing and discrediting EU institutions by interacting with countries bilaterally.¹⁴⁶ Beijing particularly sought to take advantage of the dissatisfaction that hard-hit countries like Spain and Italy felt with the EU's pandemic response to boost its own reputation through medical aid.¹⁴⁷ Unlike the EU, which tended to provide slower-moving but higher-quality pandemic aid to states with the greatest need, China's COVID-19 relief strategy focused on the quick sale of medical supplies and vaccines to politically relevant states.¹⁴⁸ China's attempt at dividing Europe was ultimately unsuccessful, as the EU was able to provide a high degree of fiscal support to member states during the pandemic and beyond; however, it did increase European attention to and negative perceptions of China.¹⁴⁹ According to data from the Pew Research Center, in 2016, five of ten surveyed European countries had more than 50 percent of respondents indicating they held an unfavorable view of China.¹⁵⁰ By 2022, all ten countries had more than 50 percent of respondents indicating an unfavorable view, due in large part to China's poor handling of the COVID-19 pandemic.¹⁵¹

China's support for Russia in the Ukraine war has caused a sharp decline in European views of China, further accelerating the ongoing deterioration of relations for many European countries. In the months immediately following Russia's invasion of Ukraine, China's unwillingness to condemn the unprovoked assault on a European state placed great additional strain on its diplomatic interactions

gic and International Studies, May 6, 2022; *EuroNews*, "Lithuania: China Condemns 'Extremely Egregious Act,' as Taiwan Opens Vilnius Office," November 11, 2021.

*For more information on the anticoercion instrument, see the passage in this section titled "Europe Seeks to Reduce Economic Vulnerability and Increase Economic Resilience."

†After the EU enacted a ban on exports of medical equipment to non-EU countries, the president of Serbia—a non-EU country—turned immediately to Beijing and heaped praise upon General Secretary Xi and the CCP in exchange for a large shipment of medical aid. Stuart Lau, "EU Fires Warning Shot at China in Coronavirus Battle of the Narratives," *South China Morning Post*, March 24, 2020.

‡Surveyed countries included France, Germany, Greece, Hungary, Italy, the Netherlands, Poland, Spain, Sweden, and the UK.

with the EU.*¹⁵² Relations were further aggravated by China's attempts to use the war to drive a wedge between Europe and the United States. China's support for Russia and attempts to inflame U.S.-EU relations have precipitated a souring of public attitudes toward China. According to a poll of 13 European countries conducted by the International Republican Institute in August 2022, 34 percent of respondents said their views of China have worsened, with 66 percent citing China's partnership with Russia as the biggest factor.[†]¹⁵³ In addition, Russia's invasion of Ukraine and the subsequent EU sanctions on Russian oil and gas further increased European sensitivity to economic dependency on authoritarian states, including China.[‡] This heightened sensitivity to dependence on authoritarian countries increased Europe's urgency in its attempts to reduce its economic vulnerability to coercion from China, ultimately leading to calls by the European Commission to "de-risk" from China.

NATO Moves to Address Challenges from China

NATO views China as a "challenge" to the interests of the Alliance and is taking incremental but steady steps to address it within the framework of the transatlantic organization. In 2022, NATO made the first revision in 12 years to its guiding policy document, the Strategic Concept, and incorporated China into the document for the first time.[§]¹⁵⁴ The revised Strategic Concept declares that China's "stated ambitions and coercive policies challenge [NATO's] interests, security, and values" and describes China's use of a broad range of political, economic, and military tools to increase its power and global reach.¹⁵⁵ The document declares that China's hybrid and cyber operations, confrontational rhetoric, and disinformation "target Allies and harm Alliance security."¹⁵⁶ It states that China seeks to control key technological and industrial sectors, critical infrastructure, strategic materials, and supply chains.¹⁵⁷ It further warns that China uses its economic leverage to "create strategic dependencies and enhance its influence."¹⁵⁸ The document also calls attention to China and Russia's "mutually reinforcing attempts to undercut the rules-based international order" as well as China's own subversive actions in the space, cyber, and maritime domains.¹⁵⁹ Finally, it expresses

*Following a summit with Xi in April 2023, the EU High Representative for Foreign Affairs Josep Borrell described the meeting as a "dialogue of the deaf" in which China's representatives refused to engage substantively in discussion on the Ukraine war. Philip Glamann, "EU's Top Envoy Calls Summit with China's Xi a 'Deaf Dialog,'" *Bloomberg*, April 5, 2022.

†Surveyed countries include: Austria, Croatia, the Czech Republic, Estonia, Greece, Hungary, Italy, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia. International Republican Institute, "IRI Poll Across 13 European Countries Shows Concerns with China-Russia Partnership, a Desire for Action against Human Rights Abuses, Economic Anxiety," January 18, 2023.

‡In 2021, gas burning generated 15.3 percent of German electricity, and Russian gas accounted for 32 percent of Germany's total gas supply. In addition, 34 percent of Germany's crude oil was imported from Russia that year. Vera Eckert and Kate Abnett, "Factbox: How Dependent Is Germany on Russian Gas?" *Reuters*, March 8, 2022.

§NATO formally acknowledged that China's "growing influence and international policies" posed "challenges" to NATO for the first time in a summit communiqué—known as the "London Declaration"—in 2019. Nevertheless, the incorporation of this language into the Strategic Concept marks its integration into a much higher-level strategic guiding document. Garret Martin and James Goldgeier, "NATO, China, and the Vilnius Summit," *War on the Rocks*, July 7, 2023; North Atlantic Treaty Organization, "London Declaration," July 1, 2022; Paul Belkin, "NATO: Key Issues for the 117th Congress," *Congressional Research Service*, June 3, 2021, 5–6.

NATO Moves to Address Challenges from China— *Continued*

concern about China's rapid and nontransparent expansion of its nuclear capabilities.¹⁶⁰

The July 2023 NATO summit in Vilnius, Lithuania, issued a communiqué that reinforced the Strategic Concept's provisions on China, with modest proposals for implementation.¹⁶¹ Not only did the communiqué reemphasize every point mentioned in the Strategic Concept, it also offered greater detail on NATO's specific concerns regarding China's relationship with Russia and China's expanding nuclear capabilities.¹⁶² On Russia, it explicitly called upon China to "act responsibly" and "refrain from providing any lethal aid."¹⁶³ Additionally, the Vilnius communiqué added a new reference to NATO addressing systemic challenges from China in cooperation with the EU, suggesting that Allies and European policymakers are placing increasing value on coordination of China policy between these two key international groups.*¹⁶⁴

Alongside growing attention on China, NATO is expanding its attention on the larger Indo-Pacific, though full consensus about the degree of involvement the Alliance should have beyond the North Atlantic remains elusive. NATO incorporated the concept of the Indo-Pacific into the updated Strategic Concept in 2022, noting that "developments in that region can directly affect Euro-Atlantic security."¹⁶⁵ The Alliance has also taken tangible steps to increase coordination with like-minded partners in the Indo-Pacific, particularly Australia, Japan, South Korea, and New Zealand.†¹⁶⁶ These have included inviting representatives of the four countries to participate in certain ministerial-level meetings since December 2020 and to attend NATO summits in 2022 and 2023.¹⁶⁷ In January and February 2023, NATO Secretary General Jens Stoltenberg visited Seoul and Tokyo, where he stated, "What happens in Europe matters to the Indo-Pacific... and what happens here in Asia matters to NATO."¹⁶⁸ In May, NATO and Japanese officials both acknowledged ongoing discussions during Secretary General Stoltenberg's January visit about opening a NATO liaison office in Tokyo and a Japanese mission to NATO, independent of Japan's embassy in Brussels.¹⁶⁹ By June, however, President Macron had voiced opposition, arguing NATO should not expand its reach beyond the North Atlantic and signaling that the required consent of all 31 NATO members might not be possible.¹⁷⁰ At the Vilnius summit in July 2023, the communiqué advanced plans for coordination with Indo-Pacific partners

*Some NATO states, particularly France, are less comfortable with the idea of NATO, a transatlantic alliance, serving as a forum for greater activities expanding in the Indo-Pacific region, preferring the EU for this purpose. Greater coordination between NATO and the EU, hinted at in the Vilnius communiqué, could potentially mitigate disagreement on such issues. North Atlantic Treaty Organization, "Vilnius Summit Communiqué," July 11, 2023; Janka Oertel, oral testimony for U.S.-China Economic and Security Review Commission, *Hearing on Europe, the United States, and Relations with China: Convergence or Divergence?* June 15, 2023, 216.

†These four countries have been informally known as the "Asia Pacific Four" (AP4) and more recently, the "Indo-Pacific Four" (IP4). Mirna Galic, "What's behind NATO's Tightening Ties with Its Indo-Pacific Partners?" *United States Institute of Peace*, July 6, 2023; Mirna Galic, "Despite Ukraine Focus, Asia-Pacific to Play Prominent Role at NATO Summit," *United States Institute of Peace*, June 27, 2022.

NATO Moves to Address Challenges from China— *Continued*

by explicitly identifying “shared security challenges” for further cooperation, including cyber defense, technology, and combating hybrid threats.¹⁷¹ NATO also announced an agreement on a new partnership program with Japan, which will entail deeper cooperation in 16 areas aimed at increasing dialogue, resilience, and military interoperability, though the once-planned NATO liaison office in Tokyo was not mentioned.¹⁷²

Europe Is Developing Its Strategy to “De-Risk” Relations with China

Europe Seeks to Reduce Economic Vulnerability and Increase Economic Resilience

Like the United States, the EU seeks to build economic resilience by limiting its exposure to and dependence on China. Over the past five years, as China’s economic statecraft toward the EU has intensified and European views of China have shifted, the EU has developed a set of economic tools to mitigate the impact of China’s coercive and unfair trade practices. In general, the EU’s measures seek to limit foreign firms’ access to critical aspects of the European economy, neutralize the competitive advantage foreign firms derive from distortive trade practices and a lack of market reciprocity, and coordinate an EU response to economic coercion against any member country. Some of these policies—like inbound investment screening—converge with the United States’ evolving economic approach to China, while others—like AI regulations—currently diverge from the U.S. approach.

- *Inflowing foreign investment screening mechanisms:* Similar in nature to the Committee on Foreign Investment in the United States (CFIUS), in October 2020 the EU issued a foreign investment screening framework to review the security implications of inflowing investment in critical sectors like infrastructure, nuclear technologies, semiconductors, and defense, among others.¹⁷³ Unlike CFIUS, the EU’s mechanism is voluntary and allows member states to determine if and how they implement the policy.¹⁷⁴ As of August 2023, 21 of the EU’s 27 member states currently have an investment screening mechanism in place, and due in part to these mechanisms, China’s investment into the EU has fallen to an eight-year low.¹⁷⁵ The varied nature of screening mechanisms across countries and their relatively lax implementation in some countries leaves room for China to secure sizable investments in critical sectors. For example, despite Portugal having an investment screening protocol in place since 2014, Beijing’s state-owned China Communications Construction Company (CCCC) was able to purchase a 30 percent stake in the Portuguese infrastructure conglomerate Mota-Engil.¹⁷⁶ The CCCC now has a role in infrastructure development projects across Europe, Latin America, and Africa through its stake in Mota-Engil.

- *International procurement instrument*: In August 2022, the EU created a mechanism—the international procurement instrument (IPI)—to penalize bidders on EU contracts if European firms do not have reciprocal access to the bidder’s market.¹⁷⁷ The IPI measures apply to tenders worth at least 15 million euros for works and concessions and 5 million euros for goods and services.¹⁷⁸ The IPI was designed in part to give Europe greater leverage in market access negotiations with emerging markets generally and China specifically.¹⁷⁹ Chinese firms have secured several prominent and high-value contracts through the EU’s open and transparent bidding process, while EU firms remain unable to compete fairly in China’s procurement market.*¹⁸⁰
- *Foreign subsidies regulation*: In January 2023, the Foreign Subsidies Regulation (FSR) went into force, giving the EU the ability to penalize foreign firms operating in the European market that receive distortive financial contributions from their home governments. The language describing “distortive” contributions is vague and may potentially include direct subsidies, tax breaks, and even the provision of electricity from a public utility.¹⁸¹ Firms that benefit from foreign subsidies may be barred from winning public contracts and may face redressive measures, including an acquisition ban, divestments of assets, or a reduction in capacity or market presence.¹⁸² Although the policy was developed specifically in response to Chinese state-owned enterprises operating in Europe, its expansive definition leaves open the possibility of it applying to private firms, including those from the United States.¹⁸³ In October 2023, the European Commission launched an antisubsidy investigation into EVs coming from China, with President von der Leyen arguing that prices for Chinese EVs are made “artificially low by huge state subsidies.”†¹⁸⁴
- *Anticoercion instrument*: In March 2023, the EU reached a provisional political agreement on a market-wide ACI.‡¹⁸⁵ The ACI allows for the application of trade restrictions on countries attempting economic coercion based on a majority vote of EU member states, including increased duties, import or export licenses, and public procurement restrictions.¹⁸⁶ China’s coercive actions against Lithuania in 2021 provided the final push for Europe to begin the development of a formal trade-defense

*China does not currently provide reciprocal access to foreign bidders in its government procurement contracts. China has been in negotiations to join the WTO’s Government Procurement Agreement (GPA) since 2007. The GPA aims to open government procurement markets to foreign competition in a reciprocal manner, and the agreement currently includes all 27 EU member states. As part of its bid to join, China has offered six separate market access proposals to the GPA, all of which have been denied for not providing sufficient access to foreign bidders. China’s latest offer was submitted in 2019 and a final determination has not been provided. Significant points of issue remain in the latest proposal, including an assertion that China “may require” the incorporation of technology transfer and domestic content offsets in foreign procurement bids, which are prohibited by the GPA. Jean Heilman Grier, “WTO Procurement Committee Resumes Business,” *Perspectives on Trade*, May 24, 2023; Jean Heilman Grier, “14th Year: Whither China’s GPA Accession?” *Perspectives on Trade*, April 27, 2021; World Trade Organization, “China Submits Revised Offer for Joining Government Procurement Pact,” October 23, 2019.

†For more on the EU’s antisubsidy investigation into China’s EV industry, see Chapter 1, Section 1, “U.S.-China Bilateral and China’s External Economic and Trade Relations.”

‡The negotiated ACI text will be endorsed at a final meeting, after which the agreement must be approved by the European Parliament and Council before it can enter into force.

mechanism, although the ACI has yet to be fully approved and enter into force.¹⁸⁷

- *Outbound investment controls:* Paralleling developments in the United States, the EU is currently considering an outbound investment review mechanism for European companies operating in high-tech industries, including AI, quantum computing, and biotechnology.¹⁸⁸ The EU legislation would likely focus on mitigating the leakage of sensitive and dual-use technologies to third parties, such as China.¹⁸⁹ The EU has yet to propose any legislation on potential investment controls, and questions remain regarding the EU's ability to enact such a policy. Controlling outbound investment in sensitive technologies is often framed as a national security issue. The EU cannot create binding legislation on matters of national security, however, and member states retain the right to choose if and how they implement EU security measures.¹⁹⁰ This limits the potential impact of any such legislation.
- *Artificial Intelligence Act:* The EU and China are developing their own regulations on AI, with each working toward different goals. The EU aims to establish safeguards for the application of AI by categorizing uses based on perceived risk. Uses classified as "limited risk" must comply with minimal transparency requirements, while uses classified as posing an "unacceptable risk"—like social scoring and real-time facial recognition—may be banned.¹⁹¹ The European Parliament passed a draft of the AI Act in June 2023, but according to current projections, the act is not expected to fully enter into force until early 2025, causing regulations to be at least two years behind the current state of the technology.¹⁹² At the same time, China is quickly moving to regulate this technology. The CCP released a set of draft rules in April that would force chatbots to follow strict censorship policies and force algorithms to follow certain regulations on search and share functions.¹⁹³ Both the EU's and China's centralized approaches to AI regulations differ from the United States' decentralized approach. To date, the U.S. Federal Government has not produced comprehensive legislation on AI, although its use and development is addressed through several narrowly targeted pieces of legislation.¹⁹⁴ Setting regulations quickly and early matters for the future of AI development, as initial regulations have the potential to set the parameters for what are and are not acceptable uses of the technology.

The EU seeks to promote and expand on some of these efforts as part of its recent strategy to "de-risk" its economic relations with China. Prior to her trip to Beijing in April 2023, President von der Leyen delivered a speech on EU-China relations and highlighted the need for Europe to maintain ties while also economically de-risking relations.¹⁹⁵ Conceptually, de-risking involves limiting economic vulnerability to factors stemming from China's control over critical aspects of global economic exchanges through diversification.¹⁹⁶ While de-risking is often characterized as an alternative to decoupling, the two share the same fundamental goal of reducing exposure to risk from China.¹⁹⁷ The added value of de-risking is primarily in its

rhetorical appeal. Relative to decoupling, an early term introduced by the United States that is often interpreted by European leaders to mean a complete cessation of relations with China,* de-risking can be presented as the more prudent and measured approach.† In addition, countries can diplomatically frame policies like investment screening as an attempt to build resilience and reduce risk rather than an attempt to limit economic ties to China. Perhaps due to this diplomatic appeal, de-risking has gained traction internationally, and the leaders of the G7 issued a joint communiqué to economically “de-risk” without “decoupling” from China following a summit in Tokyo in May 2023.¹⁹⁸

What de-risking looks like in practice is still in development, but initial implementation coincides with U.S. policy to limit China’s access to sensitive technology and reduce supply chain dependencies. In her April speech, President von der Leyen indicated restrictions on trade in highly sensitive and dual-use technologies and improved investment screening procedures—including the creation of an outbound investment screening mechanism—are being considered or are currently in development.¹⁹⁹ The EU has also stated intent to reduce critical supply chain dependencies, including through the recently proposed European Critical Raw Materials Act.²⁰⁰ Like the United States, Europe is highly dependent on China for critical raw materials, including minerals needed to produce cutting-edge green technology and batteries. The efforts outlined by President von der Leyen converge with standing and recently enacted U.S. policy. In August 2023, the Biden Administration issued an executive order directing the U.S. Department of the Treasury to establish a program reviewing U.S. investments into national critical sectors in “countries of concern,” which currently only covers China.²⁰¹ This program would include targeted investment prohibitions as well as mandatory notifications for investments in quantum technology, semiconductors, and AI.‡²⁰² In addition, both the Biden and Trump Administrations signed executive orders and passed legislation to fund research on and domestic production of rare earth metals in order to reduce U.S. dependence on China.²⁰³

Although U.S.-EU cooperation on de-risking from China remains limited in scope, joint efforts have delivered some narrow but positive developments. In June 2021, the United States and EU established the Trade and Technology Council (TTC) in an effort to deepen ties and expand cooperation.²⁰⁴ While the TTC predates discussions on de-risking, the council has become an important transatlantic forum for coordinating democratic approaches to trade, technology, and security. The TTC hosts ten working groups chaired by relevant U.S.

*In her speech outlining the EU’s intent to de-risk from China, delivered before her April 2023 trip to Beijing, President von der Leyen stated, “I believe it is neither viable—nor in Europe’s interest—to decouple from China. Our relations are not black or white—and our response cannot be either. This is why we need to focus on de-risk—not de-couple.” Germany’s recent China strategy also stated, “The Federal Government is not seeking to engage in any decoupling with China. We want to preserve our close economic ties with the country.” Germany Federal Foreign Office, *Strategy on China of the Government of the Federal Republic of Germany*, July 2023, 25; European Commission, *Speech by President von der Leyen on EU-China Relations to the Mercator Institute for China Studies and the European Policy Centre*, March 30, 2023.

†For more information on the differences between de-risking and decoupling, see Chapter 1, Section 1, “U.S.-China Bilateral and China’s External Economic and Trade Relations.”

‡For more information on the executive order, see Chapter 1, Section 1, “U.S.-China Bilateral and China’s External Economic and Trade Relations.”

agencies and European Commission services that work on topics related to de-risking, such as securing supply chains.* Although China is not explicitly mentioned in the TTC's outlined mission, addressing China's increasing influence is a point of focus for the council. Toward that end, the TTC has produced tangible policy developments, including plans to operationalize a joint early warning mechanism for disruptions in semiconductor supply chains and the development of a joint AI Roadmap.²⁰⁵ In addition to EU-level efforts on a broad set of issues, individual European countries have also partnered with the United States to confront China's growing challenge. For example, in March 2023, the Netherlands joined the United States in restricting the exports of semiconductor technology to China.²⁰⁶

Europe's De-Risking Tools are Limited in Scope but Broad in Reach

Many of the EU's trade defense and other economic tools fail to adequately address China's practices due to the policies' voluntary application or high levels of support required for the policy to operate. Some of these initiatives, like the inbound investment screening mechanism, are voluntary and allow national governments to choose if and how they implement the guidelines. Policies that are not voluntary often require a high degree of member state support or evidence to become operational, like the ACI and IPI. Uneven application and high thresholds for operation present China with the opportunity to maneuver around EU measures by operating just under thresholds for government response or working through countries with less restrictive regulations. For example, the Chinese state-owned firm COSCO originally sought to purchase a 35 percent stake in Hamburg port but eventually reduced its request to a 24.9 percent stake—just below the 25 percent threshold to trigger a federal review of the investment.[†]²⁰⁷ Similarly, Chinese telecom firm Huawei has increased its partnerships with and investments in Hungary as countries across Europe have implemented EU guidelines to reduce or eliminate the presence of Chinese equipment in their 5G networks.²⁰⁸ Unlike other EU member states, Hungary does not have any restrictions on the use of Huawei equipment, and the government has expanded its political and economic ties with China over the past decade as part of the its “Eastern Opening”‡

*Working groups include: tech standards, climate and green tech, secure supply chains, information and communications technology and services (ICTS) security and competitiveness, data governance and tech platform regulation, misuse of technology threatening security and human rights, export controls, investment screening, promoting small and medium-sized enterprises' access to and use of digital technologies, and global trade challenges. United States Trade Representative, *U.S.-E.U. Trade and Technology Council (TTC)*.

†Chancellor of Germany Olaf Scholz initially approved the 24.9 percent bid in October 2022 but was met with substantial pushback from within the governing coalition after a news investigation revealed that the Scholz chancellor had tried to push the deal through despite concerns from six federal ministries. Despite these concerns, the German government fully approved the COSCO purchase in May 2023. Hans von der Burchard, “Germany Doubles Down on China Port Deal despite New Security Concerns,” *Politico*, May 10, 2023; *Norddeutscher Rundfunk*, “Port of Hamburg: Chancellery Apparently Wants to Enforce China Business” (Hamburger Hafen: Kanzleramt will China-Geschäft offenbar durchsetzen), October 20, 2022. Translation.

‡Prime Minister Orbán introduced the Eastern Opening policy as a way to reduce Hungary's dependence on European countries following the economic upheaval of the 2008 global financial crisis and subsequent eurozone crisis and a way to build economic ties with the authoritarian countries of Russia and China. Paweł Paszak, “Hungary's ‘Opening to the East’ Hasn't Delivered,” *Center for European Policy Analysis*, July 12, 2023.

policy and turn toward authoritarianism following the reelection of Viktor Orbán as prime minister in 2010.²⁰⁹

In addition, the EU's defensive economic tools are often limited in scale and scope due to the EU's arduous consensus-building process. In negotiations on the ACI, EU members reduced the effectiveness of the instrument by purposefully "watering down the executive power of the [European] Commission" to enact the measure by requiring a qualified majority vote from the European Council.²¹⁰ While this dilution of power increases the instrument's appeal among member states, it also creates an opening for intra-European division and the possibility for China to manipulate this division to its advantage.²¹¹ Moreover, the ACI has been in discussion since 2018 and has yet to be formally adopted; it is not expected to enter into force until autumn of 2023 at the earliest.²¹² The EU's slow-moving and satisficing policy process undermines its ability to respond effectively to rapidly developing threats from China.

Although often developed with China in mind, the EU purposefully writes "country neutral" policies that can be applied to other countries, including the United States, and may undermine U.S.-EU cooperation on China. This neutrality benefits the EU in several ways, including by making their policies WTO compliant, avoiding pushback from targeted countries, and giving the EU versatility to apply policy to a broad set of actors. Discussion on the ACI initially began as a potential response to U.S. tariffs imposed on imported European steel in 2018. More recently, when discussing the impacts of the EU's foreign subsidies regulation, Executive Vice President of the European Commission Margrethe Vestager stated that "it is conceivable that subsidies that are given in the United States [through the Inflation Reduction Act (IRA)] will be relevant to notify in the EU."²¹³ In this context, country neutrality can be interpreted as both a diplomatic choice to avoid singling out China as well as a subtle warning to the United States to reconsider policies with which the EU disagrees, such as the IRA. Moreover, country neutrality gives the EU the option of equally applying these policies to the United States.* Finally, the broad applicability of the EU's policies reduces trust and the potential space for U.S.-EU cooperation on China.

Diversity in Views across the EU Complicates Achieving Concerted, Effective China Policy

Diversity of attitudes between and even within individual European countries' perceptions of China enhances discussion but undermines consensus, resulting in policy with limited scope and impact. By geography, Baltic countries—informed by their experiences under the Soviet Union and proximity to Russia—tend to hold more hawkish views and desire closer coordination with the United States, par-

*The EU's Digital Services Act (DSA) and Digital Markets Act (DMA) are two "country neutral" policies currently in development that have the potential to harm U.S. firms operating in the EU by targeting and limiting their use of data. The DSA and DMA seek to regulate the way companies use data and manage online intermediary services, like social media and search engines, as well as online platforms that act as market "gatekeepers," like app stores. Although these policies may be applied to firms from any country, they are written in a way to specifically target several large U.S. firms while avoiding EU firms. William Schwartz, "The EU's Digital Services Act Confronts Silicon Valley," *Wilson Center*, February 15, 2023; Colin Wall and Eugenia Lostri, "The European Union's Digital Markets Act: A Primer," *Center for Strategic and International Studies*, February 8, 2022; Meredith Broadbent, "Implications of the Digital Markets Act for Transatlantic Cooperation," *Center for International and Strategic Studies*, September 15, 2021.

ticularly in addressing security issues related to China.²¹⁴ Southern European states tend to be more open to engagement with China, as China was able to exploit these countries' dissatisfaction with the EU's and Germany's handling of the eurozone crisis in 2009 to expand its economic ties with the region.²¹⁵ China has found that it had less appeal in the region following the COVID-19 pandemic, however, as southern European states that were disaffected during the eurozone crisis were given greater fiscal space by the EU during and beyond the pandemic.²¹⁶ In between these extremes sit several of the EU's largest economies, including France, Germany, and the Netherlands. These countries' views and approaches are driven in large part by their business communities, which harbor complex and competing interests arising from firms' various levels of connectivity with the Chinese market. Finally, several EU and non-EU European countries with declining democratic institutions and motivated by economic opportunism—including Hungary and Serbia—view China as a viable partner and useful card to play when negotiating with the EU and member states.²¹⁷ This variety of perspectives both enhances and undermines European policy discussions about China.

Despite De-Risking, Large and Powerful European Firms Remain Embedded in China

China is a major market for Europe, and the region engages with China at a level that is often commensurate with or even surpasses the United States. In 2022, China was the top supplier for both the U.S. and EU markets, comprising 16.5 percent of imports to the United States and 20 percent of imports to the EU. That same year, EU goods comprised only 10.5 percent of China's imports, while U.S. goods comprised just 6.5 percent of China's imports.²¹⁸ Similarly, while aggregated reciprocal FDI flows have hit a recent low, a small set of large European countries and their largest multinationals dominate the European investment landscape in China.²¹⁹ German, Dutch, and French firms comprised at least 70 percent of annual EU investment inflows into China from 2017 to 2021, with most funding flowing to one of five sectors: autos, food processing, pharma/biotech, chemicals, and consumer products manufacturing.²²⁰ In 2021, 46 percent of European investment transactions in China were generated by Germany.²²¹ France is similarly well invested, with some 1,100 French companies holding \$28.1 billion (25 billion euro) in FDI stock in China as of 2017.²²² Moreover, these two countries comprised half of the eurozone's GDP in 2022, giving them extraordinary weight in decision-making on China policy within the EU as well.²²³

France and Germany's substantial economic ties to China increase the cost of de-risking relations, making these countries less willing to pursue meaningful action to counteract China's growing challenge. From 2018 to 2021, ten European companies comprised nearly 80 percent of European FDI into China.²²⁴ Among these investors, Germany's three big automakers (Volkswagen, BMW, and Daimler) and the chemicals group BASF accounted for 34 percent of total European investment flows.²²⁵ In terms of exports, autos are particularly important to Germany; in 2022, passenger vehicles comprised 18 percent of Germany's exports to China, while vehicles and car parts comprised 15.6 percent of Germany's exports to the

world.²²⁶ Luxury consumer fashion play a similarly important role in France. In 2022, over 10 percent of French exports to China were in handbags, apparel, or footwear.²²⁷ Moreover, despite muted gains in other segments of the Chinese economy, China's luxury spending saw a relatively strong rebound following the end of Zero-COVID. The French fashion group LVMH, which owns brands like Louis Vuitton and Dior, posted an 18 percent increase in 2023 first-quarter revenue relative to a year prior for its largest division—fashion and leather goods—which is attributed in part to rebounding Chinese spending.²²⁸ LVMH does not provide disaggregated revenue statements for its operations in China, but regional figures suggest the group's China operations are performing well. Of the \$83.5 billion (79.2 billion euro) of revenue it earned in 2022, approximately 30 percent (\$25.1 billion) came from sales in Asia, with the exclusion of Japan.²²⁹ By comparison, the United States accounted for 27 percent (\$22.5 billion) of revenue, while Europe accounted for 23 percent (\$19.2 billion).²³⁰ To capitalize on growth potential, the German automaker and French luxury industries are expanding operations in China despite calls for de-risking by European leaders. Following a visit by Chinese Premier Li Qiang to Munich in June 2023, BMW CEO Oliver Zipse mirrored CCP rhetoric in saying strong ties with China are a “win-win” for the auto industry.²³¹ Similarly, LVMH Financial Director Jean-Jacques Guiony asserted that “the Chinese clientele is much more important than it was in 2019.”²³² In recognition of this importance, LVMH Chairman Bernard Arnault visited China in June 2023, where he stated he was “optimistic about the Chinese market.”²³³

Despite rising risks, European multinational companies remain invested in China to benefit from the promise of its growing consumer market and its research and development (R&D) ecosystem, especially as Europe's market growth stagnates. Despite its long-term challenges in encouraging and expanding domestic consumption, China's consumer market has grown significantly, with household expenditure nearly tripling from \$2.6 trillion in 2011 to \$6.8 trillion by 2021.²³⁴ By comparison, the EU's household expenditure rose from \$8.7 trillion to \$8.8 trillion over the same period.²³⁵ The current size and future growth potential of China's domestic market is large enough to draw in Europe's largest companies, even if the majority of Chinese consumers are not fully engaged. In addition to revenue, European firms invested in China report benefiting from China's rapidly developing R&D ecosystem. According to a survey of European firms conducted by the Mercator Institute for China Studies and the European Chamber of Commerce in China, two-thirds of respondents reported finding value in China's fast-paced commercial application of R&D results.²³⁶ China's dynamic R&D environment is a substantial draw for European companies, and many that remain invested in China report plans to expand their R&D activities and further integrate them with global strategies to capitalize on China's competitive talent pool, speed of commercialization of new tech, and “potential of combining European hardware excellence with Chinese software expertise.”²³⁷

European multinationals may further frustrate the EU's attempt to economically de-risk through investment restrictions by siloing

production in China—a type of firm-level political de-risking. Siloing occurs when a firm sections off productive activities and sales in a given market by developing a supply chain and distribution strategy that is unique to the market and that minimizes contact between operations in the siloed economy and other economies. European and U.S. firms are increasingly siloing production in China as a way to reduce exposure to political risks, including the potential of import tariffs, outbound investment screening, new regulations, and other economic sanctions.²³⁸ For example, following the economic turmoil of the COVID-19 pandemic, BMW invested substantial sums to insulate and isolate its production in China. In February 2022, BMW increased its ownership share in the joint venture it had with Brilliance China Automotive Holdings from 50 percent to 75 percent. Four months later, BMW-Brilliance opened a \$2.2 billion vehicle assembly plant in Shenyang, China, specializing in the production of EVs.²³⁹ To support its China-based EV production, BMW invested \$1.4 billion to expand its EV battery plant, also located in Shenyang.²⁴⁰ At the same time, the firm announced plans to manufacture its *Neue Klasse* EVs in China for the Chinese market using electric batteries produced in the newly expanded Shenyang plant by 2026.²⁴¹ These investments increased BMW's reach into the Chinese market while decreasing its dependency on external suppliers and its exposure to tariffs.† This siloing increases European firms' entrenchment in the Chinese market, reducing the effectiveness of economic sanctions and trade restrictions while also reducing Europe's ability to effectively de-risk from China.

Europe's Approach to Taiwan

Taiwan is a topic of growing importance in Europe; however, European governments and publics have not yet reached definitive conclusions about their interests and possible potential responses to Chinese aggression toward Taiwan, an indecision that undermines a unified U.S. and allied approach to deterrence. Recent discourse on Taiwan in Europe demonstrates increasing attention to Taiwan as a strategic issue but is still lacking consensus on specific policy positions, including on the implications of a war over Taiwan.²⁴² Gudrun Wacker, senior fellow at the German Institute for International Security Affairs, explained that even the presence of a strong “pro-Taiwan caucus” equivalent in many European parliaments has not yet translated into serious policy attention.²⁴³ The EU and European states could bolster deterrence, however, by more clearly articulating the punishments, including economic costs, they would impose on China if it attacks the self-governed island, demonstrating their

*Currently, EU automakers make cars in Europe and China for sale in both Europe and China. Of the 846,000 cars BMW delivered to Chinese customers in 2021, approximately 150,000 to 200,000 were made in Europe, while the rest were produced in China at BMW's Shenyang facility. BMW also produces cars in China for sale in Europe, including its all-electric iX3. At the same time, Chinese automakers also make cars in China for sale in both China and Europe. On July 2023, the state-owned SAIC Motor announced its intent to build its first EV car factory in Europe in response to rising European demand. Annabelle Liang, “Chinese Owner of Iconic MG Car Brand to Build Europe Plant,” *BBC*, July 6, 2023; Dan Mihalascu, “China's Exports of Electric Vehicles to Europe Reach Record Levels,” *InsideEVs*, January 4, 2023; Jens Kastner, “BMW and Audi Suspend Shipments by Train to China,” *Nikkei Asia*, April 26, 2022.

†Both China and EU member states impose tariffs on imported vehicles, Nick Gibbs, “EU Should Impose Higher Tariffs on Chinese Automakers, Carlos Tavares Says,” *Automotive News Europe*, October 19, 2022; *Export Gov*, “China—Automotive Industry,” July 30, 2019.

commitment to Taiwan's security through deeper exchanges and explicit expressions of public support for Taiwan and increasing contributions to Taiwan's defense via expanded arms transfers.*

Signs of Increasing European Concern for Taiwan

European states and the EU are expanding their ties to Taiwan and formalizing their public positions on Taiwan's security, though these actions still fall short of clear statements regarding European countries' potential response to a war. These activities include a growing volume of unofficial diplomatic visits, increased economic integration and dialogue, and, in some cases, modest contributions to Taiwan's defense capabilities. Concurrently, both individual European states and the EU are increasing rhetorical support for Taiwan and expanding their presence in the Indo-Pacific.

Taiwan Increasingly Features as a Strategic Issue for Europe

Taiwan is rising in prominence as an issue of strategic concern for Europe. In her testimony before the Commission, Dr. Oertel assessed that although Taiwan did not previously rank as a key strategic topic for EU member states, this has changed dramatically in the last couple of years.²⁴⁴ Veerle Nouwens, Shangri-La Dialogue senior fellow for Indo-Pacific Defense and Strategy at the International Institute for Strategic Studies, argued in testimony before the Commission that European countries have become "increasingly aware" of the global disruption that would result from a conflict in the Indo-Pacific, "particularly around flashpoints such as Taiwan."²⁴⁵ Ivan Kanapathy, senior associate Freeman Chair in China Studies at the Center for Strategic and International Studies, assessed that U.S. diplomatic efforts have helped awaken European allies to the serious consequences a Taiwan contingency would have for the world economy in light of the island's key role in global electronics supply chains.²⁴⁶ Russia's war in Ukraine has also had a serious catalyzing effect on this process, increasing attention to the potential for dangerous escalation in the Taiwan Strait and to the interlinkages between European and Indo-Pacific security.²⁴⁷

Increasing Integration and Exchanges

Exchanges and linkages between European countries and Taiwan are increasing in the political and economic realms.²⁴⁸ European countries have increasingly demonstrated willingness to broaden unofficial engagement within the confines of their own One China

*"Deterrence" refers to the practice of discouraging an opponent from taking an unwanted action, such as military aggression. Deterrence relies on credible threats that create fear in the mind of the opponent that it will either suffer unacceptable retaliation or be unable to achieve its objectives should it undertake the unwanted action. These approaches are known as "deterrence by punishment" and "deterrence by denial," respectively. States practicing deterrence often employ threats of military force, but they can also leverage nonmilitary tools of statecraft such as economic sanctions or diplomatic exclusion to deter aggression against themselves or third parties. Successful deterrence in the Taiwan Strait requires China to recognize that another party has the capabilities and the will to carry out a threat to intervene in response to a Chinese attack on Taiwan. China must also believe that there are actions that could lead to a response from the other party and that costs will be imposed on China if it takes those actions. For more on deterrence in the Taiwan Strait, see U.S.-China Economic and Security Review Commission, Chapter 4, "A Dangerous Period for Cross-Strait Deterrence: Chinese Military Capabilities and Decision-Making for a War over Taiwan," in *2021 Annual Report to Congress*, November 2021, 390.

policies* by dispatching officials to visit Taiwan or otherwise hosting visiting Taiwan officials.²⁴⁹ In the ten months immediately following then Speaker of the House of Representatives Nancy Pelosi's August 2022 visit to Taiwan, more than a dozen European countries sent officials to visit the island.²⁵⁰ A March 2023 Czech delegation to Taiwan headed by Speaker of the Czech Chamber of Deputies Markéta Pekarová Adamová had at least 150 members and also included head of the counterintelligence Security Information Service, director of the National Cyber and Information Security Agency, and other high-level security officials.²⁵¹ (For more on the exchange of visits between Europe and Taiwan in 2023, see Chapter 5, Section 2, "Taiwan.")

EU institutions have elevated the importance of economic ties with Taiwan, supported by growing interest among European capitals.[†]²⁵² In its 2021 Indo-Pacific Strategy, the European Commission identified Taiwan as a like-minded partner for cooperation in resilient supply chains, semiconductor technology, and data protection, among other shared interests, and assessed that the use of force in the Taiwan Strait has the potential to impact European security and prosperity.²⁵³ In June 2022, the European Commission upgraded its trade and investment dialogues with Taiwan, which had been ongoing at the technical level for over 20 years, to the ministerial and director-general level for the first time in recognition of the benefit from higher-level coordination.²⁵⁴ Since the upgrade, the two sides have used the meeting to discuss issues such as supply chains, semiconductors, export controls, investment screening, research and innovation, offshore wind energy, agriculture, digital trade facilitation measures, and alignment of sanctions against Russia.²⁵⁵

Rhetorical Support for Taiwan's Security

Governments of some European states as well as the EU have recently expressed clearer concern for Taiwan's security in their public statements, although these statements fall short of communicating any specific policy response in the event of aggression (see "Formal Planning and Coordination Appear Limited" below). In response to the PLA's large-scale military exercises around Taiwan

* European governments, including the EU, EU member states, and the UK, recognize the government of the People's Republic of China as the legal government of China, yet they also reserve the right to conduct unofficial relations with Taiwan. Under the auspices of their own One China policies, these governments maintain close cooperation with Taiwan on issues such as trade, investment, human rights, connectivity and digital issues, people-to-people ties, green energy, labor, disaster management, and innovation. Veerle Nouwens, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Europe, the United States, and Relations with China: Convergence or Divergence?* June 15, 2023, 10; Elsy Fors Garzon, "France Stresses Adherence to One-China Policy," *Plenglish*, April 14, 2023; Jason Hovet and Jan Lopatka, "Czech PM: No Change to One-China Policy—Online Interview," *Zawaya*, January 31, 2023; Mission of the People's Republic of China to the European Union, *Questions and Answers Concerning the Taiwan Question (2): What Is the One-China Principle? What Is the Basis of the One-China Principle*, August 15, 2023; European External Action Service, *The European Union and Taiwan*, July 26, 2021.

† Recent examples of increasing cooperation between Taiwan and individual EU member states include ongoing talks over Taiwan semiconductor company TSMC potentially opening a factory in Germany and the raft of investment measures from Taiwan in Central and Eastern European countries, particularly Lithuania. Rhynnon Bartlett-Imdegawa, "Taiwan-Backed Fund Invests in Central, Eastern as Ties Warm," *Nikkei Asia*, June 24, 2023; Ivan Kanapathy, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Europe, the United States, and Relations with China: Convergence or Divergence?* June 15, 2023, 5; *Reuters*, "TSMC Still in Talks on Possible German Plant, No Decision before August at Earliest -Exec," May 23, 2023; *Taiwan Today*, "Taiwan, Lithuania Make Great Strides in Economic Cooperation," January 19, 2023.

following then Speaker Pelosi's visit to Taiwan in August 2022, the EU High Representative joined the foreign ministers of the G7—which also includes France, Germany, Italy, and the UK—in issuing a joint statement reaffirming their “shared commitment” to peace and stability across the Taiwan Strait.²⁵⁶ In the statement, the leaders called upon Beijing “not to unilaterally change the status quo in the region by force” and pushed back against China's use of routine visits by foreign dignitaries as a pretext for aggression.²⁵⁷ On January 18, 2023, the European Parliament passed a resolution on the implementation of the EU's common security and defense policy that included an expression of “grave concern” over activities such as China's rapid military buildup, military pressure tactics, and cyber and disinformation campaigns aimed at Taiwan.²⁵⁸ During her trip to China in April 2023, German Foreign Minister Annalena Baerbock warned the Chinese leadership directly that “a unilateral and violent change in the status quo would not be acceptable.”²⁵⁹ In a speech to the European Parliament on April 18, President von der Leyen emphasized that the EU “stand[s] strongly against any unilateral change of the status quo [in the Taiwan Strait], in particular by the use of force,” representing a much firmer position than the EU has taken in the past.*²⁶⁰

Supporting Taiwan's Self-Defense

Several European states have taken new steps to support Taiwan's military modernization through the sale of arms and weapons technology, although these ad hoc transfers remain limited in their potential contribution to Taiwan's self-defense. In 2020, France approved the sale of additional equipment to upgrade the missile interference system on a frigate previously sold to Taiwan, despite diplomatic displeasure from Beijing.²⁶¹ In 2022, the UK approved a substantial increase† in exports of submarine components and technology to Taiwan.²⁶² These contributions to the development of Taiwan's indigenous submarine program and the defense of its surface fleet, however, are unlikely to significantly improve Taiwan's resistance to a PLA attack due to their inconsistency with an asymmetric defense strategy.‡²⁶³ Reports around the Czech delegation visiting Taiwan in March 2023 revealed that the two parties were nearing agreement on the sale of 155 mm self-propelled howitzers,

*Josep Borrell stated in an opinion article in April 2023 that Taiwan concerns Europe “economically, commercially, and technologically” and called upon European navies to “patrol the Taiwan Strait” to demonstrate European commitment to freedom of navigation. Ivan Kanapathy, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Europe, the United States, and Relations with China: Convergence or Divergence?* June 15, 2023, 5; Veerle Nouwens, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Europe, the United States, and Relations with China: Convergence or Divergence?* June 15, 2023, 10; Josep Borrell, “TRIBUNE: Josep Borrell, Head of European Diplomacy: ‘A Cold Look at China’” (TRIBUNE. Josep Borrell, chef de la diplomatie européenne : « Un regard froid sur la Chine »), *Journal du Dimanche*, April 22, 2023. Translation.

†Over the first nine months of 2022, the UK government authorized 25 submarine-related export licenses to Taiwan with an approximate total value of \$201 million, more than the previous six years combined. Andrew Maccaskill and Elizabeth Piper, “Exclusive: UK Approves Increased Submarine-Related Exports to Taiwan, Risking Angering China,” *Reuters*, March 13, 2023.

‡In fact, as Kharis Templeman, research fellow at the Hoover Institution at Stanford University, argued in his testimony before the Commission in 2021, continued procurement of traditional platforms limits the resources available for the purchase of asymmetric systems by threatening to dominate much of Taiwan's procurement budget for years to come. Kharis A. Templeman, written testimony for the U.S.-China Economic and Security Review Commission, *Hearing on Deterring PRC Aggression toward Taiwan*, February 18, 2021, 7.

which some view as inconsistent with an asymmetric defense strategy, as well as between 200 and 400 large semitrailer trucks to transport Taiwan missiles.²⁶⁴ The two sides also plan to work together on the development of military drones alongside other cooperation and exchange efforts in the military, cybersecurity, and counterdisinformation domains.²⁶⁵ European governments have the opportunity to contribute more to Taiwan's self-defense through further military sales, particularly of weapons consistent with an asymmetric defense strategy.* As Ms. Nouwens argued in her testimony for the Commission, European states could also support Taiwan by helping build up stockpiles of critical nonmilitary supplies such as food and medicine on the island, which could be of critical importance in the event of a PLA blockade.[†]²⁶⁶

Strengthening Europe's Indo-Pacific Presence

European governments' increasing attention to Taiwan is occurring alongside their growing focus on the Indo-Pacific region. In her testimony before the Commission, Ms. Nouwens assessed that European governments have "recognized that the global economic and geostrategic center of gravity has shifted to the Indo-Pacific, bringing with it economic opportunities as well as concerns."²⁶⁷ This growing strategic geoeconomic interest in the region has spurred several governments, including the EU, to adopt Indo-Pacific strategies or similar guiding documents in recent years.[‡]²⁶⁸ Ms. Nouwens argues that although European governments also consider issues such as climate change, transnational crime, and global health to

*Mr. Kanapathy assessed in his testimony for the Commission that European countries that have sold arms to Taiwan in the past few years have faced little, if any, economic retaliation from Beijing beyond diplomatic demarche. Ivan Kanapathy, oral testimony for U.S.-China Economic and Security Review Commission, *Hearing on Europe, the United States, and Relations with China: Convergence or Divergence?* June 15, 2023.

†Taiwan's geography makes its trade-dependent economy highly vulnerable to a naval and air blockade. Recent estimates from Taiwan's government ministries place the estimated life of the island's food stores at one to six months and the estimated life of its oil reserves at 158 days, although these stockpiles could last longer than official estimates if Taiwan authorities rationed their distribution. For more on Taiwan's ability to endure a blockade by the PLA, see U.S.-China Economic and Security Review Commission, Chapter 4, "A Dangerous Period for Cross-Strait Deterrence: Chinese Military Capabilities and Decision-Making for a War over Taiwan," in *2021 Annual Report to Congress*, November 2021, 410.

‡France outlined a formal Indo-Pacific Strategy in 2018, making it the first member of the EU to do so and the only one to do so before 2020. France's Ministry of Armed Forces published documents on the topic in 2018 and 2019, and its Ministry of Europe and Foreign Affairs followed suit in 2019. Germany's cabinet approved Policy Guidelines for the Indo-Pacific in September of 2020, and the current government released a Progress Update on those guidelines in 2022. The government of the Netherlands released a document entitled Indo-Pacific: Guidelines for Strengthening Dutch and EU Cooperation with Partners in Asia in 2020. Led largely by the aforementioned three countries, in February 2021, the European Commission released its first EU Strategy for Cooperation in the Indo-Pacific. In April 2021, the Council of the European Union released further Conclusions on the strategy. The Czech Republic released its strategy, entitled The Czech Republic's Strategy for Cooperation with The Indo-Pacific: Closer than We Think, in October 2022. The Lithuanian government released its strategy on July 5, 2023, entitled Lithuania's Indo-Pacific Strategy - For a Secure, Resilient and Prosperous Future. Czech Republic's Ministry of Foreign Affairs, *The Czech Republic's Strategy for Cooperation with the Indo-Pacific*, October 2022; Lithuania's Ministry of Foreign Affairs, *Lithuania's Cooperation with the Indo-Pacific*, July 5, 2023; Germany's Federal Foreign Office, *Stronger Engagement in the Indo-Pacific Region*, September 14, 2022; Pierre Morcos, "France's Shifting Relations with China," *War on the Rocks*, January 4, 2022; Gudrun Wacker, "The Indo-Pacific Concepts of France, Germany and the Netherlands in Comparison: Implications and Challenges for the EU," *European University Institute*, May 2021, 1, 3; Council of the European Union, *Indo-Pacific: Council Adopts Conclusions on EU Strategy for Cooperation*, April 19, 2021; European External Action Service, *EU Strategy for Cooperation in the Indo-Pacific*, April 19, 2021; Government of the Netherlands, *Indo-Pacific: Guidelines for Strengthening Dutch and EU Cooperation with Partners in Asia*, November 13, 2020, 1; France's Ministry of Armed Forces, *France and Security in the Indo-Pacific*, 2019, 1; France's Ministry of Europe and Foreign Affairs, *The Indo-Pacific Region: A Priority for France*, 1, 3.

impact stability in the Indo-Pacific, concern over China's economic and military assertiveness and the risk of China establishing a "sphere of influence" in the region is a significant driving factor of Europe's shifting attention to the Indo-Pacific.²⁶⁹

European states' modest security presence in the Indo-Pacific region also helps send a message of support for regional peace and stability. Although France and the UK are responsible for a large share of European military activity in the Indo-Pacific, other European states such as Germany and the Netherlands have also sent forces to participate in deployments to the region.²⁷⁰

- **France:** The French military has a permanent presence in the Indo-Pacific* and conducts routine deployments throughout the region, including multiple transits of the Taiwan Strait.²⁷¹ France sent a frigate through the Taiwan Strait in 2019.²⁷² In 2021, a French signals intelligence ship transited the Strait in a freedom of navigation demonstration that France's Minister of Armed Forces suggested was also meant to support the status quo in the Taiwan Strait.²⁷³ A French warship again patrolled the Taiwan Strait in April 2023, this time during ongoing People's Liberation Army (PLA) exercises around the island.²⁷⁴
- **UK:** The UK military maintains significant power projection capabilities in the Indo-Pacific‡ as well.§²⁷⁵ For example, in 2021 the UK aircraft carrier *Queen Elizabeth* spent more than six months deployed to the Indo-Pacific.²⁷⁶ A UK survey vessel sailed through the Taiwan Strait in 2019, and in 2021 a UK frigate deployed as part of the aircraft carrier strike group transited the Strait en route to Vietnam.²⁷⁷
- **Germany:** In November 2021, the German Navy committed to sending vessels to the Indo-Pacific every two years to expand cooperation with like-minded states advocating for freedom of

*France is a self-described "resident power of the Indo-Pacific" because of its territories, its military bases, and the permanent presence of its military forces in the region. According to France's Ministry of Armed Forces, there are over 7,000 French military personnel stationed in the Indo-Pacific, including 4,100 in the Indian Ocean region and 2,900 in the Pacific. France's Ministry of Armed Forces, *France and Security in the Indo-Pacific*, 2019, 2, 6.

†Observers also interpreted the transit as a signal of France's intentions to strengthen cooperation with regional partners like Japan and of its enduring commitment to the region. Xavier Vavasour, "French SIGINT Ship Dupuy De Lôme Makes Rare Taiwan Strait Transit," *Naval News*, October 13, 2021.

‡The UK maintains military facilities in East Africa, the Gulf, and Southeast Asia and has two offshore patrol vessels stationed in the Indo-Pacific performing missions related to disaster relief and sanctions enforcement. Veerle Nouwens, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Europe, the United States, and Relations with China: Convergence or Divergence?* June 15, 2023, 9; UK Ministry of Defense, *Tamar and Spey Underline UK's Renewed Commitment to the Indo-Pacific*, May 16, 2022.

§The UK also has other security partnerships in the region. For example, AUKUS is a security partnership established between the United States, the UK, and Australia in September 2021. As part of ongoing efforts to balance against China's growing power in the region, the United States and the UK agreed to provide nuclear-powered submarines to Australia. The deal resulted in Australia terminating its existing contract for conventional submarines from France. France viewed the lack of prior consultation on the substance of the agreement a breach of trust, leading to a period of diplomatic strife between France and its English-speaking allies. The United States and France began the process of mending relations that October. Philippe Ricard, "Over AUKUS Deal, France Took Its Time to Process the Affront," *Le Monde*, March 14, 2023; Célia Belin, "AUKUS: A Cautionary Tale for French-American Relations," *War on the Rocks*, December 13, 2021; Sylvie Corbet and Zeke Miller, "Biden Tells Macron US 'Clumsy' in Australia Submarine Deal," *AP News*, October 29, 2021; Tory Shepherd, "Australia Tore up French Submarine Contract 'For Convenience' Naval Group Says," *Guardian*, September 29, 2021; Charles A. Kupchan, "Europe's Response to the U.S.-UK-Australia Submarine Deal: What to Know," *Council on Foreign Relations*, September 22, 2021.

navigation and a rules-based international order.²⁷⁸ In August 2022, Germany deployed six Eurofighters and several support aircraft* to the Indo-Pacific for the first time in what the chief of the German Air Force described as “the largest and most challenging deployment the German Air Force has ever seen.”²⁷⁹

Limitations of Europe’s Approach to Taiwan

Despite momentum, a lack of clarity about Europe’s commitment to Taiwan complicates any joint effort by the United States and its allies to deter Chinese aggression toward Taiwan. Differences persist between European governments, and according to some assessments, the European public seems unwilling to support substantial involvement in a Taiwan conflict. Officials from the EU and individual member states also do not appear to have yet engaged in in-depth scenario planning on their role in deterring or reacting to a potential crisis—including the imposition of sanctions—and to the extent that they have, they are hesitant to discuss such efforts publicly.

Limited Articulation of Common European Interests

Mixed public messages from European officials over Europe’s interests and likely responses in a Taiwan contingency weaken deterrence by demonstrating that Europe is not yet prepared to act in a unified way. In his commentary to the media in April emphasizing the importance of Europe maintaining strategic autonomy, President Macron expressed strong uncertainty both about whether it would be in Europe’s interests to push for further movement on Taiwan and about its capability of getting involved in the case of a crisis.[†]²⁸⁰ Some members of the European Parliament have criticized President Macron’s comments, deeming it “naïve” to say that Taiwan does not concern Europe, and other officials have emphasized that his position does not reflect that of the EU.²⁸¹ President Macron later clarified that there had been no change to French or European policy on Taiwan, telling reporters, “The position of France and the Europeans on Taiwan is the same. We are for the status quo, and this policy is constant.”²⁸²

European publics display a degree of interest in the idea of remaining “neutral” in a conflict over Taiwan.[‡]²⁸³ This sentiment is

*The fighter aircraft were supported by four German transport aircraft as well as three multirole tanker transport aircraft to provide air-to-air refueling. North Atlantic Treaty Alliance, “Germany Deploys Eurofighter and Transport Aircraft to the Indo-Pacific for the First Time,” August 16, 2022.

†On Europe’s interests in a Taiwan scenario, President Macron reportedly stated, “Do we [Europeans] have an interest in speeding up on the subject of Taiwan? No. The worst of things would be to think that we Europeans must be followers on this subject and adapt ourselves to an American rhythm and a Chinese overreaction.” He added that it would be “a trap for Europe” to get caught up in crises “that are not ours.” On Europe’s capabilities, he said, “Europeans cannot resolve the crisis in Ukraine; how can we credibly say on Taiwan, ‘watch out, if you do something wrong we will be there’? If you really want to increase tensions that’s the way to do it.” Jennifer Rankin, “Macron Sparks Anger by Saying Europe Should Not Be ‘Vassal’ in US-China Clash,” *Guardian*, April 10, 2023; Jamil Anderlini and Clea Caulcutt, “Europe Must Resist Pressure to Become ‘America’s Followers,’ Says Macron,” *Politico*, April 9, 2023.

‡According to recent polling by leading European think tank the European Council on Foreign Relations (ECFR), the European public displays some hesitancy to support the United States in a conflict with China over Taiwan. As Dr. Oertel explained in her testimony for the Commission, “The ECFR polling shows that a majority of European respondents (62 percent on average) polled in all of the respective countries would be in favor of a neutral stance rather than supporting the United States, which only 23 percent would on average be advocating for.” Janka Oertel, written testimony

likely supported both by a lack of public awareness about how severely a Taiwan conflict would impact European interests and by a failure by European policymakers to make clear that neutrality is neither viable nor desirable for European interests.²⁸⁴ Ms. Nouwens assessed that this lack of policy discussion around Europe's existing presence in the Indo-Pacific has contributed to widespread belief among the public that "Europe has no place in any sort of response over Taiwan."²⁸⁵ Ms. Nouwens argues that although the United States has labeled the Indo-Pacific its priority theater, European states still feel its significance less keenly due to distance and the pressure of the ongoing war against Ukraine on the European continent.²⁸⁶

Formal Planning and Coordination Appear Limited

Although some European governments are beginning to engage in initial discussions internally and with the United States about unspecified coordinated action to deter or respond to aggression by Beijing, these discussions appear limited.²⁸⁷ Dr. Oertel explains that officials in European capitals are currently not comfortable participating in "public scenario-planning."²⁸⁸ According to testimony from Ms. Nouwens, conversations about "what a Taiwan contingency might look like and what actions European capitals... could envision taking as a response to a unilateral change across the Taiwan Strait are underway" between the United States and the EU as well as the United States and the UK,* but they remain at a "nascent" stage and are occurring in private.²⁸⁹ Thus far, the most advanced indicator is reports from 2022 that the United States and the EU had begun initial talks about preparation for possible policy responses in the event of a conflict over Taiwan, although the outcome of these conversations remains unclear.†²⁹⁰ In January 2023, the European Parliament passed a resolution calling upon "all competent EU institutions to urgently draw up a scenario-based strategy for tackling security challenges in Taiwan," indicating growing attention to the issue in Brussels but also a lack of substantive planning to date.²⁹¹

European Consideration of Sanctions on China

Coordinated sanctions similar to those imposed on Russia would likely play a key role in a joint U.S.-European response to aggression by Beijing and, if appropriately communicated ahead of time, could also be valuable as a deterrent.²⁹² According to the European Commission, sanctions‡ are a critical tool allowing the

for U.S.-China Economic and Security Review Commission, *Hearing on Europe, the United States, and Relations with China: Convergence or Divergence?* June 15, 2023, 7.

*In May 2022, the United States held high-level talks with the UK on how the two countries could cooperate more closely to reduce the chances of war over Taiwan. *Financial Times* reporting described the dialogue as the first time the United States and the UK had explicitly discussed "conflict contingency plans" for a Taiwan scenario, noting that they were intended to complement the more advanced talks the United States has held with Japan and Australia. Demetri Sevastopulo and Kathrin Hille, "US Holds High-Level Talks with UK over China Threat to Taiwan," *Financial Times*, May 1, 2022.

†In those conversations, the U.S. Department of State reportedly shared research with the European Commission and other European government officials that estimated global economic losses in the event of a blockade of the island at \$2.5 trillion. Kathrin Hille and Demetri Sevastopulo, "US Warns Europe a Conflict over Taiwan Could Cause Global Economic Shock," *Financial Times*, November 11, 2022.

‡There are three types of sanctions regimes in place in the EU, including (1) UN sanctions, which are transposed directly into EU law; (2) stricter or additional measures imposed to rein-

European Consideration of Sanctions on China— *Continued*

EU to “intervene where necessary to prevent conflict or respond to emerging or current crises.”²⁹³ The European External Action Service, EU’s diplomatic arm, recognizes sanctions as one of the EU’s tools to promote the objectives of its Common Foreign and Security Policy, including “safe-guarding the EU’s values, its fundamental interests and security”; “consolidating and supporting democracy, the rule of law, human rights and the principles of international law”; and “preserving peace, preventing conflicts and strengthening international security,” all three of which have potential relevance in the event of aggression against Taiwan.²⁹⁴ The EU has implemented sanctions on China in the past on human rights grounds.^{*295} It has demonstrated great unity in enacting sanctions on Russia in response to the invasion of Ukraine and even recently imposed sanctions on Chinese entities for their support of the war.^{†296}

Nevertheless, the lack of consistent, public commitment that thus far characterizes the discussion of European involvement in a Taiwan scenario writ large also applies to the specific question of the EU’s‡ willingness to impose sanctions on China. In July 2022, the EU’s new ambassador to China commented to the media, “In the event of a military invasion [of Taiwan] we have made it very clear that the EU, with the [United States] and its allies, will impose similar or even greater measures than those we have now taken against Russia.”²⁹⁷ A senior European Parliament source reportedly expressed confusion at these remarks, however, stating that to his knowledge “there hasn’t been any systematic discussion of sanctions” within the EU.²⁹⁸ According to testimony from Dr. Oertel, while approaches to defensive measures to im-

force UN sanctions; and (3) fully autonomous sanctions regimes. The EU currently maintains over 30 EU autonomous and UN transposed sanctions regimes. European External Action Service, *European Union Sanctions*, October 7, 2021.

*On December 7, 2020, the European Council adopted a decision establishing a global human rights sanctions regime, allowing the EU to target individuals, entities, and bodies responsible for, involved in, or associated with serious human rights violations and abuses worldwide. On March 22, 2021, the EU imposed sanctions on individuals and entities associated with human rights abuses in Xinjiang as part of the first package of listings under this regime. European Council, *EU Imposes Further Sanctions over Serious Violations of Human Rights around the World*, March 22, 2021; European Union, “L 99 I: Legislation,” *Official Journal of the European Union* 64 (March 22, 2021). <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2021:099I:FULL&from=EN>.

†In May 2023, the European Commission proposed sanctions on Chinese companies accused of bypassing trade restrictions and selling equipment to Russia that could be used to support the invasion of Ukraine. After the necessary approval by all 27 member states, some of these Chinese companies were formally added to the EU’s list of “entities ... directly supporting Russia’s military industrial complex in its war of aggression against Ukraine” as part of the EU’s 11th package of sanctions in response to the war. Takashi Tsuji, “EU Takes Aim at Chinese Companies in New Russia Sanctions,” *Nikkei Asia*, June 24, 2023; European Commission, *EU Adopts 11th Package of Sanctions against Russia for its Continued Illegal War against Ukraine*, June 23, 2023; Gabriela Baczyńska, “EU Takes Aim at Chinese Firms in Proposed New Russia Sanctions—Sources,” *Reuters*, May 8, 2023; *Reuters*, “EU Plans to Slap Sanctions on Chinese Firms Aiding Russia’s War Machine—FT,” May 8, 2023; Andy Bounds, “Brussels Plans Sanctions on Chinese Companies Aiding Russia’s War Machine,” *Financial Times*, May 7, 2023.

‡Although the EU is a particularly consequential European actor with regard to sanctions imposition, other actors would also likely play a role. For example, in July 2022, the head of the Swiss organization that imposes economic sanctions stated that in the event of an invasion of Taiwan, she expected that Switzerland, a neutral state without membership in the EU, would nevertheless join the EU in enacting sanctions against Beijing. David Hutt, “Should Europe Discuss Sanctioning China Now?” *Internationale Politik Quarterly*, October 10, 2022.

European Consideration of Sanctions on China— *Continued*

prove economic security between the EU and the United States may be converging, there remains “greater hesitance among the EU and its member states than on the [U.S.] side to devise more offensive or pro-active measures including the use of sanctions and entity listings.”²⁹⁹ She assessed that European policymakers still view the imposition of sanctions on China in the event of Chinese arms sales to Russia more as something the United States may request of them rather than as something European interests themselves may require.³⁰⁰ She also assessed that “the [advance] creation of a concrete list of sanctions” to be imposed upon China is not currently viewed in European capitals as “the most sensible option.”³⁰¹ Policymakers from individual member states, particularly Germany, are likely concerned that although it may be desirable to sanction China over a Taiwan invasion, the economic fallout from doing so would be unsupportable on top of the existing economic pain from sanctions from Russia.³⁰² Because decisions to adopt, amend, lift, or review sanctions are made by the European Council, binding EU sanctions on China can only be brought about through unanimous consent of the 27 member states.*³⁰³

A final complicating factor is uncertainty over the specific details of a potential crisis over Taiwan. Ms. Nouwens pointed out in her testimony that compared to an outright invasion or blockade, Europe’s likely response is less clear if a conflict is perceived to have been sparked through actions by Taiwan or the United States, by China’s gray zone activities, or as the result of a miscalculation.³⁰⁴ A recent study by the Atlantic Council focused on the G7 nations specifically raised a similar concern, noting that “a key barrier to coordinating sanctions among G7 partners and with Taiwan arises from the difficulties in agreeing on what Chinese acts of aggression should trigger economic countermeasures.”³⁰⁵ While some actions, such as an invasion of the island, might be seen by all parties to have crossed red lines, actions below the invasion threshold, such as a blockade, or escalation of the gray zone coercion measures, such as cyberattacks or intrusions into Taiwan’s air defense identification zone, may not cross red lines for some countries, making agreement on a coordinated approach more challenging.³⁰⁶ Especially in light of the hesitancy of European governments to commit to actions or discuss contingency plans publicly, the wide range of potential scenarios adds a significant level of uncertainty about Europe’s likely response to a conflict over Taiwan.

*The EU joined the United States in imposing an arms embargo on China after the 1989 Tiananmen Square massacre; however, the embargo was not legally binding on the member states. European Parliament, *Parliamentary Question—E-001066/2023(ASW): Answer Given by High Representative/Vice President Borrell I Fontelles on Behalf of the European Commission*, May 12, 2023; European Parliament, *Parliamentary Question—E-001066/2023: Member States’ Non-Compliance with the EU Arms Embargo against China*, March 29, 2030; Congressional Research Service, “European Union’s Arms Embargo on China: Implications and Options for U.S. Policy,” January 26, 2006.

Potential Contributions from European Militaries in a Taiwan Conflict

Although European contributions in the event of a deterrence failure would likely be primarily nonmilitary, there are still several activities in which military forces from European countries could support Taiwan's defense.³⁰⁷ Those European countries with a permanent military presence in the Indo-Pacific or the capability to project meaningful military power to the region could potentially participate in certain operations or provide assistance to U.S. forces in the region.³⁰⁸ European military forces could participate in noncombatant activities such as the evacuation of non-combatants from Taiwan.³⁰⁹ European forces in the Indian Ocean region, the Gulf, or the broader Indo-Pacific region could also help maintain sea lines of communication and maritime chokepoints, assist with supply chain logistics, or provide intelligence, surveillance, and reconnaissance support.³¹⁰ European governments and militaries can assist in defending against cyberattacks from China.³¹¹ Finally, European militaries and governments could support the ongoing defense of Taiwan by continuing to provide clear, unified public messaging and by combating Chinese or third-party disinformation.^{†312}

Implications for the United States

As one of the wealthiest regions in the world with deep economic ties to both China and the United States, Europe's approach to China impacts the effectiveness of U.S. policy, specifically policies that seek to limit U.S. exposure to and dependence on China. Growing European concerns about China present opportunities for more effective and coordinated U.S.-European responses to China's growing challenges. Deep and effective collaboration would be particularly beneficial in addressing China's control over critical mineral supply chains; limiting China's access to dual-use technologies, including advanced semiconductors; and securing critical infrastructure like 5G networks from Chinese investment. Joint U.S.-Europe effort could reduce the cost of policy implementation while increasing its effectiveness by reinforcing efforts on common goals and allowing for burden sharing where comparative advantages differ.

In addition to pursuing coordinated actions in areas of high convergence, the United States and Europe are presented with the opportunity to jointly formulate policy in emerging and rapidly developing areas, including AI and technical standards-setting. Chi-

*Ms. Nouwens assessed in her testimony before the Commission that although there is not likely to be an expectation from the United States that European states play a significant role militarily, "should a military presence be nearby, there may likely be a request from the US to engage European assets in a specific way. For close defense partners like the UK, this will not necessarily be an unanticipatable scenario." Veerle Nouwens, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Europe, the United States, and Relations with China: Convergence or Divergence?* June 15, 2023, 12.

†The EU could likely contribute to many of these efforts, even without a military. According to a senior EU official attending the second annual EU Indo-Pacific Ministerial Forum on May 13, 2023, the EU is not only seeking to develop its maritime domain awareness in the region, but it is also developing new instruments to tackle both "significant cyber threats" and "foreign information manipulation" in the region. Vivienne Machi, "European Forces Flex Their Indo-Pacific Reach," *Defense News*, June 11, 2023.

na is quickly developing an AI regulatory regime that caters to its specific political objectives while appealing to other authoritarian governments through the incorporation of censorship tools and regulation of search and share algorithms. This granular government control over AI development and function undermines U.S., European, and even developing countries' interests by allowing China to insert its political preferences and authoritarian values into emerging and cross-border technologies, thus impacting how users around the world engage with the technology now and in the future. These regulations also create an adaptable foundation that can be easily adopted by third parties, further enabling authoritarian regimes and expanding and legitimizing China's approach to governance. In addition, China's increasing adoption of leadership roles in standards-setting organizations traditionally led by the United States and Europe creates risks to economic competitiveness and supply chain resilience for both the United States and the EU and may foster global technological fragmentation. Transatlantic cooperation via fora like the TTC or new multilateral mechanisms can mitigate the risks posed by China's growing participation in AI policy development and technical standards-setting organizations.

Although Europe's views of China have begun to converge with the United States, in recent years there remain significant points of departure in critical areas that could undermine U.S. and European interests, particularly in terms of recognizing, deterring, and potentially responding to the heightened potential for war over Taiwan. Despite the massive global economic fallout that would result from a conflict in the Taiwan Strait, European decision-makers and publics are not yet unified in feeling the same sense of urgency or responsibility toward deterring aggressive and destabilizing action by China against Taiwan. Although several European governments have taken key steps toward providing Taiwan with military equipment and technology, these developments may be insufficient to deter China and thus far represent only limited contributions to Taiwan's self-defense capabilities. Moreover, Russia's invasion of Ukraine forces Europe to make tradeoffs between providing support for a realized and ongoing threat within its own region and deterring an unrealized potential threat of a similar conflict in Asia. Stronger communication of Europe's interest in maintaining stability in the Taiwan Strait and clearer commitments to act on those interests alongside the United States and Indo-Pacific partners could strengthen deterrence and inform future contingency planning. Continued leadership by the United States in the Indo-Pacific and on regional security concerns, particularly when divergence between European governments presents a significant obstacle to productive cooperation, could also provide a stabilizing and deterrent effect.

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SECTION 2: TAIWAN

Abstract

In 2023, China accelerated its multifaceted political, military, economic, and information pressure campaign against Taiwan, continuing to raise international concerns about the possibility of Beijing initiating military aggression. Beijing's coercion is aimed at influencing the outcome of the presidential election in January 2024. President Tsai Ing-wen's Administration continues to adopt measures to inoculate Taiwan against these coercive efforts, especially in the security and economic spheres; however, the results of these measures will not be apparent for some time. Reforms to Taiwan's military and efforts to root out election-related disinformation are contributing to greater resilience of the island, even as China's People's Liberation Army (PLA) has intensified gray zone activities and rehearsals for possible military action. Taiwan's economy remains stable despite the global dip in demand for semiconductors and punitive measures from Beijing aimed, again, at influencing the upcoming election. Over the last year, Taiwan has sought to draw even closer to the United States through new initiatives, strengthening its security and economic ties through the Biden Administration's announcement of drawdown authorities for faster arms transfers and the U.S.-Taiwan Initiative on 21st Century Trade.

Key Findings

- In the runup to the 2024 elections, Beijing is accelerating its multifaceted coercion campaign against Taiwan. The PLA has continued to ratchet up military activity around Taiwan, continuing a trend over the past five years of increased military coercion that reflects a rising risk of conflict.
- Taiwan's four major presidential candidates have attempted to differentiate their China policies from one another while tailoring their positions to reflect popular consensus among the island's voters. Taiwan's electorate has overwhelmingly rejected the Chinese Communist Party's (CCP) "one country, two systems" framework, with no major candidate advocating for moving the cross-Straits relationship forward under that paradigm.
- Taiwan's military continues to develop its capabilities to resist a PLA military campaign, announcing plans to enhance both its training and equipment. Taiwan continues to grow its proficiency with advanced U.S.-supplied weapons and is integrating lessons observed in Russia's war against Ukraine. Taiwan's military has begun the process of reforming training for its conscripted members and extending conscripted military service from four months to one year.

- Beijing has stepped up its economic pressure campaign by continuing to ban targeted imports in addition to threatening to roll back decades-old preferential cross-Strait trade arrangements. A drop in global demand for its key exports caused Taiwan's economy to temporarily slip into recession in early 2023, raising concerns that while the economy has stabilized, it may still be susceptible to the impact of economic coercion.

Recommendations

The Commission recommends:

- Congress should direct the U.S. Department of Defense (DOD) to expand the training of Taiwan's military to locations in the United States for the purpose of conducting weapons familiarization with systems that have been ordered by, but not yet delivered to Taiwan in order to speed Taiwan's adoption of those systems once delivered. Congress should authorize DOD to station standing observer teams from Taiwan at U.S. training installations and bases to observe and participate in such training.
- Congress should pass legislation establishing a joint "center of excellence" operated by the United States and Taiwan to uncover, analyze, and counter China's disinformation and offensive cyber operations against Taiwan. This center could be modeled on the NATO Cooperative Cyber Defense Center of Excellence and foster cooperation, capabilities, and information sharing on disinformation and cyber security through education, training, and research.
- Congress direct the U.S. Department of State and relevant agencies to produce an unclassified report examining the expected economic impact of a PLA blockade and/or quarantine of Taiwan. The report should seek to assess the following under each scenario: (1) the impact on global trade and output on timelines up to one year; (2) the top ten sectors that will be most disrupted by a sustained blockade; and (3) expected impact on the domestic economies of each G7 country from such action.

Introduction

In April 2023, Taiwan President Tsai met with then Speaker of the U.S. House of Representatives Kevin McCarthy in California, the first such meeting between a Taiwan president and a Speaker of the House on U.S. soil since the break in official relations in 1979.¹ Despite then Speaker McCarthy's decision to lower the profile of the meeting by holding it in the United States rather than in Taiwan, upon President Tsai's return to the island, China launched a series of joint military exercises in the air and waters around Taiwan lasting three days.² Such actions put into stark relief Beijing's long-running efforts to isolate Taiwan from the world and to cow its elected leadership into accepting unification on CCP terms through the threat of military force. At the same time, Beijing has increased its efforts in the political sphere to sway Taiwan's January 2024 presidential elections.³ The outcome of that election will have consequences not only for the cross-Strait relationship but also for the U.S.-China and

U.S.-Taiwan relationships.⁴ This section analyzes developments in Taiwan's security, external relations, and economy between late 2022 and late 2023. It is based on the Commission's consultations with experts, open source research, and portions of its March hearing on "China's Global Influence and Interference Activities."

Cross-Strait Relations Remain Frosty ahead of Taiwan's 2024 Election

Relations between mainland China and Taiwan remain at a low point, owing to the CCP's suspension of official communications with the Democratic Progressive Party (DPP)-led government and Beijing's continued military aggression toward the island.* Beijing has acknowledged no major shifts in official policy this year and appears to be waiting to see how the consequential next election in Taiwan will transpire, even as it works to influence that outcome. Chinese government officials have expressed extreme antipathy at the prospect of another DPP government while holding a number of meetings with Kuomintang (KMT) leaders on the Mainland.⁵ Meanwhile, Beijing continues to covertly interfere in Taiwan's political environment in the runup to the election but notably has not issued direct private or public threats warning against any specific outcome as unacceptable to Beijing.⁶

Chinese Leadership Indicates Continuity of Taiwan Policy

Beijing's rhetoric and official policy toward Taiwan in 2023 continued to emphasize its declared preference for "peaceful reunification"† while preparing for and reserving the right to use force against Taiwan. At the same time, Beijing blames so-called "separatists" in the DPP and "external interference" by foreign powers for tensions in cross-Strait relations.‡⁷ In speeches made by General Secretary of

*After President Tsai refused to endorse Beijing's interpretation of the 1992 Consensus in 2016, Beijing cut official communication with Taiwan's DPP government. The 1992 Consensus is an understanding allegedly reached at a 1992 meeting between representatives of two quasi-official organizations that manage cross-Strait relations, China's Association for Relations Across the Taiwan Straits (ARATS) and Taiwan's Straits Exchange Foundation (SEF) (then associated with a government under the KMT's one-party rule). The term "1992 Consensus" was coined in the year 2000 by then Mainland Affairs Council (MAC) Chairman Su Chi under the KMT administration of Lee Teng-hui, who said that it referred to the idea that both sides agreed there is only "one China" but that each side maintained its own, differing interpretation of the meaning of "one China" (leaving open the question of whether that "China" was the Republic of China under the KMT or the People's Republic of China under the CCP). The 1992 Consensus was first adopted by the KMT in 2008 under the administration of Ma Ying-jeou and most recently reaffirmed in 2021 under current KMT chairman Eric Chu. Leaders of the DPP have questioned the existence of the 1992 Consensus and argued that it does not reflect the will of the Taiwan public, since it was reportedly reached prior to the island's democratization. In a 2019 speech, General Secretary Xi equated the 1992 Consensus with "one country, two systems." Since that time, CCP events and statements have clarified that when they refer to the 1992 Consensus it means accepting Taiwan's unification with the Mainland. Beijing maintains that the agreement does not allow for different interpretations of "one China" in the first place. Derek Grossman, "Where Does China's 'One Country, Two Systems' Stand in 2020?" *RAND*, February 13, 2020; Derek Grossman and Brandon Alexander Millan, "Taiwan's KMT May Have a Serious '1992 Consensus' Problem," *RAND*, August 9, 2004; Jessica Drun, "The KMT Continues to Grapple with Its '1992 Consensus,'" *Global Taiwan Institute*, September 21, 2022; John Dotson, "The CCP Commemorates the 30th Anniversary of the '1992 Consensus'—and Seeks to Change Its Meaning," *Global Taiwan Institute*, September 21, 2022.

†Beijing has claimed that it desires "re-unification" with Taiwan, which implies that Taiwan has historically been part of China, a claim Taiwan and the international community have rejected. Instead, this report uses "unification" to describe Beijing's revisionist ambitions, except where quoting Xi Jinping or other leaders, and in those cases leaves "re-unification" in quotations.

‡Deng Xiaoping, the former leader of China, initiated the policy of "peaceful reunification" with Taiwan in 1979. Under this framework, China opposes "independence" and "separatism" in Taiwan and prefers peaceful reunification but will not renounce the use of force to "re-unify" with the island. China has proposed the one country, two systems model for Taiwan—similar to that

the CCP Xi Jinping at the 20th Party Congress in October 2022 and the National People's Congress in March 2023, he portrayed Beijing's actions toward Taiwan over the past five years as a series of achievements based on fundamentally sound assessments of the strategic environment.⁸ At the 20th Party Congress, Xi claimed that Beijing had foiled efforts to promote Taiwan's independence, promoted its One China principle* within the international community, and asserted that China continues to maintain the "initiative" to steer cross-Straits relations in its preferred direction.⁹ He also reaffirmed the "one country, two systems" framework† as well as the relatively new "overall strategy for resolving the Taiwan question in the new era"‡ first introduced in late 2021.¹⁰ The noticeable omission of "one country, two systems" from Chairman of the Chinese People's Political Consultative Conference (CPPCC) Wang Huning's speeches at both the 2023 Taiwan Work Conference in May and the 15th annual Straits Forum in June, however, show that Beijing is deemphasizing the "one country, two systems" framework in messaging about Tai-

which was to be employed in Hong Kong—in which Taiwan would retain a degree of autonomy. In the years since the passage of Hong Kong's National Security Law, the people of Taiwan have increasingly rejected the one country, two systems framework. China also adheres to the One China principle, which asserts that there is only one China and that Taiwan is part of it. CCP General Secretary Xi Jinping has stated that "secession aimed at 'Taiwan independence' is the greatest obstacle to national reunification and a grave danger to national rejuvenation." Speaking on cross-Straits relations, he has expressed that "blood runs thicker than water" and that the issue of Taiwan is an "internal matter" only for the Chinese people on both sides of the Strait to resolve. Lindsay Maizland, "Why China-Taiwan Relations Are So Tense," *Council on Foreign Relations*, April 18, 2023; Xi Jinping, "Full Text of Xi Jinping's Report at 19th CPC National Congress," *China Daily*, November 4, 2017; Xi Jinping, "Full Text of President Xi's Speech at Meeting Marking 1911 Revolution," *Xinhua*, October 13, 2021.

*The One China principle refers to the Chinese government's position that Taiwan is an inalienable part of the state called "China" ruled by the People's Republic of China. By contrast, the One China policy refers to the U.S. government position that the PRC—rather than the Republic of China government on Taiwan—is the sole legal government of China and acknowledges, but does not agree with, the Chinese position that Taiwan is part of China. Many other countries which maintain official ties with Beijing use the phrase "One China policy" to describe their stance of officially recognizing the People's Republic of China (PRC) while simultaneously not recognizing the Republic of China (ROC).

†One country, two systems is the Chinese government's proposed political framework for unification with Taiwan. Under one country, two systems, Chinese officials claim Taiwan can enjoy a high degree of autonomy in exchange for recognizing the existence of "one China" and Taiwan's role as a constituent part of it. China's crackdown on the rights and freedoms of people in Hong Kong has shown that its promises of autonomy under the framework are empty, however. In 2019, General Secretary Xi equated one country, two systems to the 1992 Consensus, leading President Tsai to emphatically reject the framework. For more, see Derek Grossman, "Where Does China's 'One Country, Two Systems' Stand in 2020?" *Diplomat*, February 13, 2020; China's Ministry of Foreign Affairs, *A Policy of "One Country, Two Systems," on Taiwan*, 2014.

‡CCP officials and media have promoted the Party's "overall strategy for resolving the Taiwan question in the new era" as a novel, comprehensive, and theoretically profound framework for achieving Taiwan's unification with the Mainland. Most of the strategy is consistent with the policy of "peaceful reunification." According to commentary by Taiwan Affairs Office Director Liu Jieyi in July 2022, the strategy encompasses five lines of effort. First, China views "reunification" as an "inevitable requirement" of national rejuvenation and will promote both aims at the same time, aiming to "create a favorable environment in the Taiwan Strait" and to rely on "our growing comprehensive strength and significant institutional advantages." Second, China continues to view "peaceful reunification and one country, two systems" as the best policy option but still reserves the option to use force as required. Third, China maintains that the One China principle and 1992 Consensus are the political foundation of cross-Straits relations and the precondition for any official dialogue with Taipei. Fourth, China will continue to promote cross-Straits integration and development, namely through economic initiatives and cultural exchanges. Finally, China will continue its efforts to deter Taiwan politicians from declaring independence and foreign countries from "interfering" in any matter China regards as its internal affairs. For more, see U.S.-China Economic and Security Review Commission, Chapter 4, "Taiwan," in *2022 Annual Report to Congress*, November 2022, 592, 596–597.

wan ahead of the 2024 election because it has become so unpopular among Taiwan's populace and mainstream politicians.*¹¹

Beijing continues to attempt to isolate the Tsai government and the ruling DPP, blaming them for all problems in cross-Straits relations.¹² In response to the April transit of President Tsai through the United States, China's Ministry of Foreign Affairs accused Tsai of "putting cross-Straits relations in serious difficulty" by encouraging "separatist rhetoric."¹³ At the annual Shangri-La Dialogue in June, then Defense Minister General Li Shangfu blamed the DPP for tensions in the Taiwan Strait, stating that the root cause of tensions across the Taiwan Strait is "the DPP authorities soliciting foreign support for independence."¹⁴ Beijing has also accused DPP presidential candidate and current Vice President "William" Lai Ching-te of machinating for independence, preemptively demonstrating its anticipated unwillingness to engage constructively with Lai if he is ultimately elected by Taiwan's populace.¹⁵ An editorial published in July by China's embassy in the United States attempted to undercut Vice President Lai's stated support for maintaining the cross-Straits status quo by accusing him of a concealed pro-independence agenda.¹⁶ The editorial also characterized his proposal to enhance Taiwan's deterrence capabilities as a way to "resist by force the motherland's reunification," a choice of words that attempted to portray Taiwan's defensive measures as inherently provocative and offensive.¹⁷

CCP officials also continued to engage the KMT, hosting visiting KMT dignitaries throughout 2023.¹⁸ The trips represent an effort by Beijing to show willingness to engage with a KMT-led Taiwan as opposed to the shutdown of dialogue it initiated after Tsai's election.¹⁹ In March 2023, former Taiwan President and KMT member Ma Ying-jeou visited the People's Republic of China (PRC), becoming the first former Taiwan president to do so since the CCP's takeover of the Mainland in 1949.²⁰ Ma visited five mainland Chinese cities and met with Chinese officials, such as Taiwan Affairs Office head Song Tao, the official heading the body in charge of implementing Beijing's policy toward Taiwan.[†]²¹ Song praised what Chinese state media referred to as Ma's "significant contribution" to the development of cross-Straits relations.[‡]²² Ma's trip occurred at the same time as President Tsai's stopover in New York City, highlighting to Taiwan's voters the contrast between how Beijing would interact

*Wang Huning is currently the chairman of the Chinese People's Political Consultative Conference (CPPCC) and has been a member of the CCP's Politburo Standing Committee since 2017. A political theorist, Mr. Wang has been regarded as the leading ideologist in the country since the 1990s. *China Daily*, "Wang Huning Elected Chairman of China's Top Political Advisory Body," March 11, 2023; Eduardo Baptista and Michael Martina, "Newsmaker: China's Wang Huning, A Backstage Ideologue and Political Survivor," *Reuters*, December 11, 2022.

†Song Tao, a veteran Chinese diplomat with close ties to Xi Jinping, previously served as foreign vice-minister and head of the International Liaison Department, a Party organization that manages ties with other countries' political parties. Mr. Song served as ambassador to Guyana and the Philippines; counselor at the Chinese Embassy in India; and special envoy to North Korea, Vietnam, and Cuba. Mr. Song was a member of the 19th CCP Central Committee from 2017 to 2022. J. Michael Cole, "Veteran Chinese Official Song Tao Assumes the Taiwan Portfolio," *Global Taiwan Institute*, January 11, 2023.

‡Ma's trip drew criticism from both the DPP and some Chinese online commentators. Upon his return to Taiwan, Ma gave a speech in which he framed the upcoming presidential election as a choice between "peace and war," blaming the ruling DPP Administration for leading Taiwan to danger and suggesting that the KMT would be able to engage with the PRC. Ann Wang and Yimou Lee, "Taiwan Faces Choice of 'Peace and War,' Ex-President Says after China Trip," *Reuters*, April 7, 2023; Cheng Long, "Song Tao Met with Ma Ying-jeou and His Party in Wuhan" (宋涛在武汉会见马英九一行), *People's Daily*, March 31, 2023. Translation; Hemant Adlakha, "Ma Ying-jeou's Trip to China Sparks Pushback—From Taiwanese and Chinese Alike," *Diplomat*, March 29, 2023.

with future KMT and DPP governments.²³ KMT Vice Chairman Andrew Hsia also made two trips to mainland China in February and June, meeting with CPPCC chairman Wang and Taiwan Affairs Office director Song on the first occasion and participating alongside Wang in a presentation at the annual Straits Forum at the second.*²⁴

Beijing Seeks to Influence Taiwan's Upcoming Election

Beijing will continue to target Taiwan with disinformation† and united front‡ work to amplify societal divisions to divide and demoralize Taiwan society ahead of the January 2024 election (for more on disinformation and united front work, see Chapter 2, Section 2, “Battling for Overseas Hearts and Minds: China’s United Front and Propaganda Work”). According to Taiwan-based organizations Doublethink Lab and the Information Operations Research Group (IORG), Taiwan was heavily targeted by Chinese state-sponsored disinformation operations during the November 2022 local elections.²⁵ These Chinese disinformation operations emphasized cultural unification, attacked the Taiwan government’s integrity and the United States’ credibility, and promoted China’s claims that Taiwan belongs to China under its One China principle.²⁶ Puma Shen, chairman of Doublethink Lab, who testified before the Commission in March 2023, has separately stated that Chinese disinformation and united front-related influence operations toward Taiwan had increased in the first few months of 2023 and are expected to increase ahead of the election.²⁷

CCP disinformation directed at Taiwan aims to amplify social divisions and is becoming increasingly sophisticated.²⁸ The CCP is using Artificial Intelligence (AI) technologies to create biased online content using voice generators that mimic Taiwan voices and present subtitles in the specific writing system used in Taiwan in an effort to obscure the mainland origins of these articles.§²⁹ Persistent themes in disinformation on Taiwan include amplifying fears of U.S. abandonment and questioning the intent of U.S. support of Taiwan.³⁰ For example, one video circulated on the popular LINE messaging app in 2023 featured a White House press conference with a caption falsely stating that the press secretary had said that

*At the Straits Forum, Vice-Chairman Hsia stated that the KMT would adhere to the 1992 Consensus, oppose “Taiwan independence,” and promote cross-strait exchange. Before its delegation departed for the Straits Forum, the KMT issued a statement vowing to act as a “bridge between the two sides of the Taiwan Strait.” *People’s Daily*, “The 15th Straits Forum Conference Held in Xiamen” (第十五届海峡论坛大会在厦门举行), June 18, 2023. Translation; Liu Kuan et al., “KMT Vice Chair Urges Return of Cross-Strait Exchanges to Pre-COVID Levels,” *Focus Taiwan*, June 17, 2023; Flor Wang and K.T. Liu, “KMT Vows to Act as Taiwan Strait Bridge before Start of Straits Forum,” June 14, 2023; Jason Pan, “Andrew Hsia Defends Trip to China after Protests,” *Taipei Times*, February 19, 2023.

†Disinformation refers to politically motivated messaging designed to engender public cynicism, uncertainty, apathy, distrust, and paranoia, which has the effect of depressing citizen engagement. Dean Jackson, “Issue Brief: Distinguishing Disinformation from Propaganda, Misinformation, and Fake News,” *National Endowment for Democracy*, October 17, 2017.

‡United front work is a way of managing relationships with important groups and individuals outside of the CCP that is based on Russian revolutionary Vladimir Lenin’s concept of forming a “united front,” or a temporary alliance with one’s friends and lesser enemies, to defeat greater enemies. Contemporary united front work encapsulates the various activities of CCP organs, Chinese government agencies, and their affiliates to coopt or coerce groups outside of the CCP into comporting with the Party’s demands and advancing Chinese national interests as the CCP defines them. For more, see Section 2, Chapter 2, “Battling for Overseas Hearts and Minds: China’s United Front and Propaganda Work.”

§Taiwan uses traditional Chinese characters to write Mandarin Chinese, the standard written language of the Republic of China, established before changes were made to the official standard writing system in Mainland China in the 1960s.

“the United States will forsake Taiwan in case of an invasion.”³¹ Another video circulated on the social media platform TikTok—subsequently identified by Taiwan’s Ministry of Foreign Affairs as disinformation—alleged that the United States intended to provoke a war over Taiwan in order to contain China.³² Local Taiwan newspapers propagated allegations, likely originating from mainland China, claiming that the United States had asked Taiwan to develop biological warfare agents, a claim refuted by the U.S. Department of State and Taiwan’s Executive Yuan.³³ Distrust of the DPP government is also highlighted by disinformation efforts, with misleading stories circulated by Chinese state media alleging that the 2023 Han Kuang exercises were an “escape rehearsal” for President Tsai and U.S. citizens in the event of a PLA invasion.³⁴

China’s increasingly successful use of disinformation operations may stymie efforts by Taiwan’s government and civil society organizations to maintain unity and uncover electoral interference. In the leadup to 2022’s November local elections, Taiwan’s Ministry of Justice Investigative Bureau released information on an alleged Chinese state-sponsored effort to disseminate fake news in Taiwan through mainland investment in Taiwan-based media companies.³⁵ A revision to Taiwan’s All-Out Defense Mobilization Readiness Act was proposed earlier this year that would have mandated greater media cooperation with government orders while increasing penalties for spreading misinformation during times of emergency.³⁶ However, the proposal was withdrawn after opposition parties and others raised press freedom concerns.³⁷ A number of nongovernmental organizations in Taiwan have stepped in to combat disinformation, such as the Taiwan Fact Checking Center, which publishes fact checks on issues ranging from consumer scares to geopolitical propaganda.³⁸

China’s government has attempted to intimidate Taiwan citizens from exercising their right to free speech. In April 2023, China’s Supreme People’s Procuratorate announced the formal arrest of Taiwan activist Yang Chih-yuan, who had already been held incommunicado since August 2022 under “residential surveillance at a designated location” in Zhejiang Province.³⁹ Mr. Yang became the first Taiwan national to be arrested for a crime under the Mainland’s National Security Law when he was first detained in 2022.⁴⁰ The Wenzhou Municipal People’s Procuratorate arrested Mr. Yang under “suspicion of secession,” making his case the first time a person from Taiwan would face separatism charges in a mainland court, according to the *South China Morning Post*.⁴¹ According to Lee Ming-cheh, a prodemocracy activist, Yang’s activism all took place in Taiwan. Mr. Lee said Mr. Yang’s arrest “is intended to warn Taiwanese that advocating independence won’t be consequence-free.”⁴²

*Of note was that the Chinese company involved used a U.S.-registered subsidiary to purchase additional media companies in Taiwan, likely in an effort to both heighten its credibility and obfuscate connections with the originating Chinese company. Russell Hsiao, “Political Warfare Alert: The PRC’s Evolving Information Operations Targeting Provincial and Local Media Intermediaries,” *Global Taiwan Institute*, January 11, 2023.

†The All-Out Defense Mobilization Readiness Act is a law enacted in Taiwan in 2001 that established a national defense mobilization system. The act is divided into two phases: the Mobilization Preparation Phase and the Mobilization Implementation Phase. The former refers to mobilization preparation, the latter refers to the time period of assembling reserve forces for active duty. The law consolidates civil and military command and control in times of war or national emergency as authorized by Taiwan’s president. See Taiwan (ROC) Ministry of Justice, *All-Out Defense Mobilization Readiness Act*, June 19, 2019.

Presidential Race Previews Future of Cross-Strait Relations

Taiwan's tense winner-take-all presidential election in 2024 could have a significant impact on cross-Strait relations.*⁴³ The presidential race currently involves candidates from the DPP, the KMT, and the Taiwan People's Party (TPP). Foxconn founder Terry Gou also publicly announced a bid as an independent candidate, and as of October claimed to have gathered the 300,000 signatures required to be placed on the ballot as an independent.⁴⁴ Each candidate holds differing views of how Taiwan should conduct its relationship with the Mainland.⁴⁵ Historically, Taiwan's political divide has centered around the "Pan-Green" parties, of which the DPP is most prominent, and the "Pan-Blue" parties, of which the KMT is most prominent.[†]⁴⁶ While local issues were at the forefront of Taiwan's 2022 midterm elections, cross-Strait relations have historically mattered more to Taiwan's voters in presidential elections.⁴⁷ As the island's voters prepare to head to the polls, they are facing not only an increasingly belligerent threat from across the strait but also a cooling economy, high housing costs, intraparty scandals, and the realignment of political coalitions. As of August 2023, the major candidates had expressed the following positions:

- *DPP candidate "William" Lai Ching-te, current vice president of Taiwan:*‡ Lai has indicated that he plans to follow the Tsai Administration's policy on cross-Strait issues and signaled he will not pursue de jure independence, stating that "Taiwan is already an independent and sovereign nation, and thus we do not have a need to further declare Taiwan independence."⁴⁸ Lai has committed to continuing the defense reforms that were started under President Tsai and is expected to broadly follow policies from the Tsai Administration.⁴⁹ Lai has pushed back against former KMT President Ma's framing of the 2024 election as a vote between "peace" and "war," arguing instead that "it's about choosing between democracy and autocracy."⁵⁰ Lai has also stated he believes that "Taiwan and China can coexist as brothers," a remark designed to allay concerns among the electorate that he would take a confrontational approach.⁵¹ Polls conducted in September show Lai could receive between 31.4 and 34 percent of the vote.⁵²
- *KMT candidate Hou You-yi, current mayor of New Taipei City:* Hou has echoed KMT narratives that the DPP could provoke conflict with China, and suggested that a KMT administration

*Taiwan has held presidential elections with more than two mainstream candidates in 1996, 2000, and 2016. As Taiwan's presidential election operates under a "first-past-the-post" simple majority system, the candidate with the most votes will win the election, with no further runoffs required after the vote in January of 2024. Seamus Boyle, "For Taiwan's DPP, an Unprecedented '3-peat' Depends on a Third Party" *Diplomat*, June 8, 2023; Sean O'Connor and Ethan Meick, "Taiwan Opposition Party Wins Presidency and Legislative Majority in Historic Elections," *U.S.-China Economic and Security Review Commission*, January 28, 2016; *Reuters*, "Factbox: How Does a Taiwan Election Work?" January 7, 2020.

†Originally, pan-Green parties in Taiwan favored local democracy and a unique Taiwan identity, while the pan-Blue sought policies that favored eventual unification of a greater China and maintaining a Chinese identity on Taiwan. Both camps of parties have moderated through successive election cycles with the need to reach voters in the middle. Jessica Drun, "A Green Wave?" *Center for Strategic and International Studies*, November 22, 2022.

‡In 2017, Lai described himself as a "political worker for independence" while serving as Taiwan's premier. Yip Wai Yee, "Taiwan's Ruling Party DPP Names William Lai as Its Presidential Candidate," *Straits Times*, April 12, 2023.

will be able to maintain stable relations with China.⁵³ He has also stated his opposition to both “one country, two systems” and independence.⁵⁴ In August, Hou dismissed the idea of holding official negotiations with China on Beijing’s terms, stating that any such proposals were not feasible at present and blaming Chinese military activity in the Taiwan Strait and fewer contacts between the two sides for an atmosphere of reduced trust.⁵⁵ Hou has stated he would support a version of the 1992 Consensus so long as it conformed with Taiwan’s constitution.⁵⁶ In July, Hou suggested that if he were elected, he would reverse the Tsai Administration policy that extends military conscription to one year.⁵⁷ Clarifying his statement days later, Hou said he only objected to specific aspects of the new one-year system and would work to return the conscription period to four months only after peaceful cross-Strait relations had been achieved.⁵⁸ Hou has also stated that the United States is Taiwan’s strongest ally and that he would continue to strengthen Taiwan’s national defense through U.S. arms purchases if elected.⁵⁹ Polls conducted in September show Hou trailing Lai with between 15.7 and 21 percent of the vote.⁶⁰

- *TPP candidate Ko Wen-je, former mayor of Taipei between 2014 and 2022:** Ko’s position on cross-Strait relations has tended to emphasize the importance of cultural ties and dialogue between China and Taiwan while recognizing their de facto political separation.[†]⁶¹ Ko was accused by some Taiwan political observers of harboring pro-unification sentiments after his 2015 statement that “both sides of the Taiwan Strait are one family,” a phrase that has been used by CCP leadership.⁶² Ko suggested that he referred to Taiwan and China as part of the same family in order to engage in dialogue with China, and he maintains that Beijing needs to clarify its definition of the 1992 Consensus.⁶³ Since 2018, Ko has publicly favored a practical approach to relations with China, embracing the need for Taiwan to build up its deterrent capabilities even as it engages in dialogue with China.⁶⁴ In announcing his candidacy, Ko also expressed the view that Taiwan should not be a “chess piece” between the United States and China but rather a facilitator of dialogue between the two countries.⁶⁵ Polling conducted in September shows Ko capturing between 22 and 23.1 percent of the vote.⁶⁶
- *Independent candidate “Terry” Gou Tai-ming, founder of Foxconn Technology Group:* On August 28, Gou announced an independent campaign for Taiwan’s presidency.⁶⁷ Gou, the founder of Taiwan tech manufacturing company Foxconn, had previously angled for the KMT nomination in the presidential elections of 2019 and 2023 but was unsuccessful in securing the

*The newcomer to Taiwan’s national-level races, the Taiwan People’s Party was founded in 2019 by Taipei City Mayor and current TPP presidential candidate Ko Wen-je; the TPP seeks to position itself as a pragmatic party able to attract disaffected voters from both major parties. See Seamus Boyle, “For Taiwan’s DPP, an Unprecedented ‘3-peat’ Depends on a Third Party,” *Diplomat*, June 8, 2023.

[†]Ko has espoused the “Five Mutuals” of cross-Strait relations, which will guide his administration’s interactions with China. These include mutual acknowledgement, mutual understanding, mutual respect, mutual cooperation, and the most difficult to establish, according to Ko—mutual forgiveness. Duncan DeAeth, “Ko Wen-je Outlines Platform on China ahead of Taiwan Presidential Election,” *Taiwan News*, April 3, 2023.

party's nomination both times.⁶⁸ Gou has blamed the DPP for provoking China and rejecting the 1992 Consensus and said Taiwan and China should "not behave as enemies."⁶⁹ Gou has also alleged that the DPP has harmed the economic livelihood of Taiwan's populace and called to expand economic ties with China.⁷⁰ Gou has written that Taiwan owes much to the United States but should not allow the relationship to exhibit an "unhealthy dependency."⁷¹ While Gou's high profile lends his campaign weight, he will have to collect 300,000 signatures before November 2 to qualify as an independent candidate.⁷² Polls conducted in September show Gou trailing the other three candidates with between 9 and 10.5 percent of the total projected vote.⁷³

KMT Factions Fight over the Party's Position on China

The KMT's traditional stance on relations with China has become less appealing to the electorate over time, as Taiwan's population increasingly views itself as "Taiwanese" and expresses broad opposition to Beijing's "one country, two systems" framework.^{*74} The "old guard" members of the KMT, known as the Mainlander faction,[†] such as Ma Ying-jeou, have resisted calls to moderate their stance on China, defending the 1992 Consensus as essential for ensuring cross-Strait peace.⁷⁵ This older KMT generation mostly identifies as Chinese, opposes Taiwan's independence, and holds hope for eventual unification.⁷⁶ There exists a younger generation, the local Taiwanese faction of the KMT with leaders such as Johnny Chiang who espouse views closer to former Taiwan President and once KMT Chairman Lee Tung-hui.⁷⁷ This generation sees itself as more "Taiwanese" and advocate for a more pragmatic, "Taiwan-centric" approach to cross-Strait relations.⁷⁸

These ideological divisions impacted the KMT's internal primary process for a 2024 presidential candidate. Eric Chu, Terry Gou, and Hou You-yi were seen as the original contenders for the KMT nomination.⁷⁹ Hou You-yi, the mayor of New Taipei City, had long been the strongest polling candidate but lacked support from the KMT's "old guard."⁸⁰ Hou also refused to commit to a strong ideological stance on cross-Strait relations, which did not sit well with the KMT's conservative, pro-China base, though it may have contributed to his more mainstream appeal among the Taiwan electorate.⁸¹ Hou was ultimately chosen as the KMT's presidential candidate, likely in the hope that his more moderate stance would make him more electable.⁸² It appears that even after Hou's nomination, he continues to struggle with low polling numbers and will likely be competing for the same voters as Terry Gou.⁸³

* Surveys tracking how Taiwan's population self-identifies have changed over time, with respondents increasingly seeing themselves as solely "Taiwanese" in identity rather than "both Taiwanese and Chinese" or "Chinese." National Chengchi University Election Study Center, "Taiwanese / Chinese Identity (1992/06–2023/06)," July 12, 2023.

† A reference to those who fled the Mainland in 1948, after the Chinese civil war, and their children.

Polling Shows Continued Support for Taiwan's Autonomy, Growing Will to Fight

Public opinion polls in Taiwan indicate that most of Taiwan's population wishes to maintain the island's de facto autonomy while not explicitly declaring de jure "independence" from China.*⁸⁴ Polling shows conflicting views of how the major parties will handle the cross-Straits relationship with China as well as how well Taiwan's military can defend the island.

- A poll conducted by Taiwan's Mainland Affairs Council in July 2023 found that 87 percent of respondents in Taiwan support "maintaining the status quo in a broader sense," which included respondents who answered "yes" to "maintaining the status quo and deciding on independence or unification later," "maintaining the status quo and for unification later," "maintaining the status quo and independence later," and "maintaining the status quo indefinitely."⁸⁵
- A poll conducted by Taiwan's Mainland Affairs Council in July 2023 found that more than 80 percent disapproved of the "one country, two systems" framework, Beijing's proposed arrangement for unification.⁸⁶
- A March 2023 poll conducted by the Taiwan Public Opinion Foundation found that among Taiwan's adults aged 20 years and older, a strong majority of 68.6 percent do not agree with the statement that "DPP will bring war while KMT will bring peace," while 18.9 percent agree with it.⁸⁷
- A February 2023 poll conducted by the 21st Century Foundation in Taiwan found that 79 percent of respondents supported the extension of military conscription to one year.⁸⁸ A poll conducted by the Taiwan Public Opinion Foundation (TPOF) found that 73 percent of respondents favored the extension.⁸⁹
- A September 2022 poll conducted by the Taiwan Public Opinion Foundation found that 47.4 percent of Taiwan's populace believed Ukraine would win the Russia-Ukraine War.⁹⁰ That same poll found that 43.6 percent of respondents expressed the belief that Taiwan's response to PLA military intimidation has been too weak, with 51.5 percent reporting lack of confidence in the DPP government's ability to defend Taiwan.⁹¹ However, when polled in February 2023 about the results of a potential Chinese invasion of Taiwan, 45 percent expressed confidence that Taiwan's military had the ability to defend Taiwan.⁹²
- Polling indicates consistency in Taiwan's will to fight a possible PLA invasion. One poll conducted in March 2022 by the Taiwan International Strategic Study Society claimed 70 percent of respondents were willing to defend Taiwan, a substantial increase from a poll published in December 2021 by the same organization in which 40 percent said they were willing to fight.⁹³ In December 2022, the Taiwan Foundation for Democracy published

*Taiwan's "status quo" is defined by de facto independence without acknowledging de jure statehood. Lev Nachman and Brian Hioe, "No, Taiwan's President Isn't 'Pro-Independence,'" *Diplomat*, April 23, 2020.

a poll wherein 70 percent of respondents expressed willingness to defend Taiwan.⁹⁴

Taiwan's Government Attempts to Increase Population's Resilience against Political Interference

The Tsai Administration remained consistent in its final term by emphasizing the importance of strengthening Taiwan's democracy ahead of the 2024 election.⁹⁵ The Administration's actions include the following:

- In June 2023, Taiwan's government formed a cross-ministry security task force to examine possible voting interference in the upcoming election.⁹⁶ The task force will likely pay particular attention to illicit Chinese money flows into Taiwan to fund candidates favored by China.⁹⁷ Taiwan has previously established a task force to combat disinformation, consisting of representatives across different areas of government, including education, cybersecurity, digital, the Central Election Commission, equipment, and procurement.⁹⁸
- Citing an internal Taiwan government report, Reuters reported that one of Taiwan's security agencies warned in March that it expects China will target a range of Taiwan politicians, businesspeople, and public opinion leaders in various fields to build support for closer ties with the Mainland, using methods such as exchange programs and all-expenses-paid trips to China.⁹⁹ These tactics are frequently associated with the CCP's united front work (for more, see Chapter 2, Section 2: "Battling for Overseas Hearts and Minds: China's United Front and Propaganda Work").¹⁰⁰
- In April, Taiwan's Ministry of Justice Investigation Bureau detected increased amounts of money flowing from Taiwan companies operating in China to certain political candidates, apparently under orders from Beijing.¹⁰¹ According to a Taiwan official, Chinese authorities pressure Taiwan businesspeople with business interests on the Mainland via threats of audits, tax evasion charges, and other legal trouble to force them to channel money toward KMT candidates or candidates who advocate China's "one country, two systems" model and oppose Taiwan independence.¹⁰²

Military Situation in the Taiwan Strait Remains Tense

The PLA accelerated its daily pressure campaign against Taiwan, embarking on a joint exercise in April to signify Beijing's displeasure with President Tsai's transit through the United States.¹⁰³ Taiwan announced major shifts to its conscription system this year, signifying resolve in the face of Chinese aggression.¹⁰⁴

Beijing's Military Activities near Taiwan in 2023

Frequent PLA Intrusions into Air, Waters around Taiwan

The PLA continued to expand its provocative operations in the air and waters around Taiwan in 2023, frequently violating the is-

land's air defense identification zone (ADIZ)* and crossing the median line† to normalize its presence and signal its displeasure with geopolitical events.¹⁰⁵ According to a database currently maintained by defense analysts Alex Kung and Ben Lewis that compiles data published by Taiwan's Ministry of National Defense, PLA aircraft made approximately 1,390 sorties into Taiwan's ADIZ between January 1 and October 6, 2023, over 8 percent more than the 1,286 sorties than occurred over the same period in 2022.‡¹⁰⁶ However, during the April in which the Tsai-McCarthy meeting took place, the PLA only made 259 incursions into Taiwan's ADIZ, a figure 42 percent smaller than the 446 that occurred after then Speaker of the House of Representatives Nancy Pelosi's August 2022 trip to Taiwan.¹⁰⁷ Since September 2022, the PLA has also conducted long-range drone flights into and around Taiwan's ADIZ.¹⁰⁸ In 2023, the first reported drone flight that went around the island and within the ADIZ occurred in April, with two subsequent flights repeating that maneuver in May.¹⁰⁹ In July, shortly before Taiwan's annual Han Kuang military exercises,§ Taiwan's Ministry of National Defense reported an upsurge of PLA activity in the vicinity of Taiwan between July 11 and 13, with 73 ADIZ incursions by PLA aircraft.¹¹⁰ During that timeframe, 16 PLA warships were detected in the waters around Taiwan between July 14 and 15, but they were not reported to have taken the escalatory measure of entering Taiwan's contiguous zone.¶¹¹¹

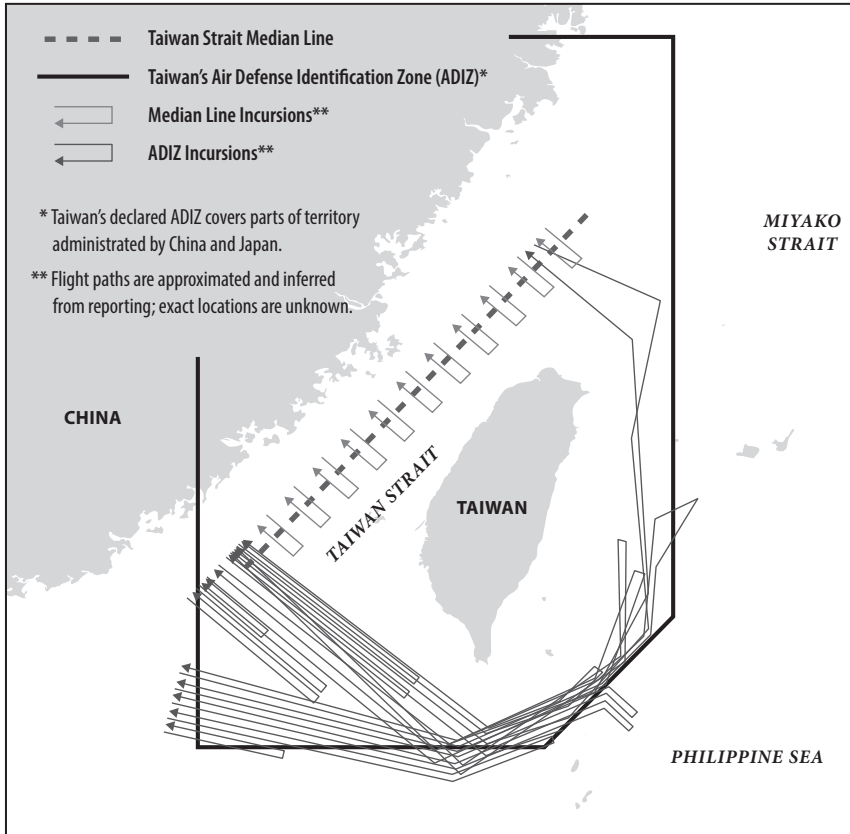
*An air defense identification zone (ADIZ) is as an area of airspace over land or water in which the ready identification and location of all aircraft is required in the interest of a nation's national security. While Taiwan's claimed ADIZ covers large portions of mainland China, its Ministry of National Defense only reports on aircraft that enter Taiwan's de facto ADIZ. Ben Lewis, "2022 in ADIZ Violations: China Dials Up the Pressure on Taiwan," *Center for Strategic and International Studies*, March 23, 2023; Federal Aviation Administration, "ENR 1.12 National Security and Interception Procedures."

†The median line, also known as the center line, is an informal demarcation extending down the middle of the Taiwan Strait. The line was drawn in 1955 by General Benjamin O. Davis, then commander of the U.S. Air Force's Taiwan-based 13th Air Force. While the Chinese government in Beijing never formally agreed to the establishment of the median line, both the PLA and Taiwan's military observed the line in practice. In the decades immediately following the drawing of the median line, Taiwan's military superiority made it too dangerous for PLA aircraft to cross the line. In fact, the Taiwan military also never publicly acknowledged the median line until 1999, when the PLA's first deliberate crossing occurred. With the shift in the cross-Strait military balance in China's favor over the last two decades, Taiwan is no longer able to prevent PLA planes from crossing the line. In 2019, two Chinese fighter aircraft intentionally crossed the median line for the first time since 1999. China's continued median line crossings constitute a unilateral change to the cross-Strait status quo. While China's foreign ministry said in September 2020 that the median line did not exist, Taiwan's defense ministry described its existence as a "fact" in August 2022. For more, see U.S.-China Economic and Security Review Commission, Chapter 5, "Taiwan," in *2019 Annual Report to Congress*, November 2019, 449; Ralph Jennings, "What Is the Median Line between China and Taiwan?" *Voice of America*, October 28, 2020.

‡The PLA aircraft sent into Taiwan's ADIZ are typically multirole strike fighters such as the J-11, J-10, or SU-30. However, the PLA has also sortied anti-submarine warfare aircraft such as the Y-8, bombers such as the H-6, and various electronic warfare and reconnaissance aircraft such as the Y-9. Gerald C. Brown, Ben Lewis, and Alex Kung, "Taiwan ADIZ Violations," October 9, 2023.

§The Han Kuang exercises are the annual joint military exercises held by Taiwan armed forces, with the live-maneuver portion occurring each summer. The largest training event in Taiwan's Ministry of National Defense yearly calendar, Han Kuang is intended to simulate Taiwan's response to an invasion by the PLA. Joseph Yeh, "2023 Han Kuang Drills to Test Response to Latest PLA Threats: MND," April 26, 2023; John Dotson, "An Overview of Taiwan's 2023 Han Kuang Military Exercise," *Global Taiwan Institute, Global Taiwan Brief* 8:15 (August 9, 2023); Eric Cheung, "Taiwan Holds Massive Han Kuang Military Drills as Tensions with China Build," *CNN*, July 29, 2022.

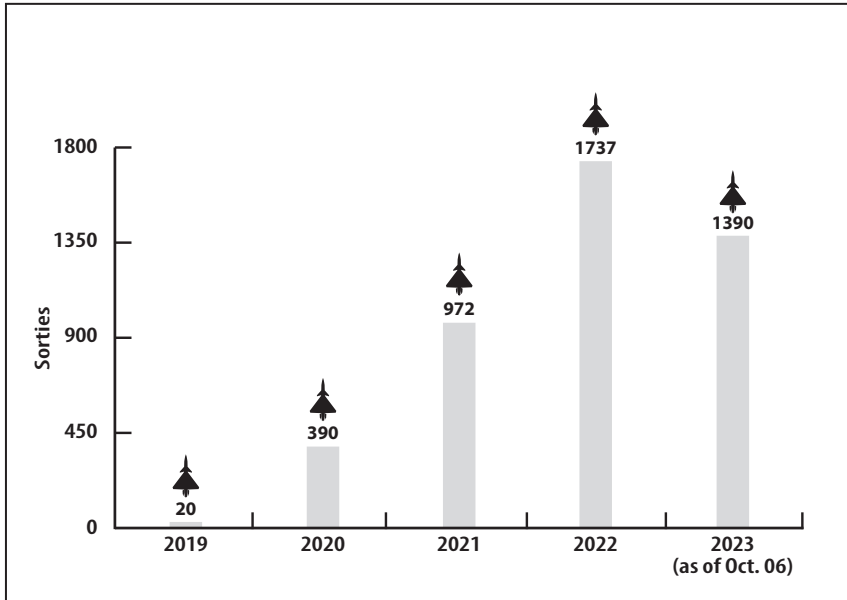
¶Consistent with UN Convention on the Law of the Sea (UNCLOS) regulations, Taiwan defines its territorial sea as beginning 12 nautical miles from its coast, and its contiguous zone as beginning 24 nautical miles from its coast. UN Convention on the Law of the Sea, Part II, "Territorial Sea and Contiguous Zone," Section 4, Article 33.

Figure 1: Flight Paths of PLA Incursions in Taiwan's ADIZ, 2023

Source: Taiwan's Ministry of National Defense, compiled by Gerald C. Brown, Ben Lewis, and Alex Kung. See Gerald C. Brown, "Taiwan ADIZ Violations," last updated October 9, 2023.

The PLA also practiced several military operations in 2023 relevant to a Taiwan conflict, which variously aimed to deter intervention by outside parties, practice new military skills, and make routine its presence in the Taiwan Strait. These included a series of exercises carried out by the PLA Eastern Theater Command that it dubbed Joint Sword between April 8 and 10, shortly after President Tsai's meeting with then Speaker McCarthy, with the following elements:¹¹²

- Military forces from the PLA Army, Navy, Air Force, and Rocket Force reportedly practiced seizing control of the sea, air, and information domains around Taiwan.¹¹³ Forces involved reportedly used a "joint combat system" to coordinate simulated strikes on "foreign military targets" in the waters off Taiwan's southwestern coast.¹¹⁴
- A PLA amphibious landing ship carried out live-fire exercises in Luoyuan Bay, just 30 miles from the Taiwan-administered Matsu Islands, reportedly firing shells at land and sea targets.¹¹⁵

Figure 2: PLA Incursions in Taiwan's ADIZ, 2019 to October 6, 2023

Source: Taiwan's Ministry of National Defense, compiled by Gerald C. Brown, Ben Lewis, and Alex Kung. See Gerald C. Brown, "Taiwan ADIZ Violations," last updated October 9, 2023.

- PLA Navy ships practiced close-range combat maneuvers and air defense drills.¹¹⁶ Chinese military commentators asserted that the forces involved in the exercise were capable of both neutralizing on-island targets before combat began as well as denying access of "external military reinforcements," reflecting the longstanding PLA focus on building a capability to execute coordinated strike and air defense operations against intervening U.S. forces.¹¹⁷
- PLA fighter jets and bombers carried out simulated strike drills and air combat drills with the support of early warning aircraft, electronic warfare jammers, and refueling aircraft.¹¹⁸ Though the April 2023 Joint Sword exercise was shorter in length than the exercises observed after then Speaker Pelosi's August 2022 trip to Taiwan, the tempo of PLA air operations around Taiwan was more intense.¹¹⁹ From April 8 through 10, 2023, a total of 134 ADIZ violations were reported by Taiwan's Ministry of Defense, an amount greater than any three-day period of the August 2022 exercises.¹²⁰
- PLA Rocket Force conventional missile brigades coordinated with naval and air assets to conduct simulated strikes.¹²¹
- The PLA Navy aircraft carrier *Shandong* sailed through the area south of Miyako Island to locations east of Taiwan and launched 80 fighter missions, demonstrating the PLA's increasing ability to conduct carrier operations.¹²² J-15 fighter aircraft launched from the *Shandong* conducted ADIZ violations across the southeast of Taiwan's ADIZ for the first time; this coincid-

ed with land-based KJ-200 airborne early warning and control aircraft that launched incursions into Taiwan's west ADIZ.*¹²³

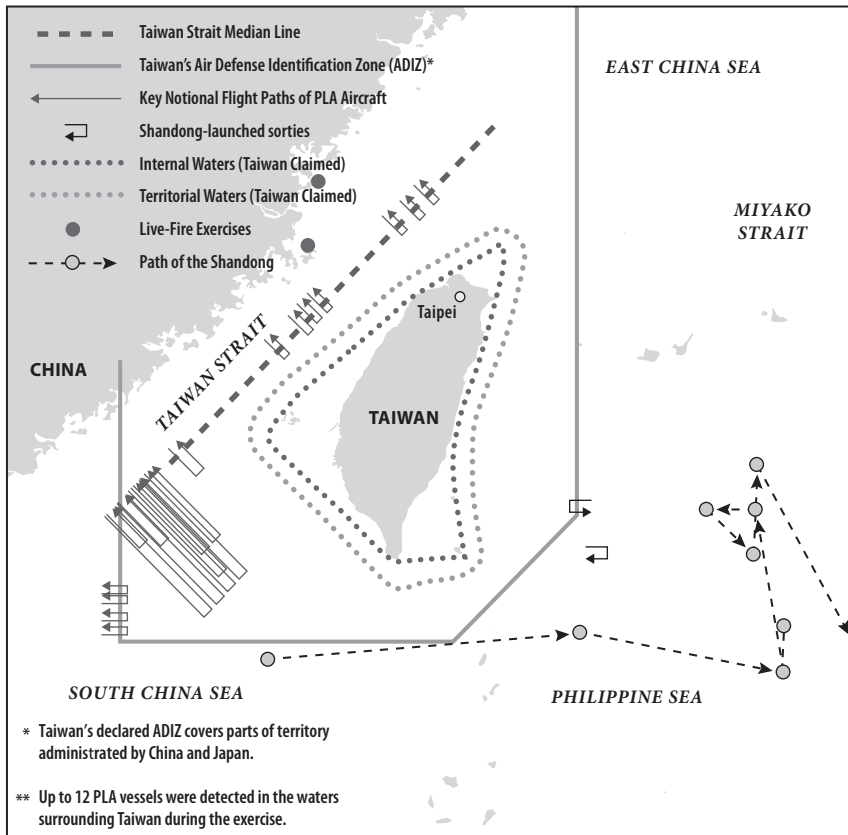
The PLA also engaged in a significant series of military drills around Taiwan in September 2023. A naval force consisting of the PLA's *Shandong* aircraft carrier and a total of 42 PLA vessels conducted drills in the Western Pacific as large numbers of aircraft conducted sorties from the Mainland.¹²⁴ Japan's Minister of Defense reported that naval drills conducted on September 13 and 14 consisted of several rounds of aircraft performing takeoff and landing exercises from the *Shandong*.¹²⁵ The PLA's Eastern Theater Command stated on its WeChat account that its pilots and ground crews were taking part in long-distance, cross-theater exercises.¹²⁶ From September 17 to 18, the PLA launched another series of aircraft drills, with Taiwan's Ministry of National Defense reporting 103 PLA aircraft within the vicinity of Taiwan in a 24-hour period.¹²⁷ These drills demonstrate Beijing's attempts to normalize its military presence around Taiwan, with Zhou Chenming, a researcher at Beijing-based Yuan Wang military science and technology think tank, stating that such "island encirclement patrols" and "cross-theater drills" around Taiwan and in the Western Pacific have become routine.¹²⁸ Lin Yin-yu, an assistant professor at Taiwan's Tamkang University, argued that China's aircraft carrier drills in the Western Pacific enable the PLA to test capabilities needed to resist a potential intervention by the United States and its allies in a Taiwan conflict.¹²⁹

Chinese Thinkers Study Lessons of the Ukraine Conflict

Prominent Chinese state-linked think tanks are studying the implications of the war in Ukraine for a potential conflict over Taiwan as well as lessons about the U.S. deterrence strategy. In a May 2022 article, Zuo Xiying of China's Renmin University opined that although U.S. deterrence efforts did not dissuade Russia from attacking Ukraine, the fact that the United States followed through on its threats to sanction Russia and provide military aid to Ukraine increased the credibility of U.S. deterrence efforts vis-à-vis Taiwan, recommending that Chinese policymakers study in depth how the United States conducts deterrence.¹³⁰ Scholars such as Dr. Zuo and Zhang Gaoyuan of Peking University highlighted the importance of intelligence in the Russia-Ukraine War.¹³¹ Dr. Zhang noted the effective use of dual-use technology such as drones and Starlink satellites, open source social media information, and efforts by noncombatants in enhancing Ukraine's intelligence posture.¹³² Dr. Zuo wrote on the United States' use of its own intelligence capabilities to influence the information environment prior to the invasion and to enhance Ukraine's military effectiveness, citing reports of U.S. intelligence assistance in the sinking of the Russian warship *Moskva*.¹³³ Dr. Zuo argued that the United States is exaggerating a decline in its own conventional deterrence capabilities while expanding its "toolbox" of methods for "containing" China.¹³⁴

*The limited radar range of J-15s requires supplemental radar coverage to operate effectively. Airborne early warning and control (AEW&C) aircraft, such as the KJ-500 and the KJ-200, can provide the needed radar coverage. *Center for Strategic and International Studies*, "By Air, Land, and Sea: China's Maritime Power Projection Network," September 15, 2021; U.S. Department of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2022*, November 29, 2022, 82.

Figure 3: PLA Activity in the Vicinity of Taiwan during the April 2023 Joint Sword Exercise



Source: Bonny Lin et al., “Tracking the Fourth Taiwan Strait Crisis,” *Center for Strategic and International Studies*, August 5, 2022; Akhil Kadidal and Ridzwan Rahmat, “Chinese Wargames End with Massed Incursions, Carrier Aircraft in Taiwan’s ADIZ,” *Janes*, April 12, 2023.

In February 2023, the influential Ministry of State Security-affiliated think tank China Institutes for Contemporary International Relations (CICIR) published an article expressing concerns that the United States and Taiwan may now be in a better strategic position, arguing that the United States had used the war in Ukraine to strengthen its regional network of allies and partners.¹³⁵

PLA Learns Operational Lessons from War in Ukraine

Writers and academics associated with the PLA and the Chinese defense industry are also studying the potential operational implications of the war in Ukraine for a Taiwan conflict. Analysis in a Chinese military journal discussed Russian helicopter operations in the current conflict in Ukraine and assessed that helicopters will no longer be able to safely conduct combat missions independently due to the proliferation of man-portable anti-aircraft systems, but neither will drones be able to fully replace them, necessitating the develop-

ment of tactics that utilize both systems.¹³⁶ A January article in the *PLA Daily* discussed Russia's proposed military reforms and poor performance by its ground forces in Ukraine; the article concluded that maintaining an effective ground force is still central to victory in modern warfare.¹³⁷ A Chinese military-affiliated journal wrote specifically about countering the U.S.-developed High Mobility Artillery Rocket System (HIMARS) in a Taiwan conflict, highlighting the importance of achieving air supremacy and information superiority in order to locate high-value systems such as HIMARS and destroy them via precision strikes; noting the importance of reconnaissance drones in this mission.*¹³⁸

China's Gray Zone Activity around Taiwan Continues

China's continued gray zone† activities around Taiwan's outer islands disrupt the lives of Taiwan citizens. Taiwan's National Communication Commission has accused two Chinese-flagged vessels, a fishing ship and a container ship, of deliberately cutting the two undersea internet cables that provide internet connectivity to Taiwan's outlying Matsu Island in February 2023.¹³⁹ The severing of the cables left the island's 14,000 residents without internet service for over two months.¹⁴⁰ According to the National Communication Commission, this was the 27th incident of cable-cutting that has been observed in the last five years.¹⁴¹ The Associated Press reported that Su Tzu-yun of the Taiwan government-supported Institute for National Defense and Security Research stated it could not be ruled out that the cables were cut on purpose.¹⁴² Geoff Huston of the Asia Pacific Network Information Center noted that the level of breakage observed was "highly unusual for a cable, even in the shallow waters of the Taiwan Strait."¹⁴³

China uses its coast guard and maritime forces to assert Beijing's territorial claims over Taiwan. In April, China's Fujian maritime safety administration launched a three-day "special joint patrol and inspection operation" in the central and northern parts of the Taiwan Strait that reportedly involved *Haixun 6*, the China Coast Guard's first large-scale patrol vessel in the Taiwan Strait, as well as vessels from the East China Sea Rescue Bureau and the East China Sea Maritime Security Center.¹⁴⁴ Chinese authorities reportedly tasked maritime law enforcement officials with practicing onsite inspections aboard vessels in the Taiwan Strait, although there were no reports of any such inspections taking place.¹⁴⁵ Taiwan's Maritime and Port Bureau issued a statement in April indicating that it had told Taiwan shipping companies to refuse these inspections.¹⁴⁶

*The Ukrainian military's employment of the U.S.-supplied High Mobility Artillery Rocket System (HIMARS), a medium-range mobile rocket artillery system, has proven to be a highly significant weapon in its conflict with Russia. Lyle Goldstein and Nathan Waechter, "China Considers CounterMeasures to US HIMARS Missile System," *Diplomat*, June 22, 2023; Matt Yu and Joseph Yeh, "Taiwan to Receive HIMARS One Year Earlier than Expected: Military," *Focus Taiwan*, May 10, 2023.

†A 2019 RAND Corporation study defined the "gray zone" as "an operational space between peace and war, involving coercive actions to change the status quo below a threshold that, in most cases, would prompt a conventional [kinetic] military response, often by blurring the line between military and nonmilitary actions and the attribution for events." Gray zone tactics can occur through military intimidation, paramilitary activity, the economic activities of state-owned enterprises or private proxies, information operations, diplomacy, and economic coercion. Lyle J. Morris et al., "Gaining Competitive Advantage in the Gray Zone: Response Options for Coercive Aggression below the Threshold of Major War," *RAND*, 2019, 8, 30–40.

Taiwan Military Reforms Advance in Last Year of Tsai Administration

Throughout its tenure, the Tsai Administration has worked to enhance Taiwan's military preparedness and redress a growing imbalance in cross-strait military forces.¹⁴⁷ High-profile efforts to do this include a Strengthening All-People's Defense Military Force Restructuring Plan, introduced by President Tsai in December 2022, which entails reforms to the conscription system and a reorganization of troop types within Taiwan's military.¹⁴⁸ Taiwan's annual Han Kuang military exercise this year continued to demonstrate priorities in Taiwan's ongoing defense reforms, while the Tsai Administration hopes to continue defense spending increases through 2024.¹⁴⁹

In late December 2022, the Tsai Administration announced plans to restore the 2013 conscription length for young men, bringing the mandatory service period from four months to one year.¹⁵⁰ Set to begin in January 2024, this change represents potentially major shifts for both Taiwan's military and society.¹⁵¹ Under the current conscription system, recruits serve just four months, with many observers commenting the training received is both outdated and too short to learn essential combat skills.¹⁵² These changes are designed to provide Taiwan's military with higher-quality conscripts and, according to Chieh Chung of the National Policy Foundation, may increase the number of troops available for the island's 169,000-strong active force by up to 70,000 annually starting in 2027.*¹⁵³ The year-long service period for new conscripts will reportedly involve more civil defense training, including medical training, air defense evacuation, and emergency rescue training that will help to increase the resiliency of Taiwan's society by increasing the number of citizens trained in civil defense skills.¹⁵⁴ The increased service period will include greater weapons familiarization for the individual conscript, increasing the number of rounds fired during basic training, training with advanced weapons, and conducting exercises based on conscripts' military specialization.¹⁵⁵

While the plan is the product of the current Administration—and a significant expenditure of political capital—there appears to be broad support for the measure across the political spectrum in Taiwan.¹⁵⁶ The Taiwan government has taken steps to socialize the changes to future conscripts and the general populace of Taiwan, including publishing a manga-style information booklet to educate the general populace of the island on the importance of conscription.¹⁵⁷ The government also announced changes to Taiwan's reserve system including a program to allow female veterans to serve in the reserves and increasing the monthly salary for active conscripts.¹⁵⁸ The plan announced by President Tsai also involves a new division of duties among four newly designated categories of troops, which is designed to better assimilate the increased number of conscripts

*Taiwan's active force (including active conscripts) numbers 169,000, with reserve manpower numbering 1,657,000. Former conscripts are enrolled in the reserves after their active period and are required to report for duty only once every two years for five to seven days of refresher training, equating to as little as 20 days of training spread out over eight years. According to DPP lawmaker and member of Taiwan's defense committee Wang Ting-yu, as of late September 2022, the number of combat-ready reservists is only about 300,000. International Institute for Strategic Studies, "The Military Balance," February 14, 2023, 291; Ian Easton et al., "Transformation of Taiwan's Reserve Force," *RAND Corporation*, 2017, 6; Huizhong Wu, "Military Reserves, Civil Defense Worry Taiwan as China Looms," *AP News*, September 4, 2022.

into a conventional force structure with an increased emphasis on civil defense while integrating reserve troops into defense plans.*¹⁵⁹ It remains to be seen what effect these reforms will have on Taiwan's military or how a new administration in 2024 would manage their implementation. Released in September, Taiwan's 2023 National Defense Report† showcased lessons from the Russia-Ukraine War that Taiwan's Ministry of National Defense intends to integrate into its defense strategy, such as ramping up its asymmetric military capabilities, establishing defense in depth, and decentralizing command and control in preparation for a possible conflict with China.¹⁶⁰ The report includes numerous systems that Taiwan's military wishes to acquire, including a fleet of 7,000 commercial and 700 military drones by 2028.¹⁶¹

Taiwan Public More Confident in U.S. Military Support in a Cross-Strait Conflict

According to a February 2023 poll by the Taiwan Public Opinion Foundation (TPOF), a DPP-leaning organization, the proportion of Taiwan citizens who believe the United States will come to Taiwan's defense in the event of a PLA attack increased from 34.5 percent in 2022 to 42.8 percent in 2023.¹⁶² The TPOF poll indicated that 51.6 percent of Taiwan's public feared Taiwan would become a "second Ukraine" (down from 59.7 percent a year before), with 43.6 percent not worried by the possibility (up from 37.5 percent).¹⁶³ The survey also asked how much confidence the public has in Taiwan's own military to successfully resist a Chinese attack if it were to occur tomorrow. According to the poll, the replies were almost evenly divided, with 45.3 percent expressing confidence in Taiwan's military and 47.2 percent holding little trust in Taiwan's armed forces.¹⁶⁴ The poll results varied widely based on respondents' political party affiliation, with 72 percent of supporters of the DPP government expressing faith in Taiwan's military and 73 percent of opposition KMT backers holding the view that Taiwan's military would not be able to resist a PLA invasion.¹⁶⁵ A RAND report released in June 2023 found that belief in U.S. intervention in a Taiwan conflict scenario could be critical in bolstering the Taiwan public's will to resist.¹⁶⁶

*According to the plan, "main battle troops" will encompass the volunteer personnel of the active-duty military (currently at 169,000 personnel with an end goal of 210,000) who will be responsible for most major front-line combat operations. "Garrison troops" will comprise "mandatory service personnel" (conscripts); these soldiers will be primarily responsible for infrastructure protection and territorial defense duties. The "civil defense system" will be formed by central and local government agencies; this system is to integrate "alternative military service personnel" and private sector resources. Aside from assisting in military support operations, it will be responsible for disaster relief, medical treatment, public safety, emergency repairs, and other unspecified tasks necessary for societal resilience. The revamped "reserve system" will be intended to "replenish our main battle force with retired volunteer soldiers, and our garrison force with former mandatory servicemembers." Office of the President, Republic of China (Taiwan), *President Tsai Announces Military Force Realignment Plan*, December 27, 2022; International Institute for Strategic Studies, "The Military Balance," February 14, 2023, 291.

†The National Defense Report is published biannually by Taiwan's Ministry of National Defense, and is intended to convey military readiness and defense policies to both domestic and international audiences. This is the 17th edition, and the second to be published simultaneously in both Chinese and English. Republic of China (Taiwan) Ministry of National Defense, *National Defense Report*, September 2023, 7; John Dotson, "The 2021 National Defense Report and Its Assessment of Taiwan's Security Environment," *Global Taiwan Institute*, December 1, 2021.

Taiwan's 2023 Han Kuang exercises focused on homeland defense, force preservation, and civil-military coordination, reflecting the continued evolution of the exercise to focus on distributed operations, counter-amphibious invasion, and protection of key infrastructure.¹⁶⁷ According to Taiwan's Ministry of Defense, the exercises occurred from July 24 to 29 and focused on troop preservation, naval interdiction operations, key infrastructure protection, and command and control resiliency.¹⁶⁸ The exercise simulated an attack on Taiwan by the PLA and the Taiwan military's efforts to preserve its forces against anticipated amphibious assaults, long-range precision strikes, and airborne assaults on key infrastructure.*¹⁶⁹ Notable elements included:

- Antiblockade escort operations to forestall a PLA blockade, including Taiwan Navy warships that practiced naval minelaying operations.¹⁷⁰
- Distributed command and control to increase survivability in anticipation of long-range PLA strikes targeting Taiwan's leadership.¹⁷¹
- Reported provision of fuel, maintenance, repair, and refueling by the nation's defense industries.¹⁷²
- Air Force units that rehearsed relocation operations aimed to distribute and preserve Taiwan's airpower in the event of an attack by the PLA, which would likely target Taiwan's airbases early in a conflict.¹⁷³
- A 40-minute antitakeover operation held at Taiwan Taoyuan International Airport during which commercial air traffic was suspended, the first time such a drill had been staged at Taoyuan Airport since it opened in 1979.¹⁷⁴
- Counter-ballistic missile drills and the public deployment of vehicle-mounted surface-to-air missile systems to locations at key facilities around the island involving military and civil defense personnel to simulate the response to missile attacks against infrastructure targets such as airports and harbors.¹⁷⁵
- An antilanding exercise held on a beach in New Taipei City's Bali District, which featured the use of drones and Javelin missile systems to defeat a simulated hostile amphibious landing.¹⁷⁶
- Exercise locations included oil refineries, power plants, port facilities, oil supply centers, key traffic arteries, train stations, and other vulnerable points, with police and firefighters also contributing, such as an exercise within Taipei's main subway station by Taiwan military and police units against simulated hostage-takers.¹⁷⁷

Taiwan's proposed defense budget for 2024 indicates willingness on the part of the government to allocate increased resources for Taiwan's defense. In August, Taiwan's Cabinet approved a fiscal

*Reflecting the priority of enhanced survivability against strikes on leadership, Taiwan announced an additional 5,000 military police would be stationed in Taipei starting in January 2024 to enhance "decapitation resistance." Jono Thompson, "Taiwan to Station 5,000 More Troops in Taipei to Boost 'Decapitation Resistance,'" *Taiwan News*, August 7, 2023.

year 2024 budget proposal that includes a record \$19 billion (New Taiwan dollars [NTD] 606.8 billion)* for defense spending.¹⁷⁸ This would represent a 3.5 percent increase compared to Taiwan's Legislative Yuan-approved defense budget for 2023 and represents a 38 percent increase in the base defense budget over the course of eight years since President Tsai took office in 2016.¹⁷⁹ The proposed budget includes a base amount earmarked for the defense budget of \$13.9 billion (NTD 440 billion) and three special budgets: one for improving air and sea strike capabilities worth \$1.54 billion (NTD 49 billion); one for advanced fighter jets worth \$1.42 billion (NTD 45 billion); and a "non-operating special fund," likely to pay for military infrastructure, housing, and defense production, worth \$2.26 billion (NTD 71.9 billion).¹⁸⁰ The 2024 budget proposal will need to be approved by Taiwan's Legislative Yuan, which typically occurs by the end of the calendar year.¹⁸¹

Taiwan Military Cooperates with the United States, Five Eyes

U.S. President Joe Biden has authorized the unprecedented use of Presidential Drawdown Authority—which allows for the delivery of U.S. defense equipment pulled directly from the current stock of weapons and munitions in service with the U.S. military—as a new means to provide military aid to Taiwan.[†]¹⁸² The United States also continues to assist Taiwan's defensive capabilities with increased intelligence sharing and military training.¹⁸³

In July 2023, the Biden Administration announced a new weapons aid package for Taiwan valued at up to \$345 million via the Presidential Drawdown Authority.¹⁸⁴ This represents the first time such authority was invoked to supply Taiwan with defense articles.¹⁸⁵ Transferring equipment in this manner allows the United States to donate defense articles directly from U.S. Department of Defense inventories rather than providing weapons through the lengthy foreign military sales process, accelerating the transfer of inventory.¹⁸⁶ This approach serves as a stopgap measure to partially alleviate a \$19 billion backlog in arms sales for Taiwan, which is in part due to production backlogs stemming from U.S. industrial base constraints.¹⁸⁷ It is currently unclear what weaponry or equipment will be in the drawdown package, as the announcement did not detail its contents.¹⁸⁸ Pentagon spokesperson Lt. Col. Martin Meiners said the package "includes self-defense capabilities that Taiwan will be able to use... to bolster deterrence now and in the future."¹⁸⁹ He added that the systems include "critical defensive stockpiles, multi-domain awareness, anti-armor and air defense capabilities."¹⁹⁰ The \$345 million aid package comes on top of the over \$1.6 billion in foreign military sales to Taiwan announced by the Defense Security Cooperation Agency since December 2022 and may

*This section uses the following exchange rate throughout: \$1 U.S. Dollar = 31.94 NTD.

†The use of the Presidential Drawdown Authority to direct a drawdown to provide military assistance under section 506(a)(1) of the Foreign Assistance Act (FAA) allows for the speedy delivery of defense articles and services from current Department of Defense stocks to foreign countries and international organizations to respond to unforeseen emergencies. Such assistance can begin arriving within days—or even hours—of approval. After initial engagement with Congress, the secretary of state requests the president's authorization to notify Congress of the intent to exercise the drawdown authority under section 506(a)(1) of the FAA and seeks delegated authority from the president to make the necessary determinations and to direct the drawdown. U.S. Department of State, Bureau of Political-Military Affairs, *Use of Presidential Drawdown Authority for Military Assistance for Ukraine*, July 25, 2023.

indicate the willingness to use this authority again as an additional channel for regular support to Taiwan.* Congress authorized up to \$1 billion worth of materiel to be sent to Taiwan via Presidential Drawdown Authority in the National Defense Authorization Act for Fiscal Year 2023.¹⁹¹ In August, the Biden Administration notified Congress that it had approved an arms transfer to Taiwan under the Foreign Military Financing (FMF)[†] program in the amount of \$80 million, but it did not specify what systems or equipment the financing would be for.¹⁹²

The U.S. military continues to advise and train the Taiwan military to increase its preparedness for a potential conflict. According to media reports published in February 2023, the U.S. military planned to send 100–200 U.S. military trainers to Taiwan in 2023, up from 39 noted in Defense Department data in 2021.¹⁹³ The U.S. military instructors are reportedly being assigned to boot camps and reserve brigades to observe Taiwan’s training and provide practical consultations on training methods.¹⁹⁴ While the American Institute in Taiwan did not confirm the training, Taiwan’s Ministry of National Defense spokesman Sun Li-fang expressed the ministry’s appreciation to the United States for “boosting the nation’s armed forces by means of military training.”¹⁹⁵ In early April, U.S. military instructors reportedly entered Chiashan Air Force Base in Hualien County to evaluate the survivability of hardened structures where fighter planes and ammunition are stored and proposed methods to strengthen facilities and increase survivability.¹⁹⁶ An unknown number of Taiwan troops were reported to have taken part in the annual Northern Strike multinational exercises held at Camp Grayling, Michigan, in August with U.S. National Guard and Reserve forces.¹⁹⁷

Finally, in 2023, Taiwan officials confirmed Taiwan is actively sharing intelligence with Five Eyes countries‡ to better understand China’s military and leadership plans.¹⁹⁸ Taiwan National Security Bureau Director Tsai Ming-yen said in April that Taiwan was upgrading its information technology infrastructure to establish an “instant online reporting and communication mechanism” to connect with foreign countries, including the Five Eyes intelligence alliance, and said that the bureau has already been sharing intelligence with these partners “in real time.”¹⁹⁹ Reporting by the *Financial Times* in June indicated that the United States, Taiwan, and Japan also plan to share real-time data gathered from their respective drone fleets, giving all three access to a common operating picture, a claim that Taiwan’s Ministry of Defense has since denied.²⁰⁰

Taiwan’s External Relations

In 2023, Taiwan’s government continued to seek out opportunities to strengthen ties with the countries that maintain official recogni-

*See Appendix for total foreign military sales to Taiwan announced by the Defense Security Cooperation Agency since December 2022.

†Foreign Military Financing is the largest military assistance account managed by the State Department and primarily provides grant assistance to foreign governments for the purchase of U.S. defense equipment and military training under the Foreign Military Sales program. FMF is a source of financing and may be provided to a partner country on either a grant (nonrepayable) or direct loan basis. Defense Security Cooperation Agency, *Foreign Military Financing (FMF)*.

‡The Five Eyes Alliance is an intelligence-sharing arrangement between five English-speaking democracies: the United States, the UK, Canada, Australia, and New Zealand. Five Eyes Alliance members share intelligence and cooperate on security matters. Public Safety Canada, *Five Country Ministerial*, June 29, 2023.

tion of Taiwan and its many unofficial partners despite a forceful, sustained effort by China to isolate it from the international community. Tensions in the Taiwan Strait have spurred many countries to more closely focus on their stance toward Taiwan and consider ramifications of a potential conflict. China continued a strategy of “checkbook diplomacy” to entice the countries that maintain official relations with Taiwan to switch recognition to Beijing, offering to sponsor large infrastructure development projects and cash infusions to their governments.²⁰¹ On the international stage, China again used its clout in organizations like the World Health Organization to pressure other members to reject Taiwan’s recognition or inclusion. Taiwan has sought to resist Beijing’s efforts by pursuing a new, pragmatic diplomatic approach, gaining support from unofficial partners when and where it could by reminding countries of Taiwan’s centrality to the global economy and its contributions to global public goods.²⁰²

China Continues Its Longstanding Campaign to Isolate Taiwan

In 2023, China continued its longstanding efforts to isolate Taiwan from the international community by attempting to poach its remaining official diplomatic partners. China also continued pressuring other countries to refrain from supporting Taiwan’s participation in international fora.

Taiwan Loses Honduras, Reducing Its Diplomatic Partners to 13

On March 15, Honduras became the ninth country since 2016 to terminate official relations with Taiwan, reducing the count of countries with which Taipei maintains official diplomatic ties to 12 plus the Holy See.*²⁰³ A statement from the Honduran Foreign Ministry read that “Taiwan is an inalienable part of the Chinese territory,” echoing verbatim remarks from Nicaragua’s foreign ministry when it switched recognition from Taiwan to China at the end of 2021.²⁰⁴ Honduras joins Nicaragua, El Salvador, Panama, and the Dominican Republic as Latin American and Caribbean countries Beijing has successfully peeled away from Taiwan in the past five years, leaving Belize, Guatemala, Paraguay, Haiti, St. Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines.²⁰⁵ Honduras is the second-largest central American country behind Guatemala both in terms of population and gross domestic product (GDP), and it is home to Soto Cano Airbase used by the U.S. military for humanitarian and antinarcotic operations in the region (for more on China’s inroads in Latin America, see Chapter 1, Section 2, “U.S.-China Security and Foreign Affairs”).²⁰⁶ In response to Honduras breaking ties, President Tsai said in a statement, “[Taiwan] will not engage in a meaningless contest of dollar diplomacy with China.”²⁰⁷

*The countries that formally recognize the government of Taiwan are Belize, Eswatini, Guatemala, Haiti, Marshall Islands, Nauru, Palau, Paraguay, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Tuvalu, and Vatican City (Holy See). *Reuters*, “And Then There Were 13: Taiwan’s Diplomatic Allies,” March 25, 2023.

Taiwan Continues to Be Shut Out of International and Regional Fora

In 2023, Taiwan's attempts to participate in the World Health Organization annual assembly and other international and regional fora were again met with a sustained pressure campaign from China directed at multilateral organizations and participant countries.*²⁰⁸ In May, despite a joint statement of support from the United States, the UK, Australia, France, Japan, Lithuania, Canada, the Czech Republic, and Germany, the assembly rejected Taiwan's request to participate at the onset of the nine-day annual gathering in Geneva.†²⁰⁹ China and Pakistan spoke against participation for Taiwan in open floor remarks, with China claiming that nearly 100 countries affirmed its "one China principle" as defined by Beijing.²¹⁰ Beyond using its membership and clout to exclude Taiwan from participation, China relentlessly campaigns against those that do include Taiwan, such as the WTO, to use its preferred nomenclature "Chinese Taipei" to designate the island.²¹¹ In April, the United States and Taiwan convened a working group on Taiwan's participation in international bodies, including the WHO and International Civil Aviation Organization (ICAO), another organization Taiwan has participated in previously but has been excluded from since 2016.²¹² On August 21, Taiwan was expelled from the Central American Parliament—an organization in which it had been an observer for over two decades—and its position was given to China.²¹³ The Parliament cited UN General Assembly Resolution 2758‡ as the rationale for Taiwan's expulsion, a resolution Beijing falsely attests is an endorsement by the international community of its interpretation of "one China."²¹⁴

Taiwan Continues Outreach to the World

Taiwan has abandoned its previous efforts to compete directly with China's checkbook diplomacy in the face of the massive, unrelenting resources Beijing continues to devote to undermining its international standing.²¹⁵ Instead, Taiwan is leaning into advocating its track record and capability to provide tailored, high-quality development assistance to partner countries.²¹⁶ At the same time, Taiwan is seeking to strengthen unofficial relations with Western

*Taiwan is not a recognized member of the UN or any of its specialized agencies, though it is a member of the WTO and other mostly regional intergovernmental organizations and an observer to 25 other international government organizations such as the Organization for Economic Cooperation and Development. Taiwan Ministry of Foreign Affairs, *Foreign Affairs*.

†In recent years, Taiwan has sought to build support for inclusion in the annual meeting of the World Health Organization's World Health Assembly, a forum Taiwan previously was invited to attend during the Ma Administration. The government's swift response at the onset of COVID-19 kept case counts well below global averages for the first two years of the pandemic, and Taiwan argues that its track record of public health development assistance programs and a domestic healthcare system that tops some international rankings exemplify the substantive benefit it would bring if given a seat. Erin Hale, "How Taiwan Used Simple Tech to Help Contain Covid-19," *BBC*, February 25, 2022; Keoni Everington, "Taiwan's Health Care Ranked No. 1 in World for 2021," *Taiwan News*, January 19, 2021; Yu-Jie Chen and Jerome A. Cohen, "Why Does the WHO Exclude Taiwan?" *Council on Foreign Relations*, April 9, 2020.

‡The UN General Assembly (UNGA) passed Resolution 2758 on October 25, 1971, recognizing the PRC as the, "sole legitimate representative of China to the United Nations" while simultaneously expelling representatives of Taiwan's government under Chiang Kai-shek. As member states were unable to reach a conclusion regarding the legal status of Taiwan, Resolution 2758 solely addressed the question of China's representation in the UN and did not address Taiwan sovereignty. Jessica Drun and Bonnie Glaser, "The Distortion of UN Resolution 2758 and Limits on Taiwan's Access to the United Nations," *German Marshall Fund*, March 24, 2022; Restoration of the Lawful Rights of the People's Republic of China in the United Nations, 1971.

countries and democracies that have become more receptive to showing support for Taiwan given its critical industries and its role as a beacon of democracy.²¹⁷

President Tsai Visits Remaining Partners in Latin America

President Tsai visited Guatemala and Belize from March 31 to April 4, 2023, against the backdrop of Honduras ending official relations two weeks earlier.²¹⁸ During her three-day visit to Guatemala, she met with Guatemalan President Alejandro Giammattei.²¹⁹ On the final day of her visit, the two leaders toured a hospital built with support from Taipei, reaffirming their close diplomatic ties.²²⁰ President Tsai then arrived in Belize for her second visit to the English-speaking Central American country of 400,000 since taking office.²²¹ She had high-level meetings with Belize Prime Minister John Briceño as well as the Ministry of Foreign Affairs.²²² She also addressed the National Assembly, stating that while “there are countries that seek to insert a wedge into this friendship, we have remained close because of our common values and our shared vision for a more prosperous and peaceful future.”²²³ Prime Minister Briceño spoke on Taiwan-Belize cooperation, listing off development projects funded by Taiwan, including farming programs and funds to build key infrastructure like hospitals.²²⁴ Paraguay’s president-elect, Santiago Peña, visited President Tsai in Taipei in July and committed to maintaining diplomatic ties with Taiwan.²²⁵ Peña stated that once he assumed office, he would “work for the next few years to convey to the people of Taiwan, mainly to the business community, that investing in Paraguay not only responds to a diplomatic interest but also responds to both nations’ mutual economic benefit.”²²⁶

Pacific Partners Face Mounting Pressure

The lengths to which Beijing is willing to go to cut Taiwan’s ties to other countries have been on full display in far-flung Pacific Island countries in recent years. Taiwan currently maintains official diplomatic relations with four Pacific Island countries: the Marshall Islands, Nauru, Palau, and Tuvalu.²²⁷ In 2019, the Solomon Islands—Taiwan’s most populous partner country in the region—switched official recognition to China amid allegations that Prime Minister Manasseh Sogavare’s government accepted bribes from Chinese officials and companies.²²⁸ In February 2023, Daniel Suidani, premier of the Solomon Islands’ most populous province Malaita, was ousted by a no confidence vote his proponents claim was orchestrated by the ruling party for his criticism of the Sogavare government’s increasingly close relationship with China.²²⁹ The move reignited street protests that were first seen in December 2021, fueled in part at the time by discontent over the breaking of ties with Taiwan.²³⁰ One of the key points of contention Premier Suidani had with Prime Minister Sogavare’s government was over the April 2022 security pact with China that opened the door for increased Chinese military presence on the island and even would allow Chinese security forces to be mobilized by the island’s government to put down internal unrest.²³¹

In Palau, China engaged in a multiyear pressure strategy to first increase the percentage of mainland tourists to the island

country from 1 percent of total visitors in 2008 to over 50 percent in 2017 before imposing an abrupt ban on visitations, citing the absence of diplomatic ties as the reason for the move.²³² Palau stood by Taiwan despite hardship posed to the tourism-based economy from empty hotels and resorts in the years following.²³³ In attempting to recover from the pandemic tourism slump, however, Palau President Surangel Whipps in June 2023 expressed the difficulty of resisting China's offers to increase flights to and investment in the island.²³⁴ President Whipps visited Taiwan in February, and in April he appeared to walk a fine line by welcoming increased relations with China while boldly calling for a unified stance in the region against Beijing's pressure, stating: "We have no problem having diplomatic relations with China. What we have a problem with is China telling us that we cannot have diplomatic relations with Taiwan."²³⁵

Europe and Taiwan Government Officials Exchange Visits

The EU and individual European governments are reexamining their Taiwan policies and beginning to reckon with the question of what their interests would be in the event of a conflict over Taiwan.²³⁶ Taiwan's top trade negotiator also sought to promote Taiwan's economic interests in Europe, mainly by pushing for progress on a bilateral investment agreement with the EU, which has been stalled since 2015.²³⁷ In June, Taiwan's Foreign Minister Joseph Wu traveled to Europe in an effort to help deepen unofficial ties with European countries and to encourage them to do more to support Taiwan.²³⁸ Minister Wu visited Prague (Czechia), Brussels (Belgium), and Milan (Italy), meeting directly with lawmakers in all three cities.²³⁹ Taiwan has been attempting to build informal ties in Europe in recent years, with its efforts being particularly well received in Eastern European countries.²⁴⁰ Minister Wu sought to encourage further rhetorical support for the status quo in the Taiwan Strait to help deter invasion by Beijing, reminding his European audiences of their real interests in continued peace and stability in the Taiwan Strait, including how damaging a conflict would be to their trade throughout the region.²⁴¹ In his statements, Minister Wu drew an explicit link between the Russia-Ukraine War and China's continued military aggression toward Taiwan, highlighting a deepening relationship between Russia and China: "What we are witnessing is that the two authoritarian forces are collaborating with each other, trading ever more with each other, and feeding more into the hunger for expansion."²⁴² China's Ministry of Foreign Affairs warned ahead of the trip that European countries should not have official interactions and should not support "separatist" forces in Taiwan.²⁴³ During Minister Wu's visit in Prague, he spoke at the same think tank conference as Czech President Petr Pavel.²⁴⁴ While Wu watched Pavel's speech from the front row, Pavel left before Wu's speech, with neither officially meeting or speaking with the other.²⁴⁵ President Pavel's speech at the event struck a tone similar to Minister Wu's, warning against Beijing's desire to "change the world to better fit its interests."²⁴⁶

Despite statements by some high-level European officials that Taiwan is not a European problem, Minister Wu's trip to Europe

appears to have been well received by a diversity of European lawmakers.²⁴⁷ Returning from a visit to China in April this year, French President Emmanuel Macron suggested that Europe steer clear from Taiwan issues and not get “caught up in crises that are not ours, which prevents it from building its strategic autonomy.”²⁴⁸ Signaling that President Macron does not speak for all of Europe, during her trip to China in April, German Foreign Minister Annalena Baerbock stated that “a unilateral, violent change of the status quo in Taiwan by China would not be acceptable for us Europeans.”²⁴⁹ Lithuania’s foreign minister tweeted: “We are capable of defending Europe without Chinese help. Instead of requesting assistance we should be projecting our strengths” (for more on Europe’s approach to Taiwan, see Chapter 5, Section 1, “Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation”).²⁵⁰ Signaling support for Taiwan, a number of European delegations visited Taiwan in 2023. In January, parliamentary delegations from Germany and Lithuania visited Taiwan, meeting with President Tsai.²⁵¹ The Lithuanian delegation reportedly discussed national security and defense as well as economic ties with Taiwan government representatives, while the German delegation voiced support for the status quo in the Taiwan Strait.²⁵² In June, a delegation from the European Parliament’s Taiwan Friendship Group also visited Taiwan, with Lithuanian Member of the European Parliament Rasa Juknevičienė praising Taiwan’s response to cyberattacks and disinformation in the protection of its democratic system.²⁵³

Taiwan Leaders Visit the United States

President Tsai transited through the United States twice in late March and early April of 2023 on her way to Central America, her seventh visit to the United States since becoming president.²⁵⁴ A defining and critically watched aspect of her trip was the meeting with then Speaker McCarthy and other congressional leaders at the Ronald Reagan Presidential Library and Museum.²⁵⁵ President Tsai gave a speech there emphasizing the “unprecedented challenges” facing Taiwan’s democracy and the island’s importance in keeping “the beacon of freedom shining.”²⁵⁶ In response, China’s Taiwan Work Office issued sanctions on Hsiao Bi-khim, Taiwan’s representative to the United States, the leaders of Taiwan’s Prospect Foundation, and the Council of Asian Liberals and Democrats.²⁵⁷ China’s Ministry of Foreign Affairs also announced sanctions against organizations that hosted President Tsai while she transited the United States, including the Hudson Institute, the Ronald Reagan Presidential Library, and specific administrators at each organization.²⁵⁸

As Taiwan’s election draws closer, leading candidates have undertaken visits to the United States. TPP chairman and presidential candidate Ko Wen-je visited in April for three weeks, traveling to New York City; Boston; Washington, DC; and Houston.²⁵⁹ Mr. Ko reportedly met with think tanks, expatriates, biomedical companies, and U.S. government officials at the American Institute in Taiwan headquarters. In conjunction with a state visit to Paraguay, DPP candidate and current Taiwan Vice President Lai transited through the United States in August, stopping in New York City and San

Francisco.²⁶⁰ Speaking in San Francisco, Vice President Lai touted Taiwan's key role in the global technology supply chain, stated plans to turn Taiwan into Asia's Silicon Valley, and asserted that he would conduct cross-Straits relations in ways consistent with the Taiwan populace's preference for peace.²⁶¹ China responded to Vice President Lai's transit by launching a three-day military exercise in the East China Sea, with China's Ministry of Foreign Affairs accusing Lai of advocating a separatist position for "Taiwan independence" and calling him a "troublemaker through and through."²⁶² KMT candidate Hou You-yi visited the United States in September, stopping in New York City; Washington, DC; and San Francisco.²⁶³ During these stops, he met with Members of Congress and with American Institute in Taiwan Chair Laura Rosenberger.²⁶⁴ While in New York City, Hou stated that his intention for the trip was to raise awareness about ensuring peace in the Taiwan Strait and to ask for Washington's assistance on economic and trade matters.²⁶⁵ Hou stated his support for both boosting Taiwan defense capabilities and increasing exchanges and dialogues between Taiwan and the Mainland.²⁶⁶

U.S. Congress Continues to Demonstrate Support for Taiwan

In 2023, the United States Congress took steps to support Taiwan through legislation, reflecting members' concern about threats to the island. In July, the House and Senate passed legislation to implement the first phase agreement of the U.S.-Taiwan Initiative on 21st Century Trade.²⁶⁷ In recognition of the hindrance double taxation places on U.S. and Taiwan businesses operating in one another's marketplace due to Taiwan's lack of treaty status, both the House and Senate have put forward bipartisan proposals to address the issue.²⁶⁸ When lawmakers in the House and Senate passed their respective versions of the fiscal year 2024 National Defense Authorization Act in July 2023, both drafts contained several provisions relevant to U.S. support of Taiwan.²⁶⁹ The act directs the Department of Defense to establish a comprehensive training, advising, and institutional capacity-building program for Taiwan's military, which includes enhancing U.S.-Taiwan military interoperability through bilateral exercises.²⁷⁰ The act as proposed also includes provisions for increased military cybersecurity cooperation with Taiwan as well as numerous reports to assess Taiwan's capability to defend itself.²⁷¹ In April, the House of Representatives' Select Committee on the CCP conducted a tabletop exercise with the Center for a New American Security, a Washington, DC-based think tank.²⁷² Lawmakers played out a scenario in which China attempted to take Taiwan by force.²⁷³ The exercise reportedly underscored the need for Washington to shore up basing agreements with regional allies and establish Pacific munitions stockpiles, and it highlighted the severe effects on the global economy that would result from such a conflict.²⁷⁴

Taiwan's Economy Remains Stable under Strain

Taiwan's economy began the year in a short-lived recession after facing dampened demand for its key export industries, but it is now in mild recovery and has maintained relatively healthy underlying fundamentals. In the second quarter of 2023, the economy grew at a modest 1.36 percent year-on-year following two successive quarters of negative growth, but this tenuous recovery comes at a moment when China is observably increasing economic pressure against Taiwan ahead of the consequential 2024 presidential election.²⁷⁵ If the economic recovery falters or reverses, Taiwan may find itself in a precarious position as China steps up its economic pressure campaign. Continuing a tactic from years prior, China has recently applied punitive bans on specific products imported from Taiwan timed around events it deems provocative. Separately, in retaliation for President Tsai's transit visit with then Speaker McCarthy, China filed a sweeping trade investigation—claiming 2,455 of its export products are subject to unfair barriers by Taiwan—on a timeline that conveniently coincides with the presidential election and implicitly threatens further deterioration of cross-strait trade arrangements.²⁷⁶

Seeking to buffer itself from exposure to an increasingly hostile Mainland, Taiwan has turned to its second-largest trading partner, the United States, to strengthen trade relations. By doing so, it hopes to open the path for increased engagement with other countries. Trade representatives from the United States and Taiwan reached a first stage agreement on the U.S.-Taiwan 21st Century Trade Agreement in May and are poised to build on these negotiations over successive rounds to expand market access, incentivize bilateral investment, and further integrate their business communities.²⁷⁷

Taiwan's Economy Dips into Recession at the Start of 2023

The recent contraction led policymakers at Taiwan's central bank to pause interest rate increases, yet stable domestic consumption alongside industry forecasts of a rebound in export demand have thus far staved off the need to stimulate growth with more aggressive monetary policy.²⁷⁸ Taiwan's export-oriented economy specializes in semiconductors* and digital and consumer electronics as well as industrial machinery parts and chemical products.²⁷⁹ In 2022, Taiwan's exports accounted for 62.7 percent of GDP.²⁸⁰ A heightened worldwide demand for consumer electronics during the pandemic provided a boon for the island's core industries in recent years. In 2021, Taiwan's overall exports rose 29 percent year-on-year, with exports of semiconductors in particular up 27 percent.²⁸¹ Annual GDP surged 6.53 percent that year but then tapered at 2.42 percent in 2022.²⁸² In the final quarter of 2022, Taiwan posted negative growth for the first time since 2016, followed by the steepest quarterly decline since 2009 (-3.3 percent decline year-on-year) in the

*Taiwan manufactures 60 percent of the world's semiconductors and nine in ten advanced chips, with information and communications technology (ICT) comprising 50 percent of the island's manufacturing by value and 17 percent of total GDP. *Economist*, "Taiwan's Dominance of the Chip Industry Makes It More Important," March 6, 2023; Atradius, "Industry Trends Information and Communication Technology (ICT)," June, 2022, 15.

first quarter of 2023.²⁸³ The recent contraction of Taiwan's economy prompted the Directorate General of Budget, Accounting, and Statistics (a government bureau) to revise downward the expected GDP for 2023 from 2.04 percent to 1.61 percent.²⁸⁴

The slump coincides with a worldwide decline in demand for semiconductors, sales of which were down 17.3 percent year-on-year worldwide in Q2 2023.²⁸⁵ On an April 2023 earnings call, the CEO of Taiwan Semiconductor Manufacturing Company (TSMC) pointed to "weakening macroeconomic conditions and softening end market demand" as the main causes of declining sales, though he went on to state that his company forecasts sales will recover in the second half of this year.²⁸⁶ This assessment comports with a broader analysis of the current global trade environment. The WTO has projected a below-average merchandise trade growth rate of 1.7 percent year-on-year for 2023 due to geopolitical tensions from the Russian invasion of Ukraine, inflation, high energy and commodity prices, and lingering effects of COVID-19.²⁸⁷ Forward-looking indicators for the information and communications technology (ICT) industry suggest muted demand in the short term as supply shortages alleviate, though according to S&P Global, demand is expected to normalize by 2024 at a higher level than before the pandemic due to persistent shifts toward remote work and the digital economy.²⁸⁸ As adverse impacts on global trade from the disruptive factors WTO identifies wane, world merchandise trade volume is projected to rebound in 2024 at 3.2 percent annual growth.²⁸⁹

In spite of slowing export demand and negative topline growth, Taiwan's economic fundamentals remained sound as consumption picked up and employment indicators stayed strong. On the demand side, household consumption growth rebounded from negative levels during the pandemic to 3.54 percent in 2022 and steadily ticked upward to a robust 12.1 percent in Q2 of 2023.²⁹⁰ Further contributing to this surge in domestic spending is a return of tourism following the end of mandatory COVID quarantines for arrivals to Taiwan in October, 2022.²⁹¹ There were 2.7 million visitor arrivals through the first half of 2023 compared to 140,000 a year earlier, though this is still below half of pre-pandemic levels.²⁹² Inflation, an issue that has plagued most countries during the post-COVID recovery, crept up slightly in Taiwan to a peak of 3.59 percent year-on-year in mid-2022 but has fallen off since then at 2.52 percent in August, nearing a level Taiwan's central bank governor Yang Chin-long characterized as "basically acceptable."²⁹³ The Taiwan Central Bank's pause of rate hikes in June after moderate hikes in 2022 signal a priority shift from quelling inflation to addressing negative growth.²⁹⁴

Cross-Strait Economic Relations

Taiwan's trade with China has decreased from record highs, though cross-Strait trade and investment in 2023 continue to reflect the historical and geographic reality of the Mainland as Taiwan's largest trading partner. Total cross-Strait trade fell 4 percent year-on-year in 2022, declining by \$9 billion from its peak of \$227 billion in 2021 (see Figure 4).²⁹⁵ So far in 2023, this trend has accelerated,

with exports to mainland China and Hong Kong dropping 24.6 percent through the first half of this year compared to January through July of 2022, outpacing the 17 percent global decline for the same time period.²⁹⁶ This was driven primarily by a precipitous drop in chip-related import orders from Chinese-based manufacturers that use ICT components in consumer electronics.²⁹⁷ Forward-looking investment indicators suggest the decline in trade is likely to continue. While it is difficult to parse out the impact of pandemic-related trade distortions and other macro-trends from policy initiatives, substantial government incentives from the current Administration for Taiwan's businesses have led them to invest \$60 billion between 2019 and late 2022 in projects to consolidate their supply chains at home, according to Taiwan's minister of economic affairs.²⁹⁸ These incentives, in combination with increased cross-Strait tensions, have compelled large Taiwan manufacturers like Foxconn to begin unwinding investment stakes in Chinese companies and to pull back on planning new facilities.²⁹⁹ Annual flows of foreign direct investment (FDI) from Taiwan to mainland China have steadily declined since peaking at \$14.6 billion in 2010 to \$5 billion in 2022, or roughly one-third of Taiwan's total outbound FDI (see Figure 5).³⁰⁰ FDI flows from Taiwan to China in 2022 were down nearly 14 percent year-over-year and declined 4.8 percent year-over-year through July of 2023.³⁰¹

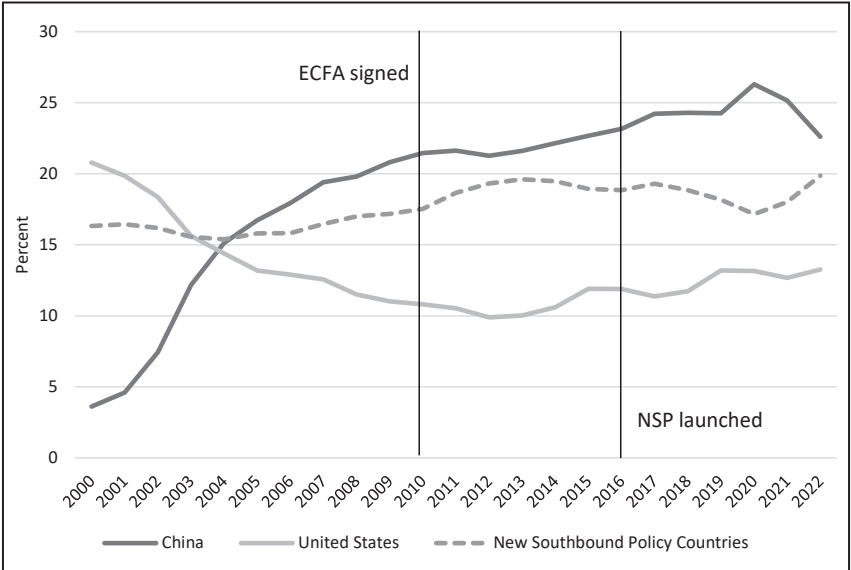
Nevertheless, China has been Taiwan's top trading partner for the better part of two decades, with the Mainland accounting for 25.3 percent of Taiwan's total exports and 19.6 percent of its imports in 2022.³⁰² Total goods trade between the two economies grew steadily during the 2010s following the signing of the Economic Cooperation Framework Agreement (ECFA), a quasi-free trade agreement, in the first year of that decade. As cross-Strait tensions have risen in recent years, the Tsai Administration has sought to reduce Taiwan's trade dependency on China with initiatives like the New Southbound Policy, with Taiwan's combined approved outbound investment in these countries surpassing its investment in China for the first time in 2022.* It is premature to assert that this represents a long-awaited move away from economic dependence on the Mainland in line with Taipei's goals given distortions from the COVID-19 pandemic. However, both flows of outbound FDI and bilateral trade are at their lowest levels since the ECFA was put into place over a decade ago.³⁰³

Beijing Steps Up a Punitive Economic Coercion Campaign

In 2023, Beijing ratcheted up its economic pressure campaign against Taiwan in order to inflict hardship on key constituencies of the ruling party and foment a general sense of discontent with current policies ahead of the 2024 presidential election. Most notably, Chinese leaders broadened a list of export bans meant to harm Taiwan's producers that are heavily reliant on the Chinese market but

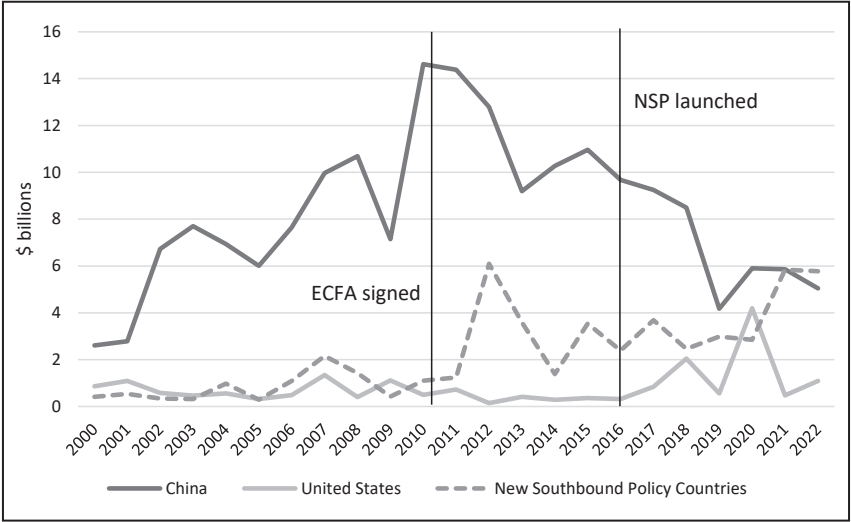
*The Tsai Administration initiated the New Southbound Policy (NSP) in 2016 in an effort to expand regional integration in the Indo-Pacific and establish closer economic and cultural relations with 18 countries identified as potential partners. The 18 nations are: Australia, Bangladesh, Bhutan, Brunei, Burma (Myanmar), Cambodia, India, Indonesia, Laos, Malaysia, Nepal, New Zealand, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, and Vietnam. Center for Strategic and International Studies, "Taiwan's New Southbound Policy," July 2019.

Figure 4: Percentage of Taiwan Total Trade, 2000–2022



Note: Economic Cooperation Framework Agreement (ECFA); New Southbound Policy (NSP).
Source: Taiwan Ministry of Economic Affairs, Bureau of Foreign Trade.

Figure 5: Taiwan's Approved Outbound Investment, 2000–2022



Note: Economic Cooperation Framework Agreement (ECFA); New Southbound Policy (NSP).
Source: Taiwan Ministry of Economic Affairs.

that pose little cost to mainland business interests. Then on April 12, 2023, one week after President Tsai's transit meeting with then Speaker McCarthy in California, Beijing announced it was launching a trade barrier investigation on 2,455 mainland exports (mainly agricultural, textile, and mineral products) to Taiwan it claims Taiwan unfairly restricts.³⁰⁴ The move marks a departure from previous Chinese economic coercion, as China has refrained from internationalizing cross-Straits trade disputes for fear of contradicting its position that such issues are an "internal affair."³⁰⁵ Taiwan's Trade Representative John Chen-Chung Deng said his government is preparing for escalation based on different outcomes, including new Chinese import bans, the possible reimposition of Chinese tariffs cut under the ECFA, and even a complete departure from the landmark agreement that has benefited Taiwan tremendously.³⁰⁶ It is noteworthy that China's Ministry of Commerce indicated the investigation could be extended past the initial October expiration date to January 12, 2024, one day before the Taiwan presidential election.³⁰⁷ A chronological list of coercive actions are as follows:

- *Import ban on pineapple and sugar apples:* In February 2021, Beijing began a series of import bans on agricultural products that are heavily reliant on the Chinese market by blocking pineapples, followed up by a ban on sugar apples in September of that year.³⁰⁸ The move jeopardized the livelihood of producers mainly in southern rural counties that historically have strongly supported the DPP.³⁰⁹
- *Import ban on grouper fish:* In June, 2022 China banned a variety of fish products after the announcement of then Speaker Pelosi's visit to Taipei, citing instead high levels of chemicals (a claim government officials in Taiwan dispute).³¹⁰ Grouper fish was the largest item on the restriction list, with 91 percent of exports worth over \$50 million going to China.³¹¹ Like the previous bans, producers were largely concentrated in regions that historically support the DPP.
- *Banned item list expanded to over half of imported food products and Chinese exports of sand:* On the eve of then Speaker Pelosi's visit to Taipei in August 2022, Beijing escalated its import ban strategy, expanding the list to 2,000 of 3,200 total food products from Taiwan.³¹² Chinese exports of sand, a raw input for silicon wafer manufacturing, also were curtailed, though with over 99 percent of sand obtained domestically in Taiwan the preceding two years the move had negligible impact.³¹³
- *Beijing adds packaged food products to import ban list:* In December 2022, China's Ministry of Commerce added to the banned items list seafood products (which totaled \$166 million in 2021) along with Taiwan beer and a large number of other beverages.³¹⁴
- *Chinese Ministry of Commerce launches trade investigation into alleged restrictive measures against 2,455 mainland products:* A potential major implication of the move is that it threatens to be a precursor to repeal the 13-year-old ECFA.³¹⁵ Taiwan officials are beginning to prepare for impact from the investigation

and a potential hard departure from the largely uninterrupted cross-Strait economic relations its businesses have come to rely on over the past decades. A government minister who serves as Taiwan's trade representative in the United States said, "We have to ensure that [Taiwan companies] will not be hurt if China takes certain actions."³¹⁶

- *Import restrictions on polycarbonate products and mangos:* During presidential frontrunner Lai Ching-te's visit to the United States from August 12 to August 17, China's Ministry of Commerce imposed temporary antidumping duties on Taiwan's polycarbonate products, a versatile and durable composite material, as well as an import ban on mango imports from the island.³¹⁷

While escalatory in their approach, the actions Beijing has taken against Taiwan industry thus far have been negligible to the overall health of Taiwan's economy, as agriculture accounts for less than 1 percent of total exports to China.³¹⁸ Taiwan has been adept at moving quickly to find alternative sources for banned products. From 2021 to 2022, China fell from the top market for Taiwan's agricultural exports to number three behind the United States and Japan.³¹⁹ However, the trade investigation initiated in April 2023 holds the potential to greatly escalate the souring economic relationship if it results in more systemic shifts away from the beneficial cross-Strait trade relations enjoyed by both sides for over a decade.

Background on the Economic Cooperation Framework Agreement

Cross-Strait trade relations enjoyed a period of relative stability during the administration of former President Ma Ying-jeou and the KMT from 2008 to 2016. The Cross-Strait Economic Cooperation Framework Agreement (ECFA) was signed in 2010 to enhance business activity with a rapidly growing China, at the time reducing tariffs on a list of goods that accounted for 16.1 percent of Taiwan's exports to China and 10.5 percent of imports from the Mainland.³²⁰ Approved outbound investment from Taiwan to mainland China doubled from \$7.1 billion in 2009 to \$14.6 billion in 2010 and \$14.3 billion in 2011.³²¹ Then, in March of 2014, widespread student-led protests erupted in Taipei after the signing of a follow-on agreement to the ECFA, the Cross-Strait Service Trade Agreement. The protesters accused the ruling KMT government of bypassing the legislature and advancing closer ties with the China through undemocratic means.³²² At the root of their grievance was a fear that closer economic ties with China would make Taiwan susceptible to ever-encroaching influence that would ultimately jeopardize its system of self-rule. The protests became known as the Sunflower Movement, and at the end of 2014 polling showed 53.3 percent of Taiwan citizens supported the protestors' grievances.³²³ This event still reverberates throughout Taiwan's society today, as it marked a broader and bolder assertion of Taiwan identity than had previously been demonstrated and led to the ascendancy of Tsai Ing-wen and the return of the DPP to power in the 2016 presidential election.³²⁴

Background on the Economic Cooperation Framework Agreement—*Continued*

Following this backlash to closer cross-Strait economic ties, Beijing initiated a campaign of economic coercion that has built and evolved to its current form. In testimony before the Commission, National Taipei University professor and Chairperson of Doublethink Lab Puma Shen categorized CCP interference approaches as either “building connections or imposing pressure.”³²⁵ Following the election of President Tsai in 2016, Beijing initially sought to punish Taiwan by dealing a blow to its tourism sector, actively restricting visas and reducing Chinese tour groups to the island, resulting in a decline from over four million visitors from the Mainland in 2015 to 2.7 million in 2019.³²⁶ Then in 2018, Beijing employed softer tactics by implementing successive rounds of preferential economic measures designed to lure Taiwan businesses and persons to establish deeper ties with the Mainland.³²⁷ Over the course of President Tsai’s second term, the PRC has shifted back to a coercive economic pressure campaign in tandem with stepped up military aggression in the Strait.

U.S.-Taiwan Economic and Trade Relations

Heightened cross-Strait tensions have inclined Taiwan to seek stronger economic ties with the United States. U.S.-Taiwan economic and trade relations continued on an upward trajectory in 2022, with increased flows in both directions. Furthermore, tangible progress was made on the U.S.-Taiwan Initiative on 21st Century Trade. A surge in trade during the pandemic moved Taiwan up just behind the UK to the United States’ eighth-largest trading partner in 2021 before being overtaken by India and Vietnam in 2022 to settle into the tenth spot.³²⁸ The United States was Taiwan’s second-largest trading partner in 2022, behind China and ahead of Japan.³²⁹ The United States was the second-largest destination for Taiwan exports in 2022, representing 15.7 percent of total export flows, a year-on-year increase of 11.8 percent.³³⁰ On the import side, 10.6 percent of total imports to Taiwan came from the United States, the third-largest share behind China’s 19.6 percent and Japan’s 12.7 percent and a year-on-year increase of 13.4 percent.³³¹

Taiwan Outbound Investment to the United States

Both the United States and Taiwan have recently taken steps to deepen economic ties through cross-border investment. In May, Taiwan sent the largest of 83 international delegations to the annual SelectUSA Investment Summit hosted by the U.S. Department of Commerce in Washington, DC.³³² Total stock of U.S. FDI in Taiwan stood at \$16.7 billion in 2022, and conversely Taiwan’s direct investment position in the United States was near equivalent at \$16.1 billion.³³³ Approved outbound investment from Taiwan into the United States through the first half of 2023 totaled \$4.8 billion, up 600 percent from \$792 million in the first half of 2022.³³⁴ TSMC’s proposed \$3.5 billion investment in its Phoenix Arizona chip fabrication plant, now set to come online in 2025, accounted

for the majority of this increase.³³⁵ By comparison, U.S. FDI flows into Taiwan were \$398.8 million in 2022, and averaged \$321.7 million annually over the preceding ten years.³³⁶ The Creating Helpful Incentives to Produce Semiconductors (CHIPS) Act of 2022 provides \$52.7 billion over five years to support domestic semiconductor manufacturing in the United States, such as the proposed TSMC investment.³³⁷ Electric vehicle (EV) companies from Taiwan have also sought to increase their U.S. based operations.³³⁸ In the past year, Delta Electronics, Excellence Optoelectronics Inc., and Hota Industrial Manufacturing—automotive parts suppliers for the big three automakers and Tesla—have announced multi-million-dollar plans to build out operations in Texas, Michigan, and New Mexico, respectively.³³⁹ iPhone manufacturer Foxconn has also entered EV production in recent years, announcing plans to begin production of \$30,000 mass market models from an Ohio facility it purchased in 2022 from Lordstown Motors for \$230 million.³⁴⁰

U.S.-Taiwan Initiative on 21st Century Trade

On May 18, 2023, United States Trade Representative Katherine Tai and her Taiwan counterpart John Chen-Chung Deng announced the successful completion of negotiations on the first part of the U.S.-Taiwan Initiative on 21st Century Trade.³⁴¹ The agreement was signed on June 1, 2023, one year to the day after the two parties announced the launch of the initiative, and is intended to offer a path toward economic engagement for Taiwan parallel to the Indo-Pacific Economic Framework for Prosperity (IPEF).³⁴² While absent of new market access commitments, the initial agreement further reduces customs and border restrictions, streamlines regulations around services, improves anticorruption rules, and creates opportunities for small and medium enterprises on each side of the Pacific.³⁴³ Negotiations will now proceed to more difficult areas, including agriculture, digital trade, labor and environmental standards, state-owned enterprises, and nonmarket practices.*³⁴⁴

An important element of the U.S.-Taiwan Initiative on 21st Century Trade is that it sets a precedent, potentially clearing the path for other large trading partners with Taiwan—like Japan and Australia, which fear retaliation from China—to commence bilateral trade negotiations.³⁴⁵ Ambassador Tai's May announcement of successful first round negotiations came just ahead of Commerce Secretary Gina Raimondo's meeting with China's Minister of Commerce Wang Wentao in Washington, DC; the June signing fell on the eve of the Shangri-La Dialogue meeting, attended by Secretary of Defense Lloyd Austin and his Chinese counterpart in Singapore.³⁴⁶ In response, a spokesperson for the Chinese Ministry of Commerce

*Completion of the U.S.-Taiwan Initiative on 21st Century Trade Phase One agreement was announced unilaterally by the Office of the U.S. Trade Representative on May 18, 2023. Congress passed H.R. 4004 in July, which approved implementation of the first-round agreement, but in the bill it asserted the constitutional authority of the legislative branch to approve entrance into binding trade agreements. The president signed H.R. 4004 into law on August 7, with the Administration stating it would treat requirements of the act that would prohibit its ability to negotiate future trade agreements with Taiwan as nonbinding. Inu Manak, "Congress Asserts Its Trade Authority with Taiwan Trade Deal," *Council on Foreign Relations*, August 8, 2023; White House, *Statement from President Joe Biden on H.R. 4004, the United States-Taiwan Initiative on 21st-Century Trade First Agreement Implementation Act*, August 7, 2023.

expressed China's opposition to any countries with which it has diplomatic relations having official exchanges with Taiwan.³⁴⁷

Implications for the United States

The potential for crisis in the Taiwan Strait has garnered substantial international attention this year, and the outcome of the island's 2024 election will have major implications for the future of cross-Strait relations. Russia's unprovoked invasion of Ukraine demonstrated the reality that authoritarian powers seeking revisionist goals can still choose to wage war against democracies they deem a threat to their own legitimacy. The similar dynamic in the Taiwan Strait, alongside Beijing's desires to control Taiwan in its quest for "national rejuvenation," position Taiwan as a key theater in the struggle for maintaining free and open societies amid increasing authoritarian aggression.

The year 2023 will be pivotal for Taiwan given the ongoing presidential election campaign. While cross-Strait relations might not be the factor that weighs heaviest on the minds of Taiwan's voters as they go to the polls in January 2024, the outcome will affect how Taiwan interacts with both the United States and China moving forward. As Beijing may seek to impose costs or limits on the next president of Taiwan, regardless of which candidate wins the presidency, the United States may be placed again in the position of reacting to actions initiated in Taipei and Beijing, where the words and deeds of the United States will be closely analyzed to assess U.S. support for Taiwan in the event of a conflict. A policy softening by Beijing in an attempt to influence or shape a new administration in Taiwan could undermine critical movement being made toward increasing deterrence and resilience and is unlikely to result in any fundamental change in China's policy or goals. In such a scenario, the United States may find itself in the awkward but familiar position of pressing to mature much-needed programs and efforts to ensure continued deterrence, while a Taipei administration is seeking to cool temperatures between Beijing and Taipei and deemphasize its own preparations for war.

The people of Taiwan are no strangers to aggression, having been confronted by threats from China for the past 75 years, but the island's indigenous defense capacity is limited. As PLA exercises continue to enhance China's ability to execute a military campaign against the island, Taiwan will need to make constant adjustments to continue to give Beijing pause, even as General Secretary Xi judges the PLA to be more capable of offering military options. Taiwan's steps toward enhancing its own capabilities to defend itself will likely face challenges in implementation, funding, and follow through, increasing the premium on U.S. demonstrations of support in conjunction with encouraging Taiwan's resistance to the pressure campaign it faces daily. Beijing's attempts to wear down Taiwan's military and to sow divisions within Taiwan and between Taiwan and the United States will challenge cooperation and implementation of reforms in defense and resilience preparations on Taiwan.

A potential crisis in Taiwan would likely be far more severe than the war in Ukraine given Taiwan's proximity to critical shipping lanes and major lines of communication in addition to its centrality

in technology and manufacturing supply chains. A recent study by Rhodium Group, a DC-based economic think tank, estimates that over \$2 trillion dollars of global economic activity would be disrupted in the event of even a limited Chinese action or blockade of the island, before accounting for sanctions and second order effects.³⁴⁸ Continued attention on China's coercion and aggression against Taiwan—not only in Washington and Taipei but also in key countries in the immediate region, across Europe, and elsewhere—support the need to continually strengthen deterrence. Deteriorating cross-Strait relations appear to finally be providing the impetus for Taiwan to reconsider key parts of its trade and investment with the Mainland. If the current recession deepens, however, there will be greater incentive for some leaders in Taiwan to push for easing of cross-Strait economic tensions as well as a potential backlash against the costs of an economic shift to diversify away from Mainland dependency. In this environment, increased focus on engagement, investment, and diversification of Taiwan's supply chains by U.S. business and government will be key to ensuring Taiwan has options and U.S. interests are considered as decisions about critical technology and de-risking are made.

Appendix: U.S. Military Sales to Taiwan, November 2022–August 2023

Date of State Department Approval*	Content of Purchase	Value
December 6, 2022 ³⁴⁹	Possible expansion of the Cooperative Logistics Supply Support Arrangement for stock replenishment supply of nonstandard spare parts, consumables, and accessories and for repair and replacement support for the F-16, C-130, Indigenous Defense Fighter (IDF), and all other aircraft and systems or subsystems of U.S. origin, as well as other related elements of logistics and program support.	\$98 Million
December 6, 2022 ³⁵⁰	Expansion of the Cooperative Logistics Supply Support Arrangement for stock replenishment supply of standard spare parts, consumables, and accessories and for repair and replacement support for the F-16, C-130, Indigenous Defense Fighter (IDF), and all other aircraft and systems or subsystems of U.S. origin, as well as other related elements of logistics and program support.	\$330 million
December 28, 2022 ³⁵¹	M136 Volcano Vehicle-Launched Scatterable Mine System; M977A4 HEMTT 10-ton cargo trucks; M87A1 mine canister (each contains six anti-tank mines and one antipersonnel mine); M88 canister training munitions (practice dummy ammunition rounds); M89 training munitions (test ammunition rounds); organic U.S. Army Depot build of Volcano system permanently mounted on M977A4 HEMTT truck; logistics support packages to include spare parts, spare secondary assemblies, tool kits, and test equipment; technical manuals; organic depot production, integration, and testing; operator and maintenance training; logistics and fielding support; U.S. government technical assistance both inside and outside the continental United States to include engineering services, program management, site surveys, facility, logistics, and maintenance evaluations; quality assurance and deprocessing team; field service representative(s); repair and return services; any transportation charges to execute the program; and related elements of logistical and program support.	\$180 million

*The Foreign Military Sales (FMS) program is a form of security assistance authorized by the Arms Export Control Act (AECA), as amended by 22 U.S.C. 2751, et. seq., and a fundamental tool of U.S. foreign policy. Under section 3 of the AECA, the United States may sell defense articles and services to foreign countries and international organizations when the president formally finds that to do so will strengthen the security of the United States and promote world peace. Under the FMS program, the U.S. government and a foreign government enter into a government-to-government agreement called a Letter of Offer and Acceptance (LOA). The secretary of state determines which countries will have programs. The secretary of defense executes the program. See Defense Security Cooperation Agency, *Foreign Military Sales (FMS)*.

**Appendix: U.S. Military Sales to Taiwan,
November 2022–August 2023—*Continued***

Date of State Department Approval	Content of Purchase	Value
March 1, 2023 ³⁵²	100 AGM-88B High-Speed Anti-Radiation Missiles (HARM); 23 HARM training missiles; 200 AIM-120C-8 Advanced Medium Range Air-to-Air Missiles (AMRAAM); 4 AIM-120C-8 AMRAAM Guidance Sections; and 26 LAU-129 multipurpose launchers. Also included are LAU-118A missile launchers with Aircraft Launcher Interface Computer (ALIC); HARM missile containers; AIM-120 control sections and containers; AIM-120C Captive Air Training Missiles (CATM); dummy air training missiles (DATM); integration and test support and equipment; munitions support and support equipment; spare parts, consumables, and accessories and repair and return support; classified software; maintenance and maintenance support; classified publications and technical documentation; U.S. government and contractor engineering technical and logistics support services, studies, and surveys; and other related elements of logistical and program support.	\$619 million
June 29, 2023 ³⁵³	30 millimeter (mm) ammunition, including 30 mm High Explosive Incendiary-Tracer rounds, 30 mm multipurpose rounds, and 30 mm training rounds; engineering technical services, including configuration control, production support, ammunition testing, and Load, Assemble, and Pack services; other technical services, including sourcing and acquisition assistance, U.S. Navy civilian personnel costs, contract support services, support on technical data requests, responses to Requests for Information, up to two Program Management Reviews per year, and testing and documentation associated with contract procurements; and other related elements of logistics and program support.	\$332.2 million
June 29, 2023 ³⁵⁴	Cooperative Logistics Supply Support Arrangement (CLSSA) Foreign Military Sales Order II (FMSO II) to support the purchase of spare and repair parts for wheeled vehicles, weapons, and other related elements of program support.	\$108 million

**Appendix: U.S. Military Sales to Taiwan,
November 2022–August 2023—*Continued***

Date of State Department Approval	Content of Purchase	Value
August 23, 2023 ³⁵⁵	Infrared Search and Track (IRST) systems; integration and test support and equipment; aircraft and munitions support and support equipment; software delivery and support; spare parts, consumables and accessories, and repair and return support; publications and technical documentation; personnel training and training equipment; studies and surveys; U.S. government and contractor engineering, technical, and logistics support services; and other related elements of logistical and program support.	\$500 million

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SECTION 3: HONG KONG

Abstract

Hong Kong now lives under the Mainland's control. Beijing continues to adapt Hong Kong's institutions to mainland preferences and has eliminated the territory's once vibrant civil society. China's central government has installed loyal judges and placed leaders in key roles, leading to the strictest interpretation of the National Security Law (NSL). Hong Kong's move to enforce its NSL beyond its jurisdiction also reveals the stronger mainland influence that is destroying its legal system. The effects of Beijing's authoritarian overreach are driving more Hong Kongers to leave the territory. Those who choose to stay must decide whether to self-censor or risk politically motivated legal action for activities that were once protected by law and common across the Special Administrative Region. As these expats and Hong Kongers leave for other regional hubs such as Singapore, mainland human capital and investment increasingly dominate Hong Kong's business environment, cementing Hong Kong's status as a Chinese, rather than international, city.

Key Findings

- Hong Kong Chief Executive John Lee serves as Beijing's enforcer of the Chinese Communist Party's (CCP) interests in reversing the territory's once democratic institutions and civil society. The CCP now controls Hong Kong's political, judicial, religious, and education systems.
- Under the NSL, the central government in Beijing has the authority to intervene in any legal case in which it sees an "intractable" problem or determines the city is unable to resolve the problem on its own.
- The Hong Kong government is now attempting to extend its reach, taking an extraterritorial approach to enforcement. It is charging individuals overseas on national security grounds, has placed bounties on some overseas prodemocracy activists, and has attempted to intimidate their family members.
- Hong Kong's civil society was weakened further this year as Beijing's restrictions on religious organizations, labor rights, and the press led some organizations to choose to disband rather than submit to new restrictions on free speech and assembly.
- Faced with the continued departure of international firms and human capital, Hong Kong is seeking to draw in mainland Chinese business and talent to boost its lagging domestic economy. Chinese nationals and businesses have flooded Hong Kong's labor force and economy, solidifying Hong Kong's reliance on

mainland China. Beijing's efforts to rehabilitate Hong Kong's international image are cosmetic, designed purely to attract foreign business.

Recommendations

The Commission recommends:

- Congress direct the U.S. Department of State to include in the annual report required by the Hong Kong Autonomy Act information on the Hong Kong government's restriction of émigrés' access to their financial accounts in the territory, including from the government-run Mandatory Provident Fund (MPF) pension scheme. Based on the findings of the report, the Administration should impose sanctions, as authorized under the 2020 Hong Kong Autonomy Act, on individuals involved in limiting freedom of emigration. Congress may consider further steps to prevent U.S.-based financial institutions involved in managing the funds of Hong Kongers from aiding in violating freedom of emigration by withholding pension funds from their rightful owners at the behest of Hong Kong's government.
- Congress amend the Hong Kong Autonomy Act to add to the contents of the required annual report an evaluation of limitations on Hong Kong's judicial independence. Specifically, the evaluation should assess whether the chief executive or any other body acting on behalf of China's government has exercised undue influence over the Hong Kong judicial system in ways that violate the right to a fair and independent trial as guaranteed under the Basic Law of Hong Kong. Based on the findings of the report, Congress may impose sanctions, as authorized under the 2020 Hong Kong Autonomy Act, on individuals involved with the Hong Kong judiciary serving in Hong Kong, including foreign national judges that serve on the Hong Kong Court of Final Appeal.

Introduction

Once a reliable foundation for civil liberties such as freedom of expression and assembly, Hong Kong's political, educational, and legal institutions have been stripped of their previous autonomy from the Mainland and implement increasingly harsh restrictions on the territory's civil society organizations at Beijing's behest. Leaving the population with no room for free expression, the Party-state has also weakened Hong Kong's electoral system, extending China's authoritarian overreach down to local-level politics and minimizing opportunities for political engagement. The Lee Administration has undermined Hong Kong's independent judiciary and is promoting pro-Beijing individuals and narratives. The Hong Kong government has sent a warning signal to activists within Hong Kong and abroad by announcing bounties on eight targeted individuals, including former lawmakers and a union representative, all of whom now live outside of Hong Kong as dissidents in the United States, Australia, and the United Kingdom (UK).¹

Though Hong Kong's role as an international commercial hub has decreased, the territory remains important for Beijing's economic

ambitions, particularly its efforts to expand the renminbi's (RMB) international use. Emerging from years of strict COVID measures, Hong Kong continues to face slow economic growth and a steady flight of human capital and multinational firms leaving the city. In their place, an influx of Chinese business and talent, as well as continued integration with mainland financial institutions, aids Hong Kong's recovery but further diminishes its unique identity. Beijing continues to exploit Hong Kong's status as an international shipping hub to evade U.S.-led sanctions on Russia, while Hong Kong-based firms have joined China in aiding Russian technology supply chains, demonstrating close alignment. This chapter details Hong Kong's recent political and economic developments, attacks on its rule of law and basic freedoms, and the implications for the United States. It is based on consultations with U.S. and foreign nongovernmental experts as well as open source research and analysis.

Hong Kong's Institutions Subjugated by Authoritarian Overreach

In 2019, Hong Kong's Legislative Council (LegCo) proposed a controversial bill to extradite criminal suspects to mainland China, sparking months of mass protests and prodemocracy demonstrations.² The outcry compelled LegCo to withdraw the bill, but when 2020's COVID lockdowns prevented residents from continuing mass demonstrations, Chinese leaders seized their opportunity.³ On June 30, 2020, the Standing Committee of China's National People's Congress passed the sweeping NSL, which Beijing then used to crack down on Hong Kong's peaceful protests and cement control over its institutions and civil society.⁴

The culmination of a decades-long attempt by the CCP to encroach upon the territory's affairs, the NSL's draconian enforcement over the last three years and its total transformation of Hong Kong's civil society amount to a definitive break from Beijing's commitment during the 1997 handover from the UK to maintain the city's autonomy for 50 years.⁵ In implementing the law, Beijing also violated its legal obligations to guarantee Hong Kong a "high degree of autonomy" as enshrined in the 1984 Sino-British Joint Declaration and Hong Kong's mini constitution, the Basic Law, both of which upheld the "one country, two systems" policy.⁶ The NSL has erased any semblance of Hong Kong's historical freedom of expression and rule of law, both of which sustained the territory's position as one of the largest global financial centers.

Now, acts of peaceful protest and independent political activity are labeled as separatism, subversion, and collusion with foreign countries and designated as major offenses laid out in 66 vaguely written articles of the law.⁷ The NSL imposes severe penalties—including life imprisonment—for offenses under its provisions, effectively chilling freedom of speech and expression.⁸ The law claims jurisdiction not only over Hong Kong residents but also over those who have never entered the territory.⁹ As part of its crackdown, the Party-state has also tightened political control of Hong Kong's institutions, rooting out dissent and installing loyalists across the government. Beijing took particular aim at Hong Kong's electoral processes by eliminating a number of locally elected positions, in-

stead allowing the government to handpick candidates. Opposition leaders were put on trial, and Hong Kong's prodemocracy political parties saw further decreases in their numbers. Three years of NSL implementation—including 265 arrests,* 155 individuals charged, and the trials of prodemocracy leaders like the 47 activists known as the “Hong Kong 47” and Jimmy Lai, founder of the prodemocracy newspaper *Apple Daily*—have produced a legal system unrecognizable from that which existed prior to Beijing's takeover.†¹⁰ Bail denials, trial delays, defendants being denied the representation of their choosing, and selection of judges based on loyalty to the Party-state provide further evidence of the ongoing erosion of Hong Kong's judicial system.

Beijing's Control Dissolves Remaining Democratic Elements of Hong Kong's Electoral System

The Party-state has eliminated potential avenues for dissent and installed pro-Beijing leaders to govern accordingly. Consequently, Hong Kong's prodemocracy leaders face difficult decisions regarding whether or not to continue their political work and risk arrest. Increasingly, the choice is being made for them: the Hong Kong Administration is transforming the electoral process to oust prodemocracy candidates. At the same time, independent political parties are unable to raise sufficient funds to operate.

Beijing Installs Loyal Propagandist to Oversee NSL Implementation

Beijing reinforced its security apparatus by promoting Zheng Yanxiong—a CCP loyalist from the Mainland who gained experience implementing the NSL during his time leading Hong Kong's Office for Safeguarding National Security.‡¹¹ In January 2023, Mr. Zheng was chosen to lead Beijing's official representative office in Hong Kong, the Liaison Office of the Central People's Government.¹² At the same time, Mr. Zheng was given a dual appointment as national security advisor for the Committee for Safeguarding National Security.§¹³ The move continues a trend of placing hardliners in positions once filled by up-and-coming local bureaucrats who could maintain Beijing's interests.¹⁴ In 2020, while in his former post, Mr. Zheng was sanctioned by the United States for undermining Hong Kong's autonomy (for a full list of individuals sanctioned for this reason, see Appendix I).¹⁵ While

*While the number of people arrested under the NSL continues to rise, there are more than 1,600 political prisoners in Hong Kong. Hong Kong Democracy Council, “Hong Kong Political Prisoners,” September 20, 2023.

† Under the NSL so far, each case that has been charged and received a trial has been brought before a nonjury trial and had a 100 percent conviction rate. Natalie Wong, “Hong Kong's National Security Law: 3 Years On, More than 160 Prosecutions, 8 Bounties Later, What Else Can the City Expect?” *South China Morning Post*, July 13, 2023; Timothy McLaughlin, “The Fracturing of Hong Kong's Democracy Movement,” *Atlantic*, July 15, 2023.

‡ The Office for Safeguarding National Security of the Central People's Government in the Hong Kong Special Administrative Region (HKSAR) is a subministry-level body under the ministry-level Liaison Office of the Central People's Government in HKSAR. The Central People's Government refers to the People's Republic of China (PRC) government in Beijing. China's State Council appointed Mr. Zheng to serve as the head of the Hong Kong and Macau Affairs Office, which is often described as China's de facto embassy in Hong Kong.

§ The Committee for Safeguarding National Security was established in 2020 under the NSL. *The Government of the Hong Kong Special Administrative Region*, “Committee for Safeguarding National Security of HKSAR Convenes First Meeting,” July 6, 2020.

Beijing Installs Loyal Propagandist to Oversee NSL Implementation—*Continued*

some observers anticipated the appointment of someone with a background in economics, given Hong Kong's weak economy post-COVID, Mr. Zheng is the first head of the Liaison Office to have served in a national security-related role, suggesting Beijing intends to continue prioritizing NSL enforcement rather than economic recovery.*¹⁶

Like his predecessor† Luo Huining, Mr. Zheng also rose through CCP ranks by serving in a variety of mainland provincial and municipal positions, and he gained notoriety for his harsh crackdown on protests in Guangdong Province in 2011.¹⁷ Mr. Zheng's resume also includes four years working for state media outlet *China Daily*, where he honed skills as a propagandist for the Party-state; this experience will serve him well in Hong Kong, where he will be responsible for spreading Beijing's message.¹⁸ During the transition of power, Luo Huining described Mr. Zheng as "a pioneer in maintaining national security in Hong Kong."¹⁹ Well versed in managing protests and combatting dissent, Mr. Zheng is expected to preside over NSL implementation with the same intensity. In a 2021 seminar, he advocated for additional implementation of the NSL to "further guide and supervise Hong Kong to perfect its local law."²⁰

Prodemocratic Parties Operate under Increasing Individual Risk

Hong Kong's prodemocratic political parties confront tighter limits on how they can operate, leading some organizations to disband. Hong Kong's Civic Party, at its peak the second-largest prodemocracy party behind the Democratic Party,‡ officially disbanded in May 2023 after no new leaders stepped forward to take the reins of the party at the end of 2022.§²¹ Comprised mostly of lawyers, academics, and other professionals, the Civic Party held

*According to media reports, staff at the Liaison Office expected Chen Dong, the office's deputy director, to replace Luo Huining rather than Mr. Zheng. Mr. Chen has a background in economics, which could have proven useful as Hong Kong pursues economic growth following a downturn during the COVID-19 pandemic. Selina Cheng, "China Promotes National-Security Chief to Top Hong Kong Post," *Wall Street Journal*, January 16, 2023.

†Following the 2019 protests and the success of prodemocracy candidates in the local council elections, Beijing installed Luo Huining, a candidate with senior-level leadership experience who had already proven his commitment to the Party in a "crisis" zone when he led an anticorruption crackdown on local businesses and political leaders in Shanxi. Christian Shepherd and Sue-Lin Wong, "Luo Huining: Beijing's Enforcer in Hong Kong," *Financial Times*, January 7, 2020.

‡In the 2012 LegCo elections, both the Civic Party and the Democratic Party won six of 70 seats. The Civic Party retained all six seats in the next LegCo elections in 2016, and the Democrats won seven. Following Beijing's co-optation of the 2021 election process, three Civic Party members were disqualified from participation in the legislative session. International Foundation for Electoral Systems, "Hong Kong Special Administrative Region," 2023; Candice Chau, "Hong Kong's Pro-Democracy Party Votes to Dissolve," *Hong Kong Free Press*, May 27, 2023.

§All but one of the Civic Party's 32 members voted to dissolve the organization in May 2023 after no members were willing to come forward for the position of chairman or to serve on the executive committee that is responsible for leading the group, organizing events, and fundraising, among other responsibilities. Without leaders in place, the party's fundraising efforts and political activities would continue to be limited, leading to a dire financial situation. Upon disbandment, the party announced that it would be donating its assets to charity. *Standard*, "Civic Party to Disband, Ending 16 Years of Pro-Democracy Fight," December 3, 2022; *Civic Party, About Us*, 2023; Jeffie Lam and Edith Lin, "Hong Kong's Civic Party Folds after 17 Years of Championing Opposition Causes," *South China Morning Post*, May 27, 2023.

six LegCo seats at its peaks in 2012 and 2016.²² Since 2019, six of the Civic Party's key members, including Kwok Ka-ki, Claudio Mo, Margaret Ng, Jeremy Tam, Alvin Yeung, and Lee Yue-shun, have been convicted of criminal acts for their participation in the prodemocracy demonstrations and efforts to help raise funds for others involved in the protests.²³ Members of the Civic Party were charged with conspiracy to commit subversion for their participation in the unofficial political primaries ahead of the 2020 LegCo.²⁴ In March 2021, Civic Party members who went to trial for their political engagement resigned from the party during their bail hearings, stating that the Civic Party had "completed its historical mission" and warning that it no longer has room for political participation in LegCo.²⁵ While the party continued operations through May 2023, its disbandment marks the end of prodemocratic organizations' ability to function in Hong Kong.

With the cessation of the Civic Party, only two prodemocracy parties remain in Hong Kong: the Democratic Party and the League of Social Democrats (LSD). The Democratic Party, Hong Kong's largest opposition party, continues to face challenges to assembling for political functions like its annual fundraising banquet, which was suddenly canceled for the fourth year in a row when the venue revoked the political organization's booking at the last minute.²⁶ Despite the fundraising setback, the Democratic Party continues to meet, but opportunity for political engagement is low since public gatherings or demonstrations risk legal action under the NSL.²⁷ One of the party's district councilors announced this year that he would not run for another term.²⁸ He argued that the new district councils established by Chief Executive Lee's electoral changes, discussed below, would fail to implement their oversight role of monitoring the government, as the majority of council seats will be held by pro-Beijing appointees.²⁹ The LSD now keeps a low profile by minimizing its engagements and abandoning former activities, like publicly protesting government policies, often using megaphones.³⁰ Instead, the LSD is constrained to a small booth in public from which its members can quietly hold banners scrutinized by the police.³¹ New volunteers wishing to serve with the LSD must face police questioning.³² Despite the party's efforts to operate within the government's restrictions, at least one LSD member has been arrested this year for engaging in political activity.³³ On June 4, 2023, LSD chairwoman Chan Po-ying was taken into police custody after holding a candle and two yellow paper flowers in Victoria Park in remembrance of the 1989 Tiananmen Square massacre.³⁴ The police detained Ms. Chan for allegedly engaging in subversive activity.³⁵

John Lee Eliminates Key Local Elections

Since the NSL took effect in 2020, Hong Kong's electoral system has been dismantled by Beijing from the top down, culminating in the nearly complete loss of locally elected positions and undermining democratic progress.³⁶ During the prodemocracy protests in 2019, Hong Kong's local council elections developed into contentious political races, as democratic candidates won 388 of the 452 District Council seats, demonstrating their cause and drawing Beijing's at-

tention.*³⁷ The Hong Kong government took additional steps this year to control the city's electoral process at all levels of government by minimizing opportunities for Hong Kongers to elect prodemocracy candidates.† In April 2023, Chief Executive Lee announced that the government would be eliminating most elected seats on local district councils, leaving just 88 of the 452 seats to be directly elected by the public.³⁸ Instead, the majority of the council seats will be filled with political appointees and other officials selected by the government, effectively installing pro-Beijing representatives at most local levels of government across Hong Kong.³⁹ Chief Executive Lee noted that the municipal-level government bodies should be “depoliticized” and comprise only “patriots.”‡⁴⁰ He also noted in May 2023 that the electoral changes would help avoid another “disaster,” referring to the 2019 elections.⁴¹ In an effort to prevent prodemocracy individuals from running, candidates will need to pass a national security background check and receive three nominations from federal committees tasked with vetting the candidates.⁴² Placing these additional restrictions on potential candidates and minimizing the number of elected seats on local councils eliminates opportunity for dissent among those opposing the Beijing-backed government.⁴³ Chairman of the Democratic Party Lo Kin-hei suggested that fewer people will be willing or able to run with the burden of additional restrictions, including the background check and nominations needed to qualify as a candidate.⁴⁴ As Hong Kong approaches its district council elections, set for December 2023, the number of registered voters also appears to be declining, dropping from 4.41 million voters to 4.33 million voters, or by 82,705 voters, since last year.§⁴⁵

Hong Kong's Judicial Integrity Further Degraded

Hong Kong's judicial integrity continues to deteriorate. China is extending its influence over key national security trials, targeting prodemocracy leaders, appointing select judges loyal to Beijing, restricting the rights of defendants, and using tactics unprecedented under common law practice. Unlike standard legal cases, national security cases remain largely a black box since there is no precedent or case law. The trials of Jimmy Lai and the Hong Kong 47 in particular will serve as indicators of how the courts are choosing to proceed with NSL cases and suggest Beijing is prioritizing national security cases against the individuals they view as the biggest threat to the regime.

*Hong Kong has 18 districts, each represented by a district council. Elections were held in 2019 for the 2020–2023 term, which includes 479 district council seats. In 2023, the government reduced the number of district council seats to 470. Government of the Hong Kong Special Administrative Region, *Public Services, District Councils*, 2023.

†“Prodemocracy candidates” refer to those who embrace democratic views, including civil liberties, free elections, and human rights. In Hong Kong, these candidates are opposed to the expansion of Beijing's political authority, which seeks to corrode Hong Kong's democratic institutions and civil society in the name of national security and to secure the Party-state's control over the territory.

‡For more information on Hong Kong's “patriots only” policy, see the U.S.-China Economic and Security Review Commission, Chapter 5, “Hong Kong,” in *2022 Annual Report to Congress*, November 2022, 666.

§The number of registered voters rose in 2019, invigorated by the prodemocracy movement, but it began to drop after the NSL was passed. Candice Chau, “Number of Registered Hong Kong Voters Falls for Second Year in a Row as District Council Election Confirmed for Dec. 10,” *Hong Kong Free Press*, August 1, 2023.

Foreign Participation in Hong Kong's Judicial System

Hong Kong's eroding legal institutions have stymied foreign participation. The number of registered foreign lawyers in Hong Kong has steadily declined over the last three years, from 1,688 in 2019 to 1,442 in December 2022, a 15 percent drop.⁴⁶ Two top sitting British judges withdrew from the city's Court of Final Appeal, the city's highest court, in March of 2022, stating that their continued participation on the court would appear to endorse the shrinking political liberties and political expression permitted in the city.⁴⁷ However, as of August 2023, 12 foreign-born judges continue to serve the court.⁴⁸ Of these judges, five are from the UK, four are from Australia, one is from Canada, one is from South Africa (holding dual British-South African citizenship), and one is from Zimbabwe (born in Southern Rhodesia, then a British colony).⁴⁹ Of these judges, one, Justice Frank Stock,[†] has sat on a case regarding national security. Justice Stock sat as a member of a five-judge panel in an appeal ruling that rejected a lower court's decision to grant activist Jimmy Lai bail during his national security case.⁵⁰ Additionally, the Hong Kong Department of Justice has moved ahead with limiting foreign political participation in Hong Kong, amending the Legal Practitioners Ordinance to require a foreign lawyer to obtain the Hong Kong chief executive's specific approval before taking on a national security case.⁵¹

Hong Kong's Judicial Integrity Fails in Jimmy Lai's Detention and Trials

Jimmy Lai's trial illustrates judicial bias against defendants the CCP views as a threat. Mr. Lai, a mainland immigrant, self-made businessman, British citizen, and leader in Hong Kong's prodemocracy movement, has been detained since December 12, 2020.⁵² He has faced multiple charges for alleged fraud, unauthorized assembly, and collusion with foreign powers.⁵³ These charges aim to silence Mr. Lai's calls for Hong Kong's freedom and eliminate the mediums through which he spread his message.⁵⁴ *Apple Daily*, the prodemocracy newspaper founded by Mr. Lai, was a major critic of mainland

*The Hong Kong Court of Final Appeal consists of a chief judge, three permanent judges, and up to 30 nonpermanent judges. The typical appeal case is heard by a five-person panel consisting of the chief judge, three permanent judges, and a nonpermanent judge. If the chief judge or permanent judges are unable to sit, additional nonpermanent judges may be added. While a minority of nonpermanent judges are from Hong Kong, provisions in article 92 of the Basic Law allow for foreign judges to be appointed to fill most of the nonpermanent judge positions. These judges are drawn from Common Law jurisdictions, to date from the UK, Australia, New Zealand, and Canada. Government of the Hong Kong Special Administrative Region of the People's Republic of China, The Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China, Chapter IV-Political Structure, July 1, 1997; Hong Kong Court of Final Appeal, *The Role of the Court of Final Appeal (CFA)*.

[†]Justice Frank Stock continues to serve on the Court of Final Appeals in a nonpermanent capacity. He has sat as a judge in Hong Kong's judicial system since 1991 and has resided in Hong Kong since 1978. A May 2023 staff report by the Congressional-Executive Commission on China listed Justice Stock among 29 Hong Kong justices appointed to hear cases on national security, suggesting the U.S. government consider imposing sanctions on these judges "to counter erosion of democratic freedoms." The report cited Stock's participation in the panel that upheld the Hong Kong government's appeal against a lower court's decision to grant Jimmy Lai bail. Hong Kong Court of Final Appeal, "Non-Permanent Judges," *Hong Kong Court of Final Appeal*; Government of Hong Kong, *Judicial Appointment*, October 3, 2003; Congressional-Executive Commission on China, *One City, Two Legal Systems: Hong Kong Judges' Role in Rights Violations under the National Security Law*, May 2023.

and Hong Kong authorities and a beacon of political expression, staunchly supporting the 2019 demonstrations and printing signs for protesters.⁵⁵ In a major blow to press freedom, the newspaper was shut down in June 2021 after authorities raided the newsroom to collect “evidence” of their NSL violations and froze the company’s assets.⁵⁶ Mr. Lai’s other three companies, Apple Daily Limited, AD Internet Limited, and Apple Daily Printing Limited, also face charges under the NSL, including “collusion with foreign forces” for their support of the 2019 prodemocracy movement.⁵⁷

In December 2022, Mr. Lai was sentenced to nearly six years in prison for alleged fraud and the apparent violation of a lease agreement.⁵⁸ Under Hong Kong’s former legal standards, such a sentence would have seemed almost absurdly incommensurate to the offense, but District Court Judge Stanley Chan determined Mr. Lai had “concealed the fact that he was operating a consulting firm from the offices of Next Digital, Apple Daily’s parent company, in violation of its lease with a government-owned entity.”⁵⁹ Judge Chan openly admitted Mr. Lai’s “heavier sentence” is atypical for a fraud case under the Basic Law.⁶⁰

Mr. Lai still awaits a separate national security trial, which includes charges for conspiracy to print seditious publications. After being delayed several times, Mr. Lai’s national security trial is scheduled for December 2023.⁶¹ He has also been denied the right to legal representation of his choosing and other tenets of due process ostensibly guaranteed by Hong Kong’s courts* but withheld on national security grounds.⁶² Because Mr. Lai is one of the highest-profile voices critical of Beijing and the Hong Kong government, the verdict reached in his December trial will set a precedent for future national security cases and will support Beijing’s mission of diminishing dissent by warning other prodemocracy activists of the consequences of speaking out against the government. In December 2022, Beijing ruled that Chief Executive Lee had the authority to ban foreign lawyers from national security trials.⁶³ Five months later, in May 2023, Hong Kong courts blocked Mr. Lai’s request to appoint a British barrister to represent him and his efforts to appeal his case.⁶⁴ Robert Pang, Mr. Lai’s current Hong-Kong-based lawyer, argued that failing to allow Lai’s British lawyer to represent him in this national security trial was “persecution not prosecution.”⁶⁵

TikTok Blocks Hong Kong-Related Content

This year, Chinese-owned video platform TikTok blocked widely viewed Hong Kong-related content for the platform’s international audiences because of allegedly “violent” content but which notably presented a narrative of China that runs counter to Beijing’s interests.⁶⁶ The company’s move has raised concerns about how it

*The 1991 Bill of Rights Ordinance guaranteed due process in Hong Kong, a guarantee that was maintained under the Basic Law following the 1997 handover. Hong Kong’s criminal legal system has guaranteed certain tenets of due process in a fair trial, including the right to choose one’s own attorney, to be considered for release on bail prior to the trial, and to receive a trial by jury rather than a no-jury trial under a judge selected by the government. Lydia Wong et al., “Hong Kong’s National Security Law and the Right to a Fair Trial: A GCAL Briefing Paper,” *Center for Asian Law, Georgetown Law*, June 28, 2021; Simon N. M. Young, “The National Security Law’s Challenges to Criminal Justice in Hong Kong,” *U.S.-Asia Law Institute* 1:11 (January 14, 2021).

TikTok Blocks Hong Kong-Related Content—Continued

may track and censor users. Although TikTok has been unavailable in Hong Kong since 2020, Hong Kongers residing overseas, including prodemocracy activists who have fled the city, and international audiences may access the platform and view content related to the prodemocracy movement in Hong Kong.⁶⁷ According to one poll by Pew Research in August 2022, the percentage of U.S. adult TikTok users who turn to the platform as a source of news rose from 22 percent in 2020 to 33 percent.*⁶⁸ Although the company claims it does not receive instructions to censor content from Beijing or its Chinese parent company, ByteDance,† TikTok has continued efforts to censor Hong Kong-related content on its platform.⁶⁹

For example, on April 18, 2023, Michigan-based think tank Acton Institute released the documentary *The Hong Konger: Jimmy Lai's Extraordinary Struggle for Freedom* about Mr. Lai's life, career, and political activism.⁷⁰ The same week the film was released, the Acton Institute posted videos promoting the film to its TikTok account.⁷¹ The think tank's videos included content on Mr. Lai's prodemocracy work and the protests related to the democracy movement, drawing attention to the CCP's violent crackdowns in Hong Kong.⁷² One video on Acton's account received more than two million views outside of Hong Kong, and together the six videos promoting *The Hong Konger* amassed more than four million views.⁷³ Just a few days after the series of videos were posted, TikTok blocked one of the think tank's widely viewed videos showing footage from *The Hong Konger*—in which Hong Kong police teargassed protestors during a prodemocracy demonstration—for allegedly violating TikTok's community guidelines, which ban “violent and graphic content.”⁷⁴ The Acton Institute appealed the video's removal and TikTok restored it within several hours. However, on May 2, the think tank's account was suspended.⁷⁵ Without access to the account, Acton Institute was unable to appeal the decision.⁷⁶ Cofounder of the Acton Institute Reverend Robert Sirico argues that “TikTok's suspension of the Acton Institute's account for telling the truth about Jimmy Lai's plight is both deplorable and predictable.”⁷⁷ After facing a pressure campaign to restore the account, TikTok reversed its suspension of Acton Institute the next day.⁷⁸ While TikTok blames a technical glitch for the account's suspension, this is not the first time the company has suspended accounts posting Hong Kong-related content or other content critical of China's human rights abuses.⁷⁹

*Pew surveyed 12,147 U.S. adults in its 2022 poll, and when asked if they used TikTok, 30 percent of respondents indicated they did, up from the 21 percent of individuals surveyed in 2021. In the 2022 poll, 70 percent of respondents indicated that they used Facebook. Katerina Eva Matsa, “More Americans Are Getting News on TikTok, Bucking the Trend on Other Social Media Sites,” *Pew Research Center*, October 21, 2022.

†ByteDance is reportedly a nonstate firm, but state-backed Chinese Internet Investment Fund's August 2021 acquisition of a 1 percent stake in its primary domestic subsidiary affords the Cyberspace Administration of China a seat on the subsidiary's board. Coco Feng, “Chinese Government Takes Minority Stake, Board Seat in TikTok Owner ByteDance's Main Domestic Subsidiary,” *South China Morning Post*, August 17, 2021; Nikki Sun, “Chinese Government Builds a Stake in Unit of TikTok-Owner ByteDance,” *Nikkei Asia*, August 17, 2021.

Trial of the Hong Kong 47: A Historic Indicator of Beijing's Control

The landmark case of 47 activists arrested under the NSL in February 2021 is the first of its kind to go to trial under the law—a sign that Beijing's control under the law has been fully realized and that Hong Kong's judicial independence has effectively ceased to exist.⁸⁰ Known as the “Hong Kong 47,” the group comprises prodemocracy advocates,* including student activist Joshua Wong, professor Benny Tai, and a number of elected officials, all of whom have been charged under the NSL for conspiring to commit subversion (see Appendix II for a full list of the 47 advocates). At issue is the group's organization of and participation in unofficial primary elections in July 2020 ahead of the LegCo election. (The full election was originally set for September 2020 but was postponed by a year, purportedly due to the government's COVID-19 concerns.⁸¹) There is a presumption of denial for pretrial bail in NSL cases, and among the defendants, 34 remain detained and only 13 have been granted bail since their initial arrest.⁸² Between 2021 and 2022, preliminary hearings (including bail hearings) were held but often delayed, resulting in many of the defendants being held in jail for nearly two years awaiting trial.⁸³ One result of the delays has been more time for prosecutors to build their case while weakening defendants' emotional will and financial assets.

The trial of the Hong Kong 47 began in February and was initially expected to last 90 days but has continued through the fall.⁸⁴ The trial is being heard by three High Court judges who have been selected under the NSL as a result of their loyalty to Beijing.[†]⁸⁵ Demonstrating the pressure placed on defendants to succumb to the will of the prosecution, four of the 31 defendants agreed to testify as prosecution witnesses against 16 of their peers who pleaded not guilty.⁸⁶ Details pertaining to the case have not been made publicly available, but in June 2023, the Hong Kong court announced that prosecutors had found sufficient evidence to bring a case against 16 of the prodemocracy activists, and the defense was expected to begin on June 12, lasting 39 days.⁸⁷ According to news reports, Hong Kong's national security police also created social media accounts to monitor the online activities of the defendants.⁸⁸ The government has expressed concerns with social media use before, previously denying Hong Kong 47 defendants bail on the grounds that they could allegedly use social media platforms to threaten national security.⁸⁹ In one reported case from 2023, Hong Kong police used an inauthentic social media account to comment on a Facebook post by Mr. Tai, threatening him with “divine punishment” for his involve-

*These 47 Hong Kong activists, politicians, legislators, and civil society leaders were opposed to the central government's overreach into the electoral process. They were accused of holding primary elections, which were historically a common occurrence ahead of elections, in order to help elect strong candidates who could effectively challenge pro-Beijing candidates in the main election. Helen Davidson and Verna Yu, “Hong Kong 47: Trial of Dozens in Pro-Democracy Movement Set to Begin under National Security Laws,” *Guardian*, February 4, 2023.

†Instead of a jury, the defense is being heard by three judges—Alex Lee, Johnny Chan, and Andrew Chan—handpicked by the Hong Kong government and Beijing loyalists. This is a break from the judicial tradition of Hong Kong's common law, which would typically provide for a jury, but so far, no national security case has been granted a jury. Ng Kang-chung, “National Security Law: Group of 47 Opposition Activists to Face Hong Kong Subversion Trial without a Jury,” *South China Morning Post*, August 16, 2022; Karl Lindberg, “Hong Kong's Biggest Security Trial Kicks Off in Test for City,” *Yahoo!Life*, February 5, 2023.

ment in the 2020 primary elections.⁹⁰ Police threats made to a defendant amid an ongoing trial are unprecedented and demonstrate the lengths Hong Kong law enforcement is willing to go to attempt to intimidate the opposition.⁹¹

Beijing Continues to Take Control of Hong Kong's Education System

Hong Kong's administration has continued introducing policies to weaken academic freedom and insert pro-CCP bias into school curricula. The central government aims to transform what is taught and eliminate dissent among Hong Kong's educators and students—the bedrock of the 2019 protests—and secure Beijing's control of both Hong Kong's education system and its next generation of leaders. Hong Kong's teachers and students have received new testing requirements and guidelines for adhering to the NSL, further weakening the integrity of the education system. Many teachers are consequently reconsidering their careers, and students are also seeking alternatives to Hong Kong's schools, including overseas options.⁹² Hong Kong's government has also sought to suppress educational resources at odds with a pro-CCP narrative, including removing children's books from public libraries.

Hong Kong's Teachers under Beijing's Censorship and Control

Facing uncertainty regarding the application of the NSL to school curricula, testing, and academic freedom, Hong Kong teachers are self-censoring for fear of failing to pass national security tests or teaching content that breaches the NSL.⁹³ Released by the Education Bureau in February 2021, the “National Security: Specific Measures for Schools” curriculum required schools to implement a new framework by August 2022.⁹⁴ The 2022–2023 school year marked the first full year that many of the new national security programs have been taught at primary and secondary schools across Hong Kong.⁹⁵ Schools are required to submit a work plan and annual report in November at the end of the school year describing their efforts to fully implement “national security education at all key stages of learning.”⁹⁶

As the NSL has been applied more stringently to Hong Kong's education system, teachers are also being forced to adapt to new testing requirements and curricula promoting content with which they may disagree. On October 24, 2022, the Education Bureau announced details on the requirement for newly appointed teachers to pass the Basic Law and National Security Law tests beginning in the 2023–2024 school year in order to serve in the public sector schools.⁹⁷ According to the bureau, the tests are intended to determine whether teachers have a “correct understanding of the Basic Law, so that they could enlighten students and help them correctly understand the constitutional status of Hong Kong and develop positive attitudes toward the Basic Law and ‘one country, two systems.’”⁹⁸ Candidates for teaching must pass a written test by answering half of the multiple-choice questions correctly in order to qualify for a teaching appointment.⁹⁹

The Education Bureau has also updated its guidelines for teachers, directing them to report any students or staff who violate “general-

ly acceptable moral standards” or “potentially” breach any laws.¹⁰⁰ The bureau also advised teachers they would be held responsible for any “inauthentic or objectionable” content posted to their social media.¹⁰¹ As one Hong Kong teacher explained, the NSL’s “red line is continuously and arbitrarily shifting, so teachers have to self-censor.”¹⁰²

Ideological requirements and pressure to self-censor have driven away teachers and university faculty.¹⁰³ Within the last academic year, around 6,550 teachers at government-run or subsidized primary and secondary schools have resigned or retired, despite more than half of the teachers being below the official retirement age.^{* 104} At the university level, there has also been an exodus of teaching talent, leaving Hong Kong’s public universities with an employment gap the government is filling with academics from China.¹⁰⁵ Around 35 percent of academics at Hong Kong’s public universities are now from mainland China, helping to replace the quarter of a million academics that left Hong Kong after the NSL was enacted.¹⁰⁶ The number of teachers leaving Hong Kong also coincides with the emigration wave that began in 2021 following the introduction of the NSL and has increased as the NSL is further implemented.¹⁰⁷

China Bans Books with “Bad Ideologies”

Beijing took additional steps this year to control historical narratives about China by removing books considered “seditious” from Hong Kong’s public libraries and, in one case, even arresting Hong Kongers for owning banned books.^{† 108} In May 2023, Chief Executive Lee met with LegCo for his first “interactive session,” a new style of meeting proposed by the chief executive that allows government officials to engage lawmakers in a question-and-answer format, providing an additional opportunity for pro-Beijing voices to exert power over the legislative body.¹⁰⁹ During the session, Chief Executive Lee argued that the government has a responsibility to identify books with “bad ideologies” and foster “correct values” in the society, including through removing library books that may threaten these efforts.¹¹⁰ According to local media, among the books considered to reflect “bad ideologies” are those related to the Tiananmen Square prodemocracy movement and other books that may not “tell a good China story.”¹¹¹ According to *Voice of America*, nearly all items related to Tiananmen Square, as well as books with authors viewed as prodemocracy or pro-independence, were removed from Hong Kong public libraries between April and May 2023.¹¹² Books written by prodemocracy activists, including Mr. Lai, were removed from public

*In 2021, more than 5,200 of Hong Kong’s 72,374 teachers resigned, leaving primary and secondary schools with nearly 12,000 fewer teachers than two years before. William Yu, “6,500 Teachers Quit Hong Kong Schools in Last Academic Year, Bringing Total to Nearly 12,000 since 2021,” *South China Morning Post*, April 13, 2023.

†Beijing’s war on books in Hong Kong is not a new development. In 2015, five staff members of Causeway Bay Books, a Hong Kong-based bookstore known for publishing stories critical of CCP members, went missing. One of the victims was Gui Minhai, a Swedish citizen who was also a shareholder of Mighty Current Media, which acquired Causeway Bay Books in 2014. He went missing while on a trip in Thailand and it was later discovered that he had been arrested and taken to China, where he was detained and eventually sentenced to ten years in prison for providing intelligence to foreign sources. *BBC News*, “Gui Minhai: Hong Kong Bookseller Gets 10 Years Jail,” February 25, 2020; Vivienne Zeng, “The Curious Tale of Gloria Davies and Linda Jaivin, ‘The Causeway Bay Books Incident,’” *The China Story*, 2015.

China Bans Books with “Bad Ideologies”—*Continued*

libraries following NSL enactment, but in May 2023 the government went a step further by removing any books that referenced Mr. Lai, as well as comics by political cartoonist Wong Kei-kwan, whose art was typically critical of the government (discussed more below).^{*113}

In March 2023, two men were also arrested for possessing children’s comic books portraying Chinese authorities as wolves attacking a village of sheep representing Hong Kongers.¹¹⁴ The books were determined to be seditious in a 2022 trial where five speech therapists were found guilty of “conspiring to publish, distribute and display three books with seditious intent” and sentenced to 19 months in prison.¹¹⁵ This arrest is the first public case of Hong Kong citizens being detained for possessing books deemed “seditious” by the government.¹¹⁶

Hong Kong’s Students a Focused Target of NSL Implementation

The NSL’s provisions requiring “patriotic education” have forced Hong Kong students of all ages to adapt to new curricula, testing requirements, and school activities, all for the purpose of promoting a strong sense of Chinese identity and support for Beijing.¹¹⁷

In October 2022, Hong Kong’s Education Bureau released a new curriculum guide for secondary schools that replaced the 2010 Life and Society Curriculum Guide (a course that once included modules on upholding Hong Kong’s core values, like the “right to freedom of opinion and expression”).¹¹⁸ The new guide supports the already revised high-school-level Citizenship and Social Development curriculum that replaced Liberal Studies. Beijing blamed the Liberal Studies program for promoting critical thinking and debate, which the government argues led students to engage in the 2019 pro-democracy protests.¹¹⁹ Schools are expected to begin implementing the new curriculum in September 2023 and achieve full implementation by 2024.¹²⁰ Missing from the new curriculum are any references to democracy or democratic values, including the freedoms of expression and opinion.¹²¹ The new curriculum instead includes modules on national security and the NSL, as well as China’s constitution and political structure, while omitting previously taught modules on international political systems.¹²²

Since the beginning of the 2020–2021 school year, public schools have been required to hold weekly flag-raising ceremonies and fly China’s national flag daily in an effort to promote an “affection for the Chinese people” and advance national education.¹²³ According to a former Hong Kong teacher who has since migrated to the UK, her school selected students from progovernment families to join the flag-raising team that was established to meet the government’s requirement.¹²⁴ In 2022, 14 students were suspended for failing to attend or stand during the flag-raising ceremony and national anthem.¹²⁵

^{*}A mainstream Chinese-language newspaper was forced to remove Wong Kei-kwan’s column earlier in May 2023 because his artwork and commentary upset the government. Verna Yu, “Hong Kong Libraries Ax Books amid National Security Fears,” *Voice of America*, May 19, 2023; Ng Kang-chung, “National Security Law: Inquiry Launched after Books by Jimmy Lai Displayed as Recommended Titles at Hong Kong Public Library,” *South China Morning Post*, June 25, 2021.

At the university level, Hong Kong's institutions of higher education are also implementing requirements under the NSL to support Beijing's national security-oriented objectives. Beginning in the 2023–2024 school year, university students will face new testing requirements as a part of national security courses.¹²⁶ As of 2023, 11 universities, including three private universities, have begun implementing the compulsory national education program for undergraduate students, who are required to pass each course before receiving their degree.¹²⁷ Many of these courses include online and self-study sessions in which students are tested on comprehension of political content approved by Beijing.¹²⁸ For example, Chinese University introduced two courses, “Hong Kong in the Wider Constitutional Order” and “Understanding China,” that require 40 hours of self-guided study and testing.¹²⁹ As another example, the University of Hong Kong is implementing a ten-hour government-approved online course that covers local and national legislation.¹³⁰

As the NSL is more stringently applied, enrollment numbers for Hong Kong's primary and secondary schools are accelerating a trend that was already occurring, owing to Hong Kong's low birthrates.¹³¹ Between 2021 and 2023, more than 64,000 students in secondary school and below have withdrawn from the system, choosing alternatives like education abroad.¹³² Media reports also indicate that at least five schools in Hong Kong face closures due to low enrollment.¹³³ In March 2023, a private primary school announced that beginning in the 2024–2025 school year it would no longer be teaching Primary One classes because of low enrollment numbers and would close its doors entirely in 2028.¹³⁴

Civil Society Further Constrained under the NSL

Beijing is enforcing the NSL's provisions on civil society organizations, including faith-based groups, trade unions, the independent press corps associated with prodemocracy and opposition groups, and those that otherwise give such views a platform or organizational capabilities. Following Beijing's efforts last year to stifle opposition by arresting Cardinal Joseph Zen,* a senior Catholic cleric accused of foreign collusion under the NSL, Christian leaders in Hong Kong sought to appease authorities by engaging with counterparts in China and avoiding controversial gatherings.¹³⁵ Trade union leaders continued to experience harassment and intimidation for their past affiliations with prodemocracy demonstrators and current efforts to petition the government on behalf of their members.¹³⁶ In addition to targeting opposition from Hong Kong's civil society, Beijing is also attempting to coopt it. Beijing's efforts to gain greater control of Hong Kong's religious communities demonstrate the CCP's appetite to control the island's society beyond the political and legal spheres. The Party-state's tactics for coopting Hong Kong's civil society mirror its approach on the Mainland, whereby it effectively eliminates independent civil society by embedding the Party in all discourse, as seen in Beijing's suppression of Hong Kong's once robust free press. More than 1,500 journalists have lost their

*For more on Cardinal Joseph Zen Ze-kun, see U.S.-China Security and Economic Review Commission, Chapter 5, “Hong Kong,” in *2022 Annual Report to Congress*, November 2022, 686–687.

jobs since the government's attacks on free press, while others have reported being followed and harassed.¹³⁷

Beijing Extends Mainland Sinicization of Religion to Hong Kong

Beijing seeks to suppress and co-opt faith-based organizations and groups, especially Hong Kong's Catholic community, which it fears may galvanize opposition to the Party-state. The CCP continues efforts to "Sinicize" or cultivate a Chinese-Marxist view of religion among Hong Kong's faith-based communities.¹³⁸ (Sinicization is a CCP concept referring to the Chinese government's efforts to transform religious beliefs and practices in accordance with CCP standards for Chinese culture and society.*) In 2023, Hong Kong held its first seminar on the Sinicization of Christianity, as required by the central government.[†]¹³⁹ State-sanctioned groups, like the Three-Self Patriotic Movement and the China Christian Council,[‡] participated in the Sinicization seminar to discuss ways to blend CCP doctrine with traditional Christian beliefs in order to ensure allegiance to the state.¹⁴⁰ More than 100 religious teachers and leaders participated in the gathering.¹⁴¹

Following particularly strained relations with the Mainland after the 2022 arrest of Cardinal Zen,[§] Hong Kong's Catholic Diocese avoided challenges to the NSL by accepting the Party's restrictions on religious practices and increasing its engagement with China's state-sanctioned religious organizations. For example, the Catholic Church in Hong Kong for a second year in a row declined to hold a June 4 memorial mass in honor of the Tiananmen Square massacre.¹⁴² Not only was this a sign of success for Beijing's political repression of Hong Kong's Catholic community, it also followed a diplomatic snub to Hong Kong's Vatican-appointed bishop Stephen Chow.

In 2018, the Vatican and the Chinese government signed an accord establishing a joint process for appointing bishops on the Chi-

*Sinicization targets both Islam and Christianity and was the key tenet of a 2018 white paper titled "China's Policies and Practices on Protecting Freedom of Religious Belief." The paper highlights the importance of subsuming religious work under China's national governance system. In a 2021 work conference on religious work, General Secretary of the CCP Xi Jinping argued that "China must adhere to the direction of the Sinicization of religion [and] insist on uniting the masses of religious believers around the Party and the government." China Aid, "Hong Kong Holds Its First Seminar on the Sinicization of Christianity," May 25, 2023; Amber Wang, "China Tightens Control of Religion, with Focus on National Security," *South China Morning Post*, December 6, 2021; *Xinhua*, "China's Policies and Practices on Protecting Freedom of Religious Belief," (中国保障宗教信仰自由的政策和实践), April 3, 2018. Translation.

†At the 20th National People's Congress, outgoing Prime Minister Li Keqiang declared that the "Sinicization of religions has been carried out gradually" and commissioned his listeners to "actively guide religions to adapt to the socialist society" and develop religions within a Chinese context. Li Qiang, "Two Sessions: Beijing 'Sinicises' Religions (Forcing Their Members to Register for Services)," *Asia News*, March 8, 2023.

‡The Three-Self Patriotic Movement (TSPM) was founded in the 1950s, after the Communist Party expelled foreign missionaries from China, in order to establish the Christian church in China under the supervision of the Chinese government. The TSPM continues to operate today as a medium through which the CCP allows state-sanctioned churches to operate within the confines of Sinicized religion, ensuring that Three-Self church doctrine and teachings omit any ideas that may threaten the Party's stability. The China Christian Council (CCC), established in 1980, is also a forum through which the CCP seeks to control the unsupervised spread of Christianity within China by convening officially registered Protestant churches under close watch of the government. Carsten T. Vala, "The Three-Self Patriotic Movement," *China Source*, September 7, 2020.

§After his arrest in May 2022, Cardinal Zen was released on bail and awaits formal charges. In a separate case in November 2022, however, he was found guilty over a fund he was a part of setting up to assist prodemocracy protesters that had been arrested. Kathleen Magramo and Wayne Change, "Hong Kong Finds 90-Year-Old Cardinal Guilty over Pro-Democracy Protest Fund," *CNN*, November 25, 2022.

nese Mainland despite this being a right the Vatican historically reserved to itself.¹⁴³ In April 2023, however, just before a planned visit from Bishop Chow to the Mainland, China unilaterally appointed its own bishop of Shanghai in direct contravention of the 2018 arrangement.¹⁴⁴ Bishop Chow's visit to Beijing, the first by a Hong Kong bishop in nearly 30 years, had been aimed at easing strained relations between the Church and the CCP.¹⁴⁵ Instead, as Bishop Chow related, the government officials he met with sought to portray Sinitization as innocuous and akin to inculturation, or the adaptability of Christian doctrine to unique cultures or societies.*¹⁴⁶

Authorities Target Trade Unions and Their Leaders

Through NSL requirements, Beijing's oversight of Hong Kong's remaining trade unions† has diminished workers' rights and transformed labor organizations to mirror those in the Mainland. In March 2023, Hong Kong police arrested union leader Elizabeth Tang, a Hong Kong native who is now a UK resident, for allegedly "colluding with foreign forces to endanger national security" after she returned to Hong Kong from the UK to visit her activist husband, Lee Cheuk-yan, who had been injured while in prison.¹⁴⁷ Ms. Tang is the general secretary of the International Domestic Workers Federation and the former chief executive of the now disbanded Hong Kong Confederation of Trade Unions (CTU),‡ which served as Hong Kong's largest opposition trade union coalition.¹⁴⁸ Nearly a week after Ms. Tang's arrest, police also arrested her younger sister and her lawyer for removing belongings from her home ahead of a police search.¹⁴⁹ Additionally, in April 2023, former chairman of the now defunct CTU, Joe Wong, was forced to withdraw an application to hold a labor rights rally on Labor Day after being detained and questioned for hours by the police.§¹⁵⁰ Mr. Wong's co-applicant, Den-yi To, stated that further details could not be provided due to potential ramifications of speaking out under article 63 of the NSL.¹⁵¹

The UN Committee on Economic, Social and Cultural Rights (CESCR) recommended the government of Hong Kong review the NSL to ensure the law is compliant with the International Labor Organization's (ILO) standards, which China has committed to as an ILO member organization.¹⁵² CESCR's recent periodic report on China in March 2023, however, expressed concerns that the All-China Federation of Trade Unions, the sole entity through which trade unions can organize in China, does not protect workers' ability to join independent trade unions.¹⁵³

*Inculturation, a theological term generally used by Catholics, refers to the adaptability of Christian doctrine to individual cultures or societies. The term does not imply compromising or altering primary doctrine of the faith but rather appreciating the traits or expressions of a particular culture and presenting and integrating religion within that context. Matteo Salonia, "Inculturation in China: A Case Study," *Catholic Exchange*, September 12, 2022.

†Since the NSL was enacted, the number of newly registered trade unions has dropped dramatically, decreasing from 495 in 2020 to 40 in 2022. Lee Yuk Yue and Gao Feng, "Labor Unions Cancel Traditional May Day March in Hong Kong, Citing Security Law," *Radio Free Asia*, May 1, 2023.

‡The CTU dissolved in 2021 after its members reportedly received threatening messages, creating concerns for their safety. Jessie Pang, "Prominent Hong Kong Union Leader Arrested after Prison Visit," *Reuters*, March 9, 2023.

§Under the NSL, police permission is required to hold a public demonstration of more than 30 people. Lee Yuk Yue, "Labor Unions Cancel Traditional May Day March in Hong Kong, Citing Security Law," *Radio Free Asia*, May 1, 2023.

Artistic Expression in Hong Kong Purged for Challenging Government Narratives

The Party-state continues to strip Hong Kong's society of any artistic expression that runs counter to CCP interests, controlling musical and other artistic forms of self-expression to cultivate a more mainland-friendly culture. Examples of the government's efforts to censor or diminish Hong Kong's rich culture include:

- **Hong Kong police seizing the “Pillar of Shame” statue that once memorialized the Tiananmen Square massacre and was viewed as a symbol of the prodemocracy movement.** The statue, which was removed from its place on the University of Hong Kong's campus in 2021, depicts a tall pile of bodies representing the lives lost during the Tiananmen Square massacre.¹⁵⁴ The university chose to dismantle the statue in the middle of the night based on a “risk assessment,” implying that keeping the statue in place would invite legal action against the university under the NSL.¹⁵⁵ Since its removal in 2021, the statue has been kept in a storage container on university-owned land, but in May 2023 the police removed the statue because of its relation to an “incitement to subversion case.”¹⁵⁶ The seizure took place just several weeks before the June 4 anniversary of the Tiananmen Square protests, which had been commemorated through a vigil in front of the statue for more than 20 years prior to authorities' ban on the event in 2020.¹⁵⁷
- **Hong Kong authorities attempting to ban the song “Glory to Hong Kong.”** “Glory to Hong Kong” became an unofficial anthem of Hong Kong's 2019 prodemocracy movement and was sung by protestors gathered at sporting events and shopping centers to protest the government's pivot away from democracy.¹⁵⁸ In an effort to censor the prodemocracy anthem and crack down on any form of dissent, the government sought a High Court injunction to require global online companies like Spotify, Google, and Meta to remove the song from their platforms.¹⁵⁹ Some renditions of the anthem have begun to disappear from streaming platforms, including iTunes and Spotify, but U.S. platforms have not completely restricted access to all versions of the song.¹⁶⁰ In July 2023, Hong Kong's High Court ruled against the government's bid to ban the song, leading the Lee Administration to appeal the decision.¹⁶¹ The government blamed the judge's lack of expertise handling matters of alleged national security.¹⁶²
- **Hong Kong authorities removal of a satirical comic strip with a history of taking on government policies from a mainstream Chinese-language newspaper.**¹⁶³ In May 2023, the comic strip of Wong Kei-kwan, a longtime political cartoonist, was suspended after Chinese-language newspaper *Ming Pao* published his comic strip showing a conversation between two individuals in which the man explains to the woman that local community representatives

Artistic Expression in Hong Kong Purged for Challenging Government Narratives—*Continued*

will be selected “as long as the superior finds them suitable,” regardless of their qualifications.¹⁶⁴ Mr. Wong’s cartoon was a critique of the government’s decision to reduce the number of locally elected council positions, opting instead for political appointees.¹⁶⁵ The cancelation of Mr. Wong’s long-running comic strip demonstrates authorities’ determination to squash any avenue for spreading opinions that may challenge the government. Prior to the removal of his comic strip, Mr. Wong also faced criticism from Hong Kong Secretary for Security Chris Tang over his illustration of a couple discussing the government’s large security budget and suggesting that money for new equipment and technology would be used against Hong Kongers.¹⁶⁶ Secretary Tang characterized Mr. Wong’s work as promoting “misleading accusations to provoke citizens’ discontent towards the government.”¹⁶⁷

Hong Kong’s Remaining Journalists Face Significant Risks under NSL

The Hong Kong government has continued an unprecedented campaign to intimidate and harass the few journalists and publications who remain in the territory, forcing them to navigate an increasingly restrictive environment under the NSL. According to the nongovernment organization Reporters Without Borders, Hong Kong’s press freedom dropped from 73rd in the world in 2019 to 148th in 2022.¹⁶⁸ In December 2022, Tang Cheuk-yu, a freelance journalist first arrested in November 2019 and released on bail, was sentenced to more than a year in prison for “possession of offensive weapons in a public place” while conducting journalistic work for Taiwan’s Public Television Service.¹⁶⁹ The “offensive weapons” included a laser pen, ropes, and a multipurpose knife, which he carried on his person during protests outside of Hong Kong Polytechnic University.¹⁷⁰ As of 2023, more than a dozen journalists remain detained in Hong Kong, and those that are not detained have reportedly faced growing harassment. The Hong Kong Journalists Association (HKJA) revealed in March 2023 that it had received reports from journalists about being followed by unknown people near their office, their homes, and outside of court hearings in an effort to intimidate and dissuade them from reporting anything negative about the government or China.¹⁷¹ For instance, the Hong Kong Free Press (HKFP) reported that on March 22, 2023, one of its journalists had been followed from her home to HKFP’s office by two men who were allegedly undercover police wearing earpieces. When confronted, the two men refused to respond to questions or identify themselves.¹⁷²

Extraterritorial Application of the NSL

In 2023, there were several cases in which the NSL was used to charge individuals accused by Hong Kong authorities with “secession” or “collusion with foreign forces” for activities conducted while living abroad:

- *Eight Hong Kong activists:* The Hong Kong police placed arrest warrants and bounties on Hong Kong activists Nathan Law Kwun-chung, Elmer Yuen Gong-yi, Dennis Kwok Wing-hang, Kevin Yam Kin-fung, Anna Kwok Fung-yee, Mung Siu-tat, Finn Lau Cho-dik, and Ted Hui Chi-fung in July 2023 for “foreign collusion” and “incitement to secession” under the NSL for activities conducted abroad.¹⁷³ Eric Lai, a visiting researcher at King’s College London’s School of Law, said the issuance of the arrest warrants and bounties “is a way to create a chilling effect for the Hong Kong overseas community.”¹⁷⁴ The eight activists now live in the United States, Australia, and the UK (for more on the reactions of these host governments to the issuance of the arrest warrants and bounties, see Appendix III and Appendix IV).¹⁷⁵ The Hong Kong police issued bounties worth approximately \$128,000 (Hong Kong Dollars [HKD] 1 million) for information that could lead to their arrest, with the charges carrying sentences up to life in prison.¹⁷⁶ Furthermore, a spokesman from Hong Kong’s Security Bureau stated that the police would cut off the activists’ sources of funding and identify their “accomplices” in Hong Kong, according to the *South China Morning Post*.¹⁷⁷
- *Ted Hui:* Notable as one of the aforementioned eight activists, the case of Ted Hui merits further attention as a study in Beijing’s extrajudicial political repression. In February 2023, former Hong Kong lawmaker and prodemocracy activist Ted Hui received a letter from the chief inspector of the Hong Kong Police Force, Peggy Chan, requesting that he return to his home city to comply with a warrant for “incitement to succession” and “collusion with foreign countries.”¹⁷⁸ Inspector Chan told Mr. Hui that he was “advised to return to Hong Kong and surrender to any Police Station with this letter and his identification document... for execution of the said warrant,” according to the *Hong Kong Free Press*.¹⁷⁹ Mr. Hui, who escaped to Australia with the assistance of Danish legislators in March 2021, told the *Hong Kong Free Press* that he had no plans to return to Hong Kong and asserted that there is “nothing wrong for me to advocate Hong Kong’s freedom while I’m overseas.”¹⁸⁰ Prior to fleeing for Australia, Mr. Hui faced multiple criminal charges in November 2020 for protesting within the legislative chamber when he was a lawmaker and at a demonstration in July 2019.¹⁸¹ In May 2022, Mr. Hui was charged for fleeing abroad while on bail, and in September 2022, he was sentenced in absentia to 3.5 years in jail for contempt of court.¹⁸²
- *Hong Kong student living in Japan:* In March 2023, a 23-year-old Hong Kong student studying abroad in Japan was arrested after returning to Hong Kong and charged for allegedly “inciting secession.”¹⁸³ The student made social media posts on Facebook two years prior while studying in Japan, saying that “Hong Kong’s independence is the only way.”¹⁸⁴ She had returned to Hong Kong in order to renew her identification documents, and according to Japanese expert Tomoko Ako, the student was not “particularly political.”¹⁸⁵ *Deutsche Welle* asserted that the case is “the first known arrest of a Hong Konger under the NSL over

activities that took place outside of Hong Kong,” while the *Hong Kong Free Press* noted that numerous Japanese outlets said the case is the first of its kind in Japan.¹⁸⁶

Activism Abroad under the NSL: “Chilling Effect” of Law Pressures Activists into Silence

The “chilling effect” of the NSL is making many Hong Kong dissidents living abroad self-censor due to the risk of punishment from authorities and concern about the safety of their family members still in Hong Kong.¹⁸⁷ According to Sunny Cheung, an exiled Hong Kong activist and nonresident fellow at the Pacific Forum, the number of protesters organizing abroad has declined since the NSL came into effect.¹⁸⁸ Mr. Cheung notes that Hong Kong activists in the United States organized a private summit of around 100 people, where the location and identities of the participants were concealed.¹⁸⁹ Anna Cheung, an organizer for pro-Hong Kong rallies in New York, also stated that fewer people have been attending demonstrations since many Hong Kongers still have a desire to travel back or may have obligations there.¹⁹⁰ In the UK, where approximately 144,000 Hong Kongers now reside, a Hong Kong community organizer said, “We don’t use our real names, we wear masks. We are still scared. In the end we censor ourselves.”¹⁹¹ The founder of a community organization named “Hong Kongers in Britain,” Simon Cheng, stated that his group was aware of at least ten cases where Hong Kongers returned to the city after being pressured by police for participating in “political activities abroad.”¹⁹²

To make matters worse, Hong Kong lawmakers are increasingly emphasizing the importance of using digital tools to crack down on dissent abroad.¹⁹³ For instance, former Hong Kong leader CY Leung said pro-Beijing politicians need to do more in order to quell dissent abroad that spreads “harmful views online.”¹⁹⁴ Additionally, a cybercrime law that was proposed in July 2022 was discussed further during a LegCo meeting in November 2022, where lawmakers in the Law Reform Commission’s Cybercrime Subcommittee said the law needs to have extraterritorial reach in order to be effective.¹⁹⁵ According to Radio Free Asia, the law will apply to data “deemed in breach of that law, which contains broad definitions of subversion, sedition, secessionist and terrorist speech and activity.”¹⁹⁶ In February 2023, Radio Free Asia reported that Hong Kong police have received over 400,000 tips to its national security hotline since the hotline opened in 2020, a figure that former lawmaker Dennis Kwok said is “absolutely incredible,” noting that a few thousand are likely submitted every day.¹⁹⁷ According to Maya Wang, associate director in the Asia division at Human Rights Watch, the hotline “replicat[es] the Chinese Communist party’s model of relying on grassroots informants.”¹⁹⁸ The National Security Department of the Hong Kong Police Force’s website says people can submit tips through the Chinese social media platform WeChat, over email, or via SMS.¹⁹⁹ The hotline accepts audio, videos, photographs, and texts, which contributors can anonymously submit.²⁰⁰ Mr. Hui noted that the hotline accepts reports from informers all over the world, which can “create invisible tensions, threatening those who continue to speak out” due to fears of informants.²⁰¹

Despite the risks associated with speaking out under the NSL, many Hong Kongers have remained resolute in their determination to continue their activism abroad.²⁰² The solidarity of Hong Kongers living abroad was on display during this year's worldwide commemorations honoring the victims of the June 4th Tiananmen Square massacre on its 34th anniversary.²⁰³ Over the last three years, candlelight vigils have been suppressed in Hong Kong due to Beijing's political crackdown and pandemic restrictions.²⁰⁴ According to *CNN*, Hong Kongers participated in overseas commemorations in Australia, Japan, Taiwan, Europe, the United States, and Canada.²⁰⁵ Former Tiananmen Square student activists opened the June 4th Memorial Museum in New York after the September 2021 closure of a similar museum in Hong Kong, which was accused of colluding with foreign forces under the NSL.²⁰⁶ The museum contains newspaper clippings covering the crackdown, souvenirs commemorating the victims, and a section focused on Hong Kong's activism.²⁰⁷

Economics and Trade

Just as it has with Hong Kong's civil society, Beijing's domination of Hong Kong's economic, trade, and financial sectors has intensified, while Hong Kong's economy, stymied by COVID isolation, is compelled to turn to the Mainland for human capital and investment. At the same time, Beijing exploits Hong Kong's unique financial status to access international markets and further its economic ambitions. The Hong Kong business environment increasingly takes on the appearance of any other Chinese city, centered on mainland investment, with its firms having to contend with complex and at times contradictory regulations emanating down from Beijing. Faced with Hong Kong's dwindling international stature and cementing of mainland ties, U.S. firms and other multinationals continue to depart the city. Hong Kongers also depart the city in record numbers despite facing punitive actions from the city's government.

Withheld Pensions for Hong Kong Emigres

To penalize Hong Kongers emigrating under a dual passport following imposition of the NSL, Hong Kong's government is denying access to pensions from the Mandatory Provident Fund (MPF), Hong Kong's pension fund. This fund is managed in part by U.S. financial institutions.²⁰⁸ In principle, when Hong Kong residents permanently depart Hong Kong to live abroad, they are entitled to early withdrawals from the MPF, money that can be used to cover resettlement costs.²⁰⁹ To access the MPF fund, Hong Kongers who have departed to the UK have relied on using their British National Overseas (BNO) passports, presenting them as a key document to demonstrate overseas residency and initiate the withdrawal process.²¹⁰

However, in March 2021, MPF authorities announced that BNO passports could no longer be used as documentation to enable early MPF withdrawal.²¹¹ This change in regulations limits more than 90,000 Hong Kong residents who have emigrated under the BNO passport from having the necessary documentation to make their withdrawal from the MPF.²¹² Based on data from the Hong

Withheld Pensions for Hong Kong Emigres—*Continued*

Kong government, human rights group Hong Kong Watch finds that these individuals are now being denied over \$2.74 billion (HKD 21.5 billion) in MPF pension funds being held by international banks, including by the UK-headquartered Hong Kong Shanghai Banking Corporation (HSBC) and U.S.-headquartered Prudential.²¹³ Overseas banks manage much of the MPF, with HSBC managing over 30 percent of funds.²¹⁴

Multinational banks have been clear in their reasoning for rejecting early pension withdrawal. In letters to departed Hong Kong residents, they point to the changed BNO regulation as a reason for withholding funds.²¹⁵ In response to this changed guidance, a May 2023 letter signed by 90 UK Members of Parliament criticized the actions of the Hong Kong government, describing the derecognition of the BNO as retaliation and stating that the “punitive denial of Hong Kongers to access their savings is curtailing the ability of many to start new lives and to prosper and thrive here in the UK.”²¹⁶

Weaknesses Persist in Hong Kong’s Economy Post-COVID

Although key indicators point to steadying in the Hong Kong economy in 2023, it is lagging behind its pre-pandemic strength. The 2022 real gross domestic product (GDP) of \$360 billion sits 5.2 percent below the 2018 number before protests, crackdowns, and strict COVID lockdowns slowed the economy.²¹⁷ Bloomberg estimates that Hong Kong’s isolation over the last three years bore severe economic costs, causing the city to lose out on \$27 billion in growth.²¹⁸ A major COVID outbreak further hampered the Hong Kong economy in the final quarter of 2022, causing real GDP to contract by 4.2 percent year-on-year in the fourth quarter.²¹⁹ This was the fourth straight quarter the economy contracted and marked 2022 as the second year the city’s GDP contracted in three years.²²⁰ While easing COVID restrictions brought 13 million visitors to Hong Kong in the first half of 2023, that is still about 37 percent of pre-pandemic levels, compared to Macau, which has returned to 70 percent of pre-COVID levels, and Singapore, which hit 67 percent.²²¹ The reopening of the Hong Kong border with mainland China in February 2023 also led to a rebound in Hong Kong’s wages and consumer activity, although the city’s international shipments remain sluggish, with total shipments of goods plummeting by 18.7 percent year-on-year in the first three months of 2023 due to falling demand in mainland China, the United States, and the EU (for more on U.S.-Hong Kong bilateral trade, see Appendix V: U.S.-Hong Kong Bilateral Trade).²²² As of July 2023, Hong Kong’s year-on-year total exports have declined for 15 straight months.²²³ The Mainland, which serves as Hong Kong’s largest trading partner, saw shipments of goods from Hong Kong decrease 15.2 percent year-on-year in July.²²⁴

Hong Kong’s fiscal deficit grew significantly during the pandemic with a budget shortfall for the July 2022–July 2023 fiscal year of \$17.9 billion (HKD 140 billion), more than double original government projections.²²⁵ Despite the deficit, the Department of Finance

continues to try to stimulate demand, including by extending a consumption program of cash vouchers for up to \$637 (HKD 5,000) for Hong Kong residents in 2023.* Hong Kong's Financial Secretary Paul Chan estimated that the city's stimulus programs will add to Hong Kong's \$6.9 billion (HKD 54.4 billion) deficit for the 2023–2024 fiscal year, posing added difficulty to the city's balance sheet, with back-to-back years of sizable deficits.²²⁶

In the medium term, Hong Kong faces expanding private debt, declining demand for Hong Kong-produced electronics, and slow-downs in key export and shipping markets, along with worsening demographic difficulties.²²⁷ The city's shifting demographics are demonstrated by the decline in its working-age population. In 2022, Hong Kong lost 94,000 working-age people, a record since the city began tracking demographics in the mid-1980s.²²⁸ From the end of 2019 through 2022, the city's working-age population has fallen by 220,500, with 2022 alone representing a 2.4 percent year-on-year reduction of the labor force.²²⁹ While the city's aging population is one driver of this demographic decline, the largest proportion to leave Hong Kong's labor force was in the 25–29 age bracket, as young people left the city due to repressive crackdowns and a stagnant economy.²³⁰ Trying to stem these human capital concerns, Hong Kong is drawing ever closer to the Mainland, introducing programs to draw talent from mainland China and adding to Hong Kong's growing economic reliance on mainland talent and capital, a dynamic addressed later in this section.²³¹ As Hong Kong grapples with these persistent economic headwinds, the International Monetary Fund projects Hong Kong's medium-term GDP growth to slow below 3 percent.²³² This is a historically low growth projection for a city counted on by Beijing to be a central driver of its Greater Bay Area strategy.[†]²³³

Rising living costs continue to weigh on working-class Hong Kongers. The cost of transport rose in 2023, with main transport agencies seeking to raise ticket prices by as much as 50 percent and the 125-year-old Star Ferry applying for permission to both cancel free rides for the elderly and double some of its ticket prices.²³⁴ The relaxing of COVID restrictions also revived housing concerns that have long plagued the city, with rents reaching levels not seen since historic highs in 2018.²³⁵ Hong Kong has been the world's least affordable housing market for 13 consecutive years, and the 2023 wait time for public housing was 5.3 years, well beyond the government's pledge to reduce wait times to three years.²³⁶ In its latest bid to ameliorate the housing shortage—an issue Chief Executive Lee has promised to reduce—the city government introduced a \$3.3 billion plan to build about 30,000 temporary public apartments over the next five years.²³⁷ The plan faced protests in already densely populated neighborhoods and was panned by critics for its temporary status, viewed as indicative of the government's inabil-

*All Hong Kong permanent residents will be eligible for the HKD 5,000 stimulus. Those who are not permanent residents but are studying in the city or temporarily working in the city will receive HKD 2,500. Hong Kong's domestic workers will not receive a payout. Hillary Leung, "HKFP Guide: How to Claim Hong Kong's 2023 HK\$5,000 Consumption Vouchers," *Hong Kong Free Press*, March 8, 2023.

†The Greater Bay Area (or GBA) is an initiative to connect 11 cities in Southern China—Hong Kong, Guangzhou, Shenzhen, Macau, and seven other supporting cities—into a single economic hub. Real Instituto Elcano, "The Greater Bay Area: China's 'Next Big Thing,'" July 28, 2022.

ity to provide sufficient permanent housing, particularly for Hong Kong's working class.²³⁸ The housing shortage further threatens to renew decade-long tensions over mainland Chinese property buyers, who many Hong Kongers blame for driving up real estate prices in Hong Kong.²³⁹ The issue may gain new traction as the Hong Kong government seeks to attract more Chinese professionals to the city.

Hong Kong Dollar under Duress

The ability of the Hong Kong Monetary Authority (HKMA) to maintain the HKD peg to the U.S. dollar is under pressure, draining Hong Kong's fiscal capacity. The HKMA holds the exchange rate of the HKD pegged at a range between 7.75 and 7.85 per U.S. dollar.²⁴⁰ The Hong Kong government has maintained the HKD's peg to the U.S. dollar since 1983, a feature that has helped to stabilize local interest rates and the value of the HKD while also maintaining easy convertibility of the HKD. Demonstrating its growing weakness, however, the peg has touched the weak end of its managed value window more than 40 times in the period of May 2022–June 2023.²⁴¹ This is due to an outflow of capital from Hong Kong seeking U.S. dollars as traders move to capitalize on rising U.S. interest rates, which have outpaced Hong Kong banks in interest rate hikes. Amid uncertainty about the future of the HKD, the HKMA has had to purchase HKD aggressively in order to ensure the HKD remains within the currency band, buying nearly \$37 billion (HKD 289 billion) from banks.²⁴² With these fluctuations in the HKD, Hong Kong's aggregate balance,* a key gauge of liquidity in the banking system, has dropped precipitously over the past 12 months and has fallen 90 percent from its peak in 2021.²⁴³ In June 2023, Hong Kong's aggregate balance fell to \$5.7 billion (HKD 44.76 billion), the lowest liquidity level since November 2008, following the global financial crisis.²⁴⁴

The stress on the HKD has raised questions for Hong Kong's financial leaders on the sustainability of the currency being pegged to the U.S. dollar.²⁴⁵ The peg has historically been key to Hong Kong's financial stability and has helped promote the city's role as an international financial center in a region where a large amount of trade and capital transactions are denominated in U.S. dollars.²⁴⁶ While Hong Kong leadership insists on the need to keep the currency pegged to the U.S. dollar, recent volatility has prompted speculation that Beijing may switch to the offshore RMB, or Chinese RMB that circulate outside of the Mainland and that are less subject to mainland exchange rate controls.²⁴⁷ Such a move would harm Hong Kong's financial center status due to the offshore RMB's limited circulation as well as the numerous advantages for international banks and their clients provided by maintaining balance sheets largely denominated in a currency that fluctuates minimally relative to the U.S. dollar.

*The aggregate balance is the sum of balances in clearing accounts and reserve accounts that commercial banks keep with the HKMA for settling interbank payments and payments to the HKMA.

Multinational Firms Weigh Chinese Anti-Sanctions Measures

As Hong Kong falls increasingly under Beijing's rule, financial institutions and multinational firms operating in Hong Kong confront new risks from Beijing's pressure to ignore U.S. sanctions and potential retaliatory measures.²⁴⁸ Since 2020, the United States, with the support of allies and partners, has imposed financial sanctions on individuals involved in implementing the NSL and related crack-downs, including Chief Executive Lee. In spite of the HKMA issuing a statement that the sanctions had "no legal status in Hong Kong," companies have broadly complied, with U.S. social media firms banning Chief Executive Lee from fundraising on their platforms and foreign banks operating in Hong Kong distancing themselves from sanctioned individuals in the territory's senior leadership.²⁴⁹

To formalize a legal tool for retaliating against foreign sanctions and authority to impose sanctions on a wide variety of targets, China's legislature passed the Anti-Foreign Sanctions Law (AFSL) in 2021. Among other provisions, the law targets "persons or organizations that directly or indirectly participate in the drafting, decision-making, or implementation of the discriminatory restrictive measures."²⁵⁰ It also provides that parties impacted by foreign sanctions may sue companies implementing them for associated losses (for more on the law, see Chapter 2, Section 1, "Rule by Law: China's Increasingly Global Legal Reach").²⁵¹ After the law's passage, Hong Kong leadership indicated intent to implement the law in Hong Kong, placing the territory's business community at risk of retaliation for complying with U.S. sanctions associated with the NSL.²⁵² Strong opposition was raised against the law via an extensive lobbying campaign from the city's finance industry, culminating in meetings between Hong Kong executives and then Chinese Vice Premier Liu He in 2021.²⁵³ As of October 2023, the AFSL has not been enforced in Hong Kong.

The NSL itself also creates difficult compliance questions. In abiding by U.S. sanctions, financial institutions in Hong Kong risk being labeled as engaging "in activities such as requesting, conspiring with, receiving instructions etc., from a foreign country" in violation of article 29 of the NSL.²⁵⁴ While no such cases have emerged as of October 2023, with China's continued crackdown on Hong Kong's institutions, lingering questions persist for the dozens of multinational banks that underpin Hong Kong's financial sector.²⁵⁵ These financial institutions have already complied with requests from the Hong Kong police, including freezing the assets of activists and civic organizations. As of July 2023, these banks—including UK-based HSBC—have kept frozen the accounts of individuals and civic associations associated with the Hong Kong protests, including those of former Hong Kong LegCo members.²⁵⁶

Hong Kong Companies Support Russia's War in Ukraine

Hong Kong's standing as an international shipping hub has been exploited to support Russian technology networks. According to a Carnegie Endowment for International Peace report, Hong Kong has taken on the role of a "transshipment hub for diverting Western-made microelectronic components to companies affiliated

Hong Kong Companies Support Russia's War in Ukraine—*Continued*

with the Russian military,” diverting chips to Russia manufactured by top U.S. chipmakers, including Intel, Advanced Micro Devices, and Texas Instruments.²⁵⁷ From 2021 to 2022, exports of U.S. chips from Hong Kong and mainland China to Russia grew to a value of about \$570 million, a tenfold increase.²⁵⁸ By some estimates, between March and December 2022, mainland China and Hong Kong combined accounted for nearly 90 percent of global chip exports to Russia.²⁵⁹ Following this increase, in May 2023 the EU sanctioned several Hong Kong firms—including Sinno Electronics, Sigma Technology, and Asia Pacific Links—for their role as conduits of illicit Russian technology networks.²⁶⁰ Officials from the U.S. Department of the Treasury additionally visited Hong Kong in June 2023, reportedly to warn Hong Kong’s banks and industry groups against aiding transfers of U.S. technology to Russia.²⁶¹

Continuing Charm Offensive on International Business and Travel to Hong Kong

The regional headquarters of U.S. firms in Hong Kong continue to depart for other regional hubs, including Singapore and South Korea. Although the trend of U.S. firms’ regional headquarters departing Hong Kong has existed for the last decade, this drop has become more pronounced since the COVID pandemic and the crackdowns on Hong Kong protestors, with 39.6 percent, or 187 U.S. firms, relocating regional headquarters out of Hong Kong in the last two years.²⁶² While some firms have in the past relocated regional headquarters to the Mainland in order to focus on mainland markets, Singapore is the main beneficiary of relocations out of Hong Kong.²⁶³ This includes the relocation of shipping giant FedEx, which in 2023 announced plans to depart Hong Kong for Singapore.²⁶⁴ Between 2018 and 2022, a time period of democratic protests, crackdowns, and strict COVID measures, Hong Kong only registered an average of 950 companies a year, compared to an annual 18,000 in Singapore.²⁶⁵ Among all firms since June 2019, the number of regional headquarters based in Hong Kong has decreased by 5 percent.²⁶⁶ Crackdowns on business in China also reverberate in Hong Kong. Following a raid on the Beijing offices of due diligence firm Mintz Group, several Hong Kong-based staff reportedly left for Singapore, with no plans to return to Chinese-controlled territory until the probe concludes.²⁶⁷ To offset the outflow of multinational firms, Hong Kong has been creating incentives to attract business, particularly from the Mainland, introducing tax incentives and subsidies in a bid to draw in business professionals. This includes the “Top Talent Pass Scheme,” offering extended visas to those who earn more than \$318,000 (HKD 2.5 million) or have above a bachelor’s degree from a top 100 global university.²⁶⁸ According to Hong Kong Government statistics, 95 percent of applicants admitted to Hong Kong under the Top Talent Pass Scheme were mainland Chinese nationals.²⁶⁹ The introduction of a new multi-entry visa pilot program for skilled professionals in

science, health, and other fields in the Greater Bay Area seeks to further enmesh Hong Kong with the Mainland, allowing for easier access among residents of the neighboring Greater Bay Area to come to Hong Kong to conduct research and attend workshops.²⁷⁰ With these policies meant to draw in mainland workers, the Hong Kong government has fostered a dynamic where foreign business and talent are leaving Hong Kong and Chinese nationals are stepping in to replace them.* This is already bearing results among Hong Kong's labor force, where Chinese nationals comprised two-thirds of applicants approved to work in Hong Kong as of February 2022, including the majority of those joining the financial services, engineering and construction, and higher education sectors.²⁷¹

Hong Kong has also extended a charm offensive to international business interests, easing COVID restrictions at financial conferences such as the Global Leaders Financial Summit (GLFS), held in November 2022 and meant to promote Hong Kong as an investment and business center. The event offered shortened quarantines for attendees flying in to attend the event.²⁷² Attendees were not required to follow the city's indoor masking regulation, and in at least one instance, a positive-testing participant did not complete the standard quarantine procedure for visitors to Hong Kong.²⁷³ In turn, participants at the summit issued statements praising Hong Kong following widespread COVID lockdowns and protests that roiled the city.²⁷⁴

Hong Kong as an Arbitration Center

Hong Kong continues to decline as a center for commercial arbitration, losing out cases to other international legal hubs, a sign of the eroding perception of Hong Kong's legal institutions by the international business community. The right of the Hong Kong National Security Council to overrule arbitration rulings in the city undermines the region's status as the venue of choice for those seeking arbitration, particularly with mainland firms. Provisions in the NSL allow for the Hong Kong National Security Committee to intervene and potentially overturn arbitration proceedings should it deem them an issue of national security.²⁷⁵

Singapore, Hong Kong's regional competitor for commercial arbitrations, continues to outrank Hong Kong as a preferred venue and has steadily outpaced Hong Kong on arbitration cases heard in the city. While Hong Kong once dominated Singapore in terms of case-loads, recent data show the city falling behind, with the Hong Kong International Arbitration Center (HKIAC) last year processing 344 arbitration cases, valued at \$5.5 billion, compared to the Singapore International Arbitration Centre (SIAC) in 2022, which heard 357 cases, valued at \$5.61 billion.²⁷⁶ New case filings in the first quarter of 2023 came to 332 for the SIAC, a record high.²⁷⁷ The HKIAC has yet to provide quarterly figures for 2023.²⁷⁸

*An October 2023 survey by the consulting firm Robert Walters found that 52.3 percent of Hong Kong's working professionals have considered leaving Hong Kong. Among respondents to the survey, 15 percent plan to "leave as soon as possible," while another 36.7 percent are considering leaving Hong Kong in the next three to five years. Among those considering plans to leave Hong Kong, just over half are millennials (aged 27 to 42) and 40 percent of those considering leaving the city said that they had already applied for overseas roles. Irene Chan, "Over Half of Hong Kong Professionals Considering Leaving the City within 5 years, Survey Finds," *Hong Kong Free Press*, October 4, 2023.

Convergence between the Hong Kong and Mainland Economies

Mainland China continues to integrate with Hong Kong's financial institutions. Hong Kong is a key center for personal banking among Chinese nationals. In February 2023, 1.1 million Chinese visitors visited Hong Kong following the easing of COVID restrictions on February 6, and the daily average number of counter transactions at HSBC by mainland customers doubled.²⁷⁹ An HSBC survey indicated that about 60 percent of Mainlanders who planned to visit Hong Kong after the border reopened highlighted personal banking and wealth management services in Hong Kong as their main reason for travel.²⁸⁰

Chinese business continues to consolidate its dominant role in Hong Kong capital markets. Chinese companies account for 78 percent of the market capitalization of the main board of the Hong Kong stock market, while Hong Kong handles as much as 70 percent of all international investment flows into stocks listed in the Mainland.²⁸¹ In a bid to increase international exposure, at least eight mainland-based funds, including billion-dollar equity and mutual funds, have set up operations in Hong Kong in the period of November 2022–April 2023.²⁸² More than ten others have announced plans to flock to the city.²⁸³ Hong Kong leadership has leaned into the deep financial influence that China holds over the city, with Chief Executive Lee in November 2022 describing Hong Kong as “the only place in the world where the global advantage and the China advantage come together in a single city.”²⁸⁴

Hong Kong Data Policies Look Toward the Mainland

Although Hong Kong's business community has undergone close integration with the Mainland, its data management policies have to date not fully adopted the Mainland's restrictive regulations. While the Mainland in recent years has passed strict policies governing cross-border data transfers, Hong Kong still follows the Personal Data Ordinance, introduced under British rule in 1996, which allows broad authority for the processing of personal data collection and relatively low scrutiny of cross-border data flows.²⁸⁵ However, this dynamic is shifting, with the city starting to transition to better align with the data regulations of the Mainland. A new amendment to the ordinance, yet to be enforced as of October 2023, allows for increased restrictions on cross-border data flows in Hong Kong, while further talks between the Hong Kong government and the Cyberspace Administration of China seek to open cross-data flows with the Mainland but restrict Mainland data flows from leaving the city.²⁸⁶ Should Hong Kong adopt these measures, it will further reduce any substantive differences between the regulatory regimes of Hong Kong and that of the broader Greater Bay Area. This move would also add to a recent reduction in public data access in Hong Kong by the city's government. The Hong Kong government cited new personal data regulations in justifying the removal of identifying personal information of executives and employees of newly listed firms from Hong Kong's company registry while allowing currently listed members to have their company information retroactively removed.²⁸⁷ The move inhibits public access of key employment data

at Hong Kong's largest firms and was condemned by activists and journalists as a means to restrict free press coverage of Hong Kong's business sector and reduce transparency.²⁸⁸

While it has yet to be adopted, Hong Kong's plan to shift its data control regime to mimic the Mainland's may also serve to further degrade the city's international business stature. A report by the Information Technology and Innovation Foundation finds that international firms value Hong Kong for its relatively liberal data regime and that Beijing-style restrictions on data flows would reduce foreign investment.²⁸⁹ The report found that the impact of Hong Kong shifting its data regime toward the regressive mainland regime would place onerous costs on businesses, potentially reducing trade volume by 5.7 percent over five years while raising import prices by 1.5 percent.²⁹⁰

Hong Kong and China Continue to Connect Financial Markets

Launched in May 2023, the Hong Kong-China Swap Connect is the fifth platform connecting Hong Kong and mainland financial markets, joining programs for stocks, bonds, exchange-traded funds (ETFs), and wealth management markets, all launched since 2014.²⁹¹ The latest Swap Connect enables overseas investors to participate in China's interest rate swap market and provides northbound access via Hong Kong to the Mainland's interbank financial derivatives market. This gives international investors the ability to trade onshore interest rate swaps,* providing a means to hedge holdings of RMB-denominated assets.†²⁹²

The Swap Connect will act as a counterweight to the Hong Kong-China Bond Connect program, which allowed overseas access to the Chinese bond market and trade in RMB-denominated bonds beginning in 2017. While the Bond Connect was initially designed to draw international investors to Chinese bonds, in 2022 foreign investors sold \$91 billion in RMB bonds, a record trend that continued into the first half of 2023.²⁹³ For more information on Hong Kong's financial connect schemes, see Table 1 below.

Table 1: Hong Kong's Financial Connect Schemes

Name	Description	Launch Year
Shanghai-Hong Kong Stock Connect	Northbound daily quota is \$7.17 billion (RMB 52 billion) and the southbound daily quota is \$5.8 billion (RMB 42 billion). In 2022, the average daily trade value for the northbound leg was \$6.94 billion (RMB 46.5 billion), while southbound it was \$1.95 billion (HKD 15.3 billion).	2014

*In an interest rate swap, parties agree to exchange interest payments, often as a means to hedge against interest rate fluctuations. For example, an investor that purchases a fixed-interest bond could use an interest rate swap to exchange the fixed interest payment for a floating rate that tracks changes in a benchmark reference rate. If the reference rate increases, the investor would potentially profit from the increase. If the reference rate decreases, the investor would potentially take losses from the decrease.

†The Swap Connect currently operates in the "northbound" direction, though a future channel is planned to provide onshore mainland investors access to the derivatives market in Hong Kong. The Stock and Bond Connect programs currently have "southbound" channels that enable mainland investors to trade securities listed on Hong Kong's exchanges. *Bloomberg*, "China Opens New Channel Giving Access to \$3 Trillion Swap Market," May 14, 2023.

Table 1: Hong Kong's Financial Connect Schemes—Continued

Name	Description	Launch Year
Shenzhen-Hong Kong Stock Connect	Quotas are identical to the Shanghai-Hong Kong Stock Connect. In 2022, the value of average daily trade for the northbound leg was \$8.15 billion (RMB 54.6 billion), while southbound it was \$1.94 (HKD 15.2 billion).	2016
Bond Connect	While the northbound connect has no quota, the southbound connect has an annual quota of \$68.96 billion (RMB 500 billion). In the first half of 2023, the northbound average daily turnover was \$5.35 billion (RMB 38.8 billion).	2017 (Northbound), 2021 (Southbound)
Greater Bay Area Wealth Management Connect	Annual quotas of \$20.69 billion (RMB 150 billion) both northbound and southbound.	2021
Exchange-Traded Funds (ETF) Connect	Daily quota operates according to thresholds under the Stock Connect.	2022
Swap Connect	Allows Hong Kong and international investors to participate in the interbank interest rate swap market in the Mainland, with no changes to prior trading and settlement processes for currency swaps.	2023
Greater Bay Area Insurance Connect	The scheme will primarily open up insurance products from Hong Kong and Macau to the more than 80 million people in the Greater Bay Area.	Expected 2023 or 2024

Source: Various.²⁹⁴

The connects join other China-Hong Kong RMB internationalization pushes, such as the HKD-RMB Dual Counter Model announced in June 2023. This program allows Hong Kong investors to buy select stocks, including Tencent and Alibaba, on the Hong Kong Stock Exchange (HKEX) in both HKD and RMB. While the program comprises stocks for about 40 percent of the average daily trading volume on the HKEX, only a small proportion of that trading currently occurs in RMB.²⁹⁵ However, this agreement is indicative of attempts to expand RMB use in HKEX trades and the continued push for the HKEX to more closely integrate with financial markets and firms in mainland China.²⁹⁶

HKEX Serves Mainland Exchanges

The deepening link between Hong Kong and Chinese markets also comes at a time when initial public offerings (IPOs) on the HKEX are being dwarfed by its Chinese counterparts. In 2022, total funds raised for 75 Hong Kong IPOs were \$12.69 billion, a 70.5 percent drop compared to the \$42.96 billion raised in 2021.²⁹⁷ Hong Kong IPOs in the first six months of 2023 continued to lag, with raised funds dropping by 14 percent to \$2.16 billion (HKD 17 billion) compared with \$2.51 billion (HKD 19.7 billion) in the first half of 2022.²⁹⁸ This contrasts with exchanges in the Mainland, with the

Shanghai and Shenzhen Stock Exchanges—which rank third and sixth globally in terms of market capitalization—both ahead of the HKEX.²⁹⁹ Analysts predict that mainland Chinese exchanges will lead the world in IPOs again this year.³⁰⁰

In a new link between Hong Kong and mainland financial markets, the HKEX has been enlisted to boost the profile of the Beijing Stock Exchange (BSE), a small cap board.* To increase the exchange's exposure, a June 2023 memorandum of understanding (MOU) promotes dual listings for firms on both the HKEX and the BSE.³⁰¹ As part of the agreement, the BSE will support the applications of qualifying companies seeking to list on the HKEX and vice versa. The agreement stands to increase the Chinese makeup of the HKEX, as nearly all firms listed on the BSE are small and medium-sized Chinese firms.³⁰² These firms, which are mostly Chinese startups founded in the last decade, will be able to list domestically in the Mainland while simultaneously accessing the larger and more international-facing HKEX. This MOU will further benefit the BSE as it seeks to attract listings from large, tech-heavy firms listed on the HKEX.

Hong Kong Supports RMB Internationalization while Limiting Impact on China's Domestic Financial Markets

Through Hong Kong's unique role as an offshore hub facilitating RMB settlement and investment into and from the Mainland, Beijing can maintain a relatively closed capital account while allowing Chinese entities and foreign businesses in China to engage in a high volume of cross-border transactions denominated in RMB. Hong Kong's status as the largest center of offshore RMB also affords the CCP unique strategic advantages in promoting the RMB's use internationally. Because of Hong Kong's historic legal and financial advantages, many foreign banks prefer to settle payments with Hong Kong-based banking partners and pay a fee for these banks to forward their transfers to mainland accounts rather than make the transfers directly.³⁰³ At the same time, Hong Kong helps Beijing control the RMB exchange rate because it is under China's direct political control and has a financial sector that includes many subsidiaries of mainland banks.

Hong Kong Banks Caught Up in Chinese Property Troubles

The Chinese property sector, which is entering its third year of a slump amid widespread defaults, has borrowed heavily from Hong Kong banks. China's property decline has been a black eye for major Hong Kong banks, including HSBC Holdings, which pointed to mainland real estate exposure when announcing projected credit losses and other impairment charges of \$3.6 billion for 2022, notably high-

*The BSE, launched in 2021, has ramped up IPO listings but has enlisted few large-cap stocks compared to its domestic counterparts in Shanghai and Shenzhen. At the end of 2022, only three companies on the BSE had a market capitalization of more than \$1.49 billion (RMB 10 billion), while the large majority had a market value of less than \$224 million (RMB 1.5 billion). In contrast, the average market value of stocks listed on Shanghai's STAR Market was \$1.85 billion (RMB 12.4 billion) and \$1.43 billion (RMB 9.6 billion) on the ChiNext board. Quanyue and Zhang Ziyu, "Beijing Stock Exchange Fights to Make Its Mark," *Caixin*, December 12, 2022.

er than the \$1.1 billion for the first half of 2022.³⁰⁴ HSBC classified 60 percent, or \$6 billion dollars, of its loans in the Chinese commercial real estate sector as “substandard and credit impaired.”³⁰⁵ A similar outlook faced Hong Kong-based Standard Chartered, as it accounted for \$582 million, or 70 percent, of total credit impairment for 2022 as being caused by commercial real estate exposures in the Mainland.³⁰⁶ Ties between Hong Kong banks and mainland real estate were a focal point for the HKMA as it raised its overall classified loan ratio, or the proportion of loans in danger of default, to 1.38 percent in 2022 from 0.88 percent in 2021.³⁰⁷ With the mounting losses, several Hong Kong banks have moved to “de-risk,” no longer willing to finance China’s lagging property development. HSBC Chief Risk Officer Kathy Cheung said the bank’s mainland property loan exposure had already declined by 26 percent in 2022, roughly equivalent to a reduction of \$2.3 billion (HKD \$18 billion), while officials at Standard Chartered announced they will be “in no particular rush” to increase mainland property exposure going forward.³⁰⁸ This de-risking in the property sector looks to add to general trends of Hong Kong banks reducing exposure to the Mainland as it grapples with domestic economic headwinds.³⁰⁹

Hong Kong Emerges as a Cryptocurrency Testing Ground

Hong Kong has pushed to become a hub for digital assets and a center for cryptocurrency, viewing it as a means to attract both capital and financial firms back to the city.³¹⁰ As the United States tightened regulations and scrutiny of cryptocurrency firms following major cryptocurrency crashes and nearby cities like Singapore seek to rein in retail investment in cryptocurrency, Hong Kong has sought to capitalize, expanding retail investors’ access to trade in digital tokens like Bitcoin and Ether, while the HKMA has reportedly pressured lenders—including HSBC and Standard Chartered—to take on crypto exchanges as clients.³¹¹ Starting in June 2023, cryptocurrency trading platforms and exchanges could apply for a license to operate in the city.³¹² Also in June, LegCo member Johnny Ng took to Twitter, now known as X, to publicly invite U.S.-based cryptocurrency exchange Coinbase to establish operations in Hong Kong, one week after the U.S. Securities and Exchange Commission charged Coinbase with operating in the United States as an unregistered securities exchange.³¹³ The city aims to be a “global hub” for the cryptocurrency sector, according to the chief executive of the HKMA.³¹⁴

Hong Kong’s embrace of cryptocurrency stands in stark contrast with the Mainland, which banned crypto-related transactions in 2021 along with crypto mining.* Beijing appears to quietly back Hong Kong’s cryptocurrency ambitions, however, with representatives from the central government’s Liaison Office attending

*These crackdowns brought crypto mining to a halt in China, with the country accounting for 0 percent of global Bitcoin mining power by June 2021, down from 44 percent in April. Despite the ban, China is still the world’s fourth-largest crypto market and the largest in East Asia. Sarah Dai, “China’s Cryptocurrency Market Still among World’s Strongest despite Beijing’s Crackdown on Trading,” *South China Morning Post*, October 21, 2022; MacKenzie Sigalos, “U.S. Officially the Top Destination for Bitcoin Miners, Beating Out China for the First Time,” *CNBC*, October 13, 2021; Cambridge Bitcoin Electricity Consumption Index, “Bitcoin Mining Map.”

Hong Kong Emerges as a Cryptocurrency Testing Ground—*Continued*

several conferences on cryptocurrency in the city.³¹⁵ *Bloomberg* reports that these representatives are reporting their findings on Hong Kong's digital currency efforts to superiors in the Mainland.³¹⁶ Beijing's tacit support of Hong Kong's cryptocurrency ambitions has led some cryptocurrency executives to speculate that Hong Kong's embrace of cryptocurrency may signal a future easing of restrictive cryptocurrency rules in China.³¹⁷

Implications for the United States

Hong Kong's overseas activist community has grown as more people flee Beijing's attacks on democracy and those opposing its destruction of "one country, two systems." With greater prodemocracy activism taking place abroad, however, China is expanding its security apparatus to conduct stricter enforcement of the NSL beyond the territory's borders. The extraterritorial reach of the NSL means Hong Kongers living abroad, naturalized citizens, and other foreigners who sympathize with Hong Kong may continue to be targeted by the Hong Kong government. While they face harassment and coercion from a distance, their family and friends who remain in Hong Kong or the Mainland face more direct threats. China's extrajudicial activity in this regard may conflict with the laws and statutes of the places where overseas Hong Kongers have chosen to reside, undermining the safety of individuals who come to the United States seeking a safe haven from the CCP's authoritarianism. This situation will be a source of continuing tension between China and the rest of the world as well as between the United States and China.

U.S. businesses, tourists, and students can no longer rely on Hong Kong's legal system or law enforcement for fair, transparent treatment of the rule of law. What was once a vibrant city for international visitors is no longer a reliably safe destination for tourism or commerce and presents the same level of risk to U.S. citizens as visiting the Mainland. U.S. businesses, travelers, and family of those residing in Hong Kong now face more uncertain and potentially unsafe circumstances, challenging their engagements in and visits to the city. More robust enforcement of the NSL has transformed Hong Kong into an environment where teachers, politicians, religious leaders, and others are forced to self-censor, just as they do in the Mainland. This culture of fear runs in tandem with Beijing's installation of mainland loyalists to key positions through which they will oversee NSL implementation, resulting in Beijing's solidification of its control over Hong Kong. The government's politicization of Hong Kong's judicial system has ruined the legitimacy and integrity of the courts by inserting political bias and control into the legal process. The Lee Administration continues revising school curricula and policies to reshape Hong Kong's schools into something more closely mirroring the mainland education system.

Amid this atmosphere, firms operating in Hong Kong's business environment must contend with policies reflective of Beijing's positions. This includes the city's involvement of international banks

when withholding pensions for departed Hong Kongers. International business can no longer rely on Hong Kong courts to mediate commercial legal disputes fairly, and the threat of Beijing-led crack-downs in Hong Kong weighs on the city's status as an international financial hub. Meanwhile, mainland firms have come to dominate Hong Kong's markets, and the city's capital flows have been geared toward serving Beijing's interest. Consequently, it remains unclear how Hong Kong can in any way be treated as separate from mainland China.

Appendix I: Individuals Sanctioned by the United States for Undermining Hong Kong's Autonomy

On August 7, 2020, the U.S. Department of the Treasury sanctioned 11 individuals for undermining Hong Kong's autonomy.³¹⁸

Carrie Lam, Chief Executive, Hong Kong Special Administrative Region (Retired)

Chris Tang, Commissioner of Hong Kong Police Force

Stephen Lo, Former Commissioner of Hong Kong Police Force

John Lee Ka-chiu, Secretary for Security (Currently serving as Chief Executive of Hong Kong)

Teresa Cheng, Secretary for Justice

Erick Tsang, Secretary for Constitutional and Mainland Affairs

Xia Baolong, Director of the Hong Kong and Macau Affairs Office of the State Council

Zhang Xiaoming, Deputy Director of the Hong Kong and Macau Affairs Office of the State Council (Currently serving as the Deputy Secretary General of the Chinese People's Political Consultative Conference)

Luo Huining, Director of the Hong Kong Liaison Office (Currently serving as head of a Central Leading Group on Xi Jinping Thought)

Zheng Yanxiong, Director of the Office for Safeguarding National Security in Hong Kong (Currently serving as Director of the Hong Kong Liaison Office)

Eric Chan, Secretary General of the Committee for Safeguarding National Security of the HKSAR (Currently serving as Chief Secretary for Administration)

Appendix II: The Hong Kong 47³¹⁹

1. Benny Tai, law professor
2. Joshua Wong, student activist
3. Claudia Mo, lawmaker
4. Kwok Ka-ki, lawmaker
5. Wu Chi-wai, lawmaker
6. Raymond Chan, lawmaker
7. Eddie Chu, lawmaker
8. Lam Cheuk-ting, lawmaker
9. Alvin Yeung, lawmaker
10. Au Nok-hin, lawmaker
11. Leung Kwok-hung, lawmaker
12. Andrew Wan, lawmaker
13. Jeremy Tam, lawmaker
14. Helena Wong, lawmaker
15. Andy Chui, elected district official
16. Ben Chung, elected district official
17. Gary Fan, elected district official
18. Clarisse Yeung, elected district official
19. Lawrence Lau, elected district official
20. Jimmy Sham, elected district official
21. Henry Wong, elected district official
22. Kinda Li, elected district official
23. Sam Cheung, elected district official
24. Tiffany Yuen, elected district official
25. Lester Shu, elected district official
26. Andrew Chiu, elected district official
27. Ricky Or, elected district official
28. Roy Tam, elected district official
29. Calvin Ho, elected district official
30. Lee Yue-shun, elected district official
31. Michael Pang, elected district official
32. Cheng Tat-hung, elected district official
33. Sze Tak-loy, elected district official
34. Ng Kin-wai, elected district official
35. Fergus Leung, elected district official
36. Carol Ng, union leader
37. Ventus Lau, politician, union leader
38. Gwyneth Ho, journalist
39. Prince Wong, student leader
40. Nathan Lau Chak-fung, student leader
41. Winnie Yu, nurse, union leader
42. Tam Tak-chi, radio presenter, activist
43. Mike Lam, businessman
44. Gordon Ng, businessman
45. Frankie Fung, founder of online media outlet
46. Hendrick Lui, social worker
47. Owen Chow, student leader, politician

Appendix III: United States Continues to Oppose Beijing's Repression in Hong Kong

In late July 2023, the *Washington Post* reported that the Biden Administration would prohibit Chief Executive Lee from attending the November 2023 summit of Asia-Pacific Economic Cooperation (APEC) leaders in San Francisco. As Hong Kong's then security chief, Lee was sanctioned along with ten other Hong Kong and Chinese officials in 2020 by the Trump Administration for his role in implementing the NSL.

The Biden Administration has continued the Trump Administration's implementation of Executive Order (EO) 13936, the President's Executive Order on Hong Kong Normalization, into July 2024.³²⁰ The EO declares a national emergency pursuant to the International Emergency Economic Powers Act (50 U.S.C. 1701 et seq.) to deal with "the unusual and extraordinary threat to the national security, foreign policy, and economy of the United States constituted by the situation with respect to Hong Kong."³²¹ In accordance with EO 13936, several agencies have continued previous policies in order to respond to the situation in Hong Kong.

U.S. Department of Homeland Security

- On January 26, 2023, the Biden Administration issued a memorandum on Extending and Expanding Eligibility for Deferred Enforced Departure for Certain Hong Kong Residents, which was set to expire on February 5, 2023.³²² The Administration extended the deferment of departure for most* Hong Kong residents for 24 months and directed the secretary of homeland security to "to take appropriate measures to authorize employment for noncitizens whose removal has been deferred" and consider suspending regulatory requirements for F-1 nonimmigrant students who are Hong Kong residents.³²³ The memorandum stated that "offering safe haven for Hong Kong residents who have been deprived of their guaranteed freedoms in Hong Kong furthers United States interests in the region."³²⁴

U.S. Department of State

- In its March 2023 *Hong Kong Policy Act Report*, the State Department asserted that China took "new actions directly threatening U.S. interests in Hong Kong" that were inconsistent with China's obligation pursuant to the Sino-British Joint Declaration of 1984 and the Basic Law, which provided the legal basis for Hong Kong's previously high degree of autonomy.³²⁵ Some

*According to the White House, this rule applies to all Hong Kong residents in the United States with the exception of those "who have voluntarily returned to Hong Kong or the PRC after the date of this memorandum; (2) who have not continuously resided in the United States since the date of this memorandum; (3) who are inadmissible under section 212(a)(3) of the Immigration and Nationality Act (INA) (8 U.S.C. 1182(a)(3)) or deportable under section 237(a)(4) of the INA (8 U.S.C. 1227(a)(4)); (4) who have been convicted of any felony or two or more misdemeanors committed in the United States, or who meet any of the criteria set forth in section 208(b)(2)(A) of the INA (8 U.S.C. 1158(b)(2)(A)); (5) who are subject to extradition; (6) whose presence in the United States the Secretary of Homeland Security has determined is not in the interest of the United States or presents a danger to public safety; or (7) whose presence in the United States the Secretary of State has reasonable grounds to believe would have potentially serious adverse foreign policy consequences for the United States." White House, *Memorandum on Extending and Expanding Eligibility for Deferred Enforced Departure for Certain Hong Kong Residents*, January 26, 2023.

of these actions include Beijing's decision to permit only one candidate to run for Hong Kong chief executive and the National People's Congress Standing Committee's issuance of its first "interpretation" of the NSL in December 2022, which stated that the chief executive and Committee for Safeguarding National Security in Hong Kong can issue legal decisions and legally binding certificates on national security matters without review.³²⁶ The department stated that Chinese and Hong Kong authorities have continued to invoke "national security" on a broad and vague basis to undermine protected rights, freedoms, and the rule of law.³²⁷

- The State Department issued a press statement in early July 2023 condemning the Hong Kong Police Force's "issuance of an international bounty for information leading to the arrest of eight pro-democracy activists who no longer live in Hong Kong."³²⁸ The State Department asserted that the NSL sets a "dangerous precedent" that harms fundamental freedoms and human rights, and it also called on the Hong Kong government to immediately withdraw the bounties.³²⁹

U.S. Department of the Treasury

- In accordance with EO 13936, the Department of the Treasury's Office of Foreign Assets Control continued to impose sanctions of 42 individuals through the Specially Designated Nationals and Blocked Persons List.³³⁰

Appendix IV: International Responses to the Continued Repression in Hong Kong

The United States' allies and partners have issued predominately rhetorical condemnations of Beijing's degradation of Hong Kong's autonomy and human rights situation as well as the CCP's transnational repression of Hong Kong dissidents living abroad.

EU

- On February 17, 2023, the 38th session of the EU-China Human Rights Dialogue was held in Brussels, where the EU addressed China's crackdown on human rights defenders, lawyers, and journalists in Hong Kong and the Mainland.³³¹
- On February 20, 2023, the Council of the EU published a press release outlining the EU's priorities in UN human rights fora for the year, urging the Hong Kong government to "restore the full respect for the rule of law and human rights."³³²
- On June 4, 2023, U.S. and EU consulate offices in Hong Kong lit candles in their windows to commemorate the Tiananmen Square massacre.³³³
- On June 15, 2023, the European Parliament passed a resolution with widespread support calling for the immediate release of *Apple Daily* founder Jimmy Lai and to repeal the NSL.³³⁴ The resolution also renews calls for sanctions on Hong Kong government officials for deteriorating fundamental freedoms.³³⁵

United Kingdom

- Britain published a report in January 2023 calling out Beijing's "systematic erosion of freedoms" in Hong Kong, noting that Chinese authorities are cracking down on free speech, press, and assembly.³³⁶ The report also notes that individuals and civil society groups are censoring themselves, and a majority of the remaining independent news outlets are now closed.³³⁷
- In May 2023, UK Foreign Secretary James Cleverly said that he raised the Jimmy Lai case to Chinese Vice President Han Zheng.³³⁸
- Following the July 2023 issuance of eight bounties placed on Hong Kong dissidents living overseas by the Hong Kong government, Secretary Cleverly stated that the UK "will not tolerate any attempts by China to intimidate and silence individuals in the UK and overseas."³³⁹ Among the eight bounties, Nathan Law, Finn Lau, and Meng Siu-tat reside in the UK.³⁴⁰

Australia

- Australian Foreign Minister Penny Wong stated that she was "deeply disappointed" by the bounties issued to the eight Hong Kong dissidents and articulated that "we have consistently expressed concerns about the broad application of the national security law to arrest or pressure pro-democracy figures and civil society."³⁴¹ Those listed as bounties include Kevin Yam, an Australian citizen and Melbourne-based senior fellow at Georgetown University's Center for Asian Law, and Hong Kong

legislator and prodemocracy leader Ted Hui, who has settled with his family in Adelaide.³⁴²

Japan

- Then Minister of Foreign Affairs Yoshimasa Hayashi and then Minister of Defense Yasukazu Hamada issued a joint statement alongside U.S. Secretary of State Antony Blinken and Secretary of Defense Lloyd Austin for the 2023 U.S.-Japan Security Consultative Committee.³⁴³ In the joint statement, Japan and the United States expressed “serious concerns about the state of Hong Kong’s autonomy and freedoms.”³⁴⁴

G7

- The G7 Hiroshima Leader’s Communiqué, published in May 2023, “call[s] on China to honor its commitments under the Sino-British Joint Declaration and the Basic Law, which enshrine rights, freedoms and a high degree of autonomy for Hong Kong.”³⁴⁵

UN

- In March 2023, the UN Committee on Economic, Social, and Cultural Rights urged Hong Kong to review the NSL in order to “to ensure the full independence of the judiciary” and also advised the abolition of the national security hotline, which the Hong Kong government claims its police force uses to receive “national security offenses related information” from members of the public but in practice has “detrimental effects on the work and expression of civil society, trade unions, teachers and other actors,” according to the committee.³⁴⁶

Appendix V: U.S.-Hong Kong Bilateral Trade

The United States remains Hong Kong's second-largest export market behind mainland China, although China remains Hong Kong's dominant trading partner with a share of 57 percent of total exports, compared to the United States' 6 percent share.³⁴⁷ Total trade in goods between the United States and Hong Kong decreased in 2022, with a marked drop in year-over-year exports from Hong Kong for the last three months of the year as Hong Kong was hampered by trade restrictions due to a major COVID outbreak.³⁴⁸ Bilateral trade between the United States and Hong Kong in 2023 has yet to return to pre-pandemic levels. Hong Kong exports to the United States in the first three months of 2023 totaled 83 percent of 2019 levels during the same period.³⁴⁹

Trade between the United States and Hong Kong rose slightly during the first half of 2022, with the value of total trade from January to June 2023 up 3 percent on the preceding year. Exports from Hong Kong to the United States in that time period are up 6.5 percent from \$12.66 billion to \$13.5 billion.³⁵⁰ Hong Kong also remains an important conduit for merchandise trade between the United States and mainland China. In 2022, around 4.0 percent (\$23.1 billion) of China's exports to the United States and around 6.5 percent (\$11.6 billion) of China's U.S. imports were routed through Hong Kong.³⁵¹

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COMPREHENSIVE LIST OF THE COMMISSION'S RECOMMENDATIONS

Chapter 2: China's Efforts to Subvert Norms and Exploit Open Societies

Section 1: Rule by Law: China's Increasingly Global Legal Reach

The Commission recommends:

1. Congress enact legislation to address politically oppressive lawsuits initiated by the Chinese government or its proxies attempting to silence, intimidate, or impose significant litigation costs on parties for exercising protected rights through political engagement or other public participation. Such legislation would create a procedure providing for expedited consideration of efforts to dismiss such lawsuits and staying expensive discovery proceedings until the court has made a threshold determination on the merits of the lawsuit.
2. Congress pass legislation requiring the Judicial Conference of the United States to prepare an evaluation and guidance for U.S. courts and administrative personnel on the Chinese legal system and body of law for purposes of assisting courts in assessing recognition of Chinese judgments and change of venue, choice of law, and forum non conveniens inquiries.

Section 2: Battling for Overseas Hearts and Minds: China's United Front and Propaganda Work

The Commission recommends:

3. Congress address China's state-sponsored influence and interference in the United States by amending the Higher Education Act of 1965 as follows:
 - To require the U.S. Department of Education to share data on U.S. universities and colleges' foreign gifts and contract disclosures, required under section 117 of the act, with U.S. federal law enforcement, intelligence agencies, and other relevant agencies, including but not limited to the Federal Bureau of Investigation and the Office of the Director of National Intelligence (ODNI). Such information sharing should encompass gifts and contracts extending back at least ten years, or a period of time determined by Congress, as well as all future gifts and contracts as they are disclosed to the department.
 - To direct an interagency review, led by ODNI, to assess the section 117 data to identify risks posed by China- and Hong

Kong-origin money received by U.S. universities and colleges. The interagency findings should be reported to Congress and inform steps, including potential suspension of federal funds, to mitigate risks associated with continued receipt of China-origin money by U.S. universities and colleges.

- To require universities and colleges to include in their section 117 reporting when a foreign gift or contract disclosure has been added retroactively or when a past entry has been revised and to establish penalties for late reporting. Penalties may include loss of federal financial assistance within three consecutive or nonconsecutive years of failing to disclose gifts or contracts above the current threshold of \$250,000.
 - To direct the U.S. Department of Education to evaluate the adequacy of the current reporting threshold of \$250,000 by conducting a study on the average amount of foreign gifts and contracts received or signed by U.S. universities and colleges in a variety of academic disciplines and to determine whether the threshold needs to be adjusted for programs in disciplines that Congress deems critical to U.S. national security. The study should also include an analysis of the amount, focus, and potential impact of China- and Hong Kong-origin gifts and contracts received by U.S. universities and colleges over the last ten years.
4. Congress pass legislation to amend the Foreign Investment Risk Review Modernization Act (FIRRMA) to expand the definition of “covered transaction” to include “research contracts.” Under the expanded definition, the Committee on Foreign Investment in the United States (CFIUS) should have the authority to review investments made by Chinese entities in the U.S. education system in the form of contracts. All parties to the transaction, including the foreign contracting organizations and U.S. institutions, should file a joint declaration to CFIUS ahead of their contract start date. Upon passage of this legislation, reporting requirements under section 117 of the Higher Education Act should be adjusted through regulation to include foreign gifts to U.S. universities and colleges, effectively transferring the administrative authority to receive and oversee the collection of foreign research contract reporting to CFIUS.
 5. Congress amend the Lobbying Disclosure Act to require domestic associations, such as industry or trade associations, who employ an individual registered as a lobbyist to publicly disclose any donations or member contributions from entities based in China and other countries of concern, as well as their U.S. affiliates.
 6. Congress support the establishment of a new entity under the U.S. Agency for Global Media (USAGM) to coordinate and disseminate news content internationally in Chinese, English, and other languages to promote fact-based information on China and counter Chinese Communist Party (CCP) global information manipulation. The entity could facilitate partnerships with

international journalists and media and provide independent content, particularly where Chinese state and state-sponsored entities seek to discredit the United States and the values of liberal democracy and promote false narratives about China. This digital service will:

- Curate and repackage the best of USAGM entities' daily content to provide uncensored China-related news in Mandarin and English for countries around the world where China is making inroads promoting its values and attempting to discredit the United States; and
 - Engage audiences and partners through multiple platforms and multilateral means to promote responsible and fact-based journalism.
7. Congress establish an interagency group, led by the Office of the Director of National Intelligence, to create a public database to assist U.S. companies, universities, and individuals in conducting due diligence on potential business or academic partners in China. The database should enable users to identify how China's military, United Front Work Department, intelligence agencies, and security agencies may be linked to Chinese companies, investment firms and other financial institutions, research institutes, and universities.
 8. Congress direct the U.S. Department of State, in coordination with the U.S. Department of Commerce and U.S. Trade and Development Agency, to prepare a public biennial assessment of the impact of China's lending and other financial practices on Belt and Road Initiative participant countries and to recommend best practices for addressing the impacts of China's activities through U.S. diplomatic and programmatic engagements.
 - The assessment should consider the impact of these practices on corruption and social stability within recipient countries, among other issues.
 - Based on the findings of the report, Congress request the U.S. Department of State, in coordination with the Development Finance Corporation, U.S. Trade and Development Agency, and other relevant agencies, to work with the EU to develop a unified approach to addressing the impact of China's activities under the Belt and Road Initiative in third countries.
 9. Congress should consider legislative restrictions to address the national security and systemic risks raised by Chinese social media applications.
 10. Congress should require the U.S. Department of State to establish as grounds for student visa revocation any instance where a foreign student surveils on behalf of or reports to any foreign-state intelligence, security, law enforcement, or political party authority the civil or political speech of any other student, or threatens to do so. The Department of State shall develop appropriate evidentiary sources and standards for revocation.

Chapter 3: Potential Risks to China's Future Economic Competitiveness

Section 1: China Educating and Training Its Next Generation Workforce

The Commission recommends:

11. Congress request a Government Accountability Office report assessing the reciprocal nature of information sharing, including access to databases, and scientific collaboration between the United States and the People's Republic of China. Such a report shall include information on access by U.S. academics and experts to ongoing research activities, projects, symposia, and other scientific and technology activities in China. It should also assess whether such collaboration and activities provide comparable information and value to that which is available to researchers from China at international conferences and venues or in the United States.

Section 2: Fiscal, Financial, and Debt Problems Weigh Down Beijing's Ambitions

The Commission recommends:

12. To combat tariff evasion by Chinese exporters, Congress amend the procedures for investigating claims of trade remedy laws in the Enforce and Protect Act of 2015 to include merchandise subject to tariffs under the findings of the 2018 Section 301 investigation into China's acts, policies, and practices of related to technology transfer, intellectual property, and innovation.
13. Congress consider legislation establishing a framework for corporate disclosure requirements to provide investors greater transparency into risks from publicly traded companies' exposure to China. Factors encompassed within the framework may include but not be limited to the percentage of companies' total assets in China, their joint ventures with Chinese firms, the amount and nature of research and development they undertake in China, and the influence of any company personnel associated with the Chinese Communist Party in corporate decision-making.
14. The Joint Economic Committee should consider resuming production of an annual unclassified report on the state of the Chinese economy and economic policy decisions of the Chinese Communist Party. The report would analyze open source and classified data and analysis, leveraging expertise from across the U.S. government, including analysts and economists from the relevant agencies of the intelligence community.
15. Congress consider legislation requiring federal financial authorities, including the Federal Reserve, to seek specific information from bank and investment institutions regarding their exposure to, and involvement in, the People's Republic of China. Such information shall include any wealth management products they offer within China and any Chinese investment vehicles they may sell to citizens of the United States directly or indirectly.

Chapter 4: China Seeking Military Influence and Advanced Capabilities

Section 1: China's Relations with Foreign Militaries

The Commission recommends:

16. Congress require the U.S. Department of Defense and the U.S. Department of State to provide to the appropriate committees of Congress within 180 days a classified briefing on China's efforts to educate and train foreign military personnel. The briefing should address how China's programs affect U.S. interests, including: (a) foreign military partners' assessment of the value of China's security assistance and training programs; and (b) whether the scale and offerings of U.S. military education and training programs are sufficient to maintain the United States' status as a preferred partner.
17. Congress require the U.S. Department of Defense (DOD) to submit a report within 180 days that builds upon the restrictions on DOD's contacts with the People's Liberation Army (PLA) outlined in section 1201 of the National Defense Authorization Act for Fiscal Year 2000 by detailing measures DOD is taking to mitigate the risk of the PLA gaining indirect knowledge of U.S. Armed Forces' equipment and operational tactics, techniques, and procedures through interactions with the militaries of U.S. allies and partners. The report should identify any obstacles to ensuring sufficient partner awareness of these risks and to conducting the necessary follow-up and end-use monitoring to ensure compliance.

Section 2: Weapons, Technology, and Export Controls

The Commission recommends:

18. Congress hold hearings to evaluate the potential for establishing a single export licensing system. Such a system would integrate the Commerce Control List, the dual-use technology licensing system managed by the U.S. Department of Commerce's Bureau of Industry and Security, and the U.S. Munitions List, the armaments licensing system managed by the U.S. Department of State's Directorate of Defense Trade Controls. In evaluating a single licensing system, Congress should consider:
 - Whether a single licensing system could improve the enforcement of export controls targeting specific end users, particularly those in jurisdictions with poor transparency into corporate ownership and commercial affiliations, such as China;
 - The potential commercial impact of combining the licensing systems, including how to reduce the compliance burden on industry without compromising national security;
 - Which technologies to include in a combined system and how to integrate appropriate technical expertise to scope evolving controls on dual-use emerging and foundational technologies;
 - Where such a system should be housed within the U.S. government and how to establish effective coordination between different agency stakeholders; and

- How to provide the Department of State and other relevant agencies with appropriate information and authorities to advocate for multilateral export controls that advance U.S. security, foreign policy, and economic competitiveness.
19. Congress provide the Committee on Foreign Investment in the United States (CFIUS) the authority to review investments in U.S. companies that could support foreign acquisition of capabilities to attain technological self-sufficiency or otherwise impair the economic competitiveness of the United States, including:
 - Investments in technology areas prioritized in potential adversaries' industrial policies, such as China's 14th Five-Year Plan, Made in China 2025, and other related initiatives;
 - Investments in U.S. firms that have received funding from the U.S. Departments of Defense, Commerce, Energy, and other U.S. government funding for projects critical to national security and competitiveness; and
 - Other investments that may provide privileged access to expertise, business networks, and production methods critical to maintaining U.S. economic and technological competitiveness.
 20. Congress establish a risk matrix framework to evaluate the national security threat posed by electronic products imported from the People's Republic of China. To eliminate or mitigate risks identified in the threat matrix evaluation, Congress should consider the use of all trade tools, including tariffs.
 21. Congress request an evaluation, to be completed within 180 days by the General Accountability Office, of the effectiveness of recently imposed semiconductor export control regulations in preventing China from either acquiring or developing the capacity to manufacture certain advanced semiconductors. The report should include an assessment of the extent of cooperation received from key allied governments, as well as both U.S. and foreign-based companies, and an evaluation of China's efforts to circumvent these controls or to negate their effectiveness by developing its own indigenous capabilities. This assessment should be prepared for public release but may include a classified annex. The report should be updated annually.

Chapter 5: Changing Relations with Europe, Taiwan, and Hong Kong

Section 1: Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation

The Commission recommends:

22. Congress direct the U.S. Department of Defense to work with European partners to protect the movement of U.S. military equipment, supplies, and personnel from Chinese surveillance via China's National Transportation and Logistics Public Information Platform (LOGINK) and any other logistics platform controlled by, affiliated with, or subject to the jurisdiction of the Chinese Communist Party or the Government of the Peo-

ple's Republic of China or any logistics platform that shares data with such a system. Coordination with European partners should include:

- Identifying ports in NATO countries that currently utilize or intend to utilize LOGINK or similar systems from China or other countries of concern;
 - Assessing the U.S. military's current and past potential exposure to Chinese surveillance via LOGINK or similar systems and the risks to U.S. interests and national security resulting from such exposure;
 - Identifying and assessing the feasibility of adopting alternative shipping routes through ports that do not currently utilize or intend to utilize LOGINK or similar systems, including by identifying any risks to U.S. military programs, activities, and movements that would be created by attempting to avoid exposure to such systems; and
 - Implementing joint measures to mitigate the identified risks of exposure to LOGINK and similar systems in European ports.
23. Congress direct the Administration to engage in discussion with European allies on plans and preparations to impose economic sanctions on China in the event of a confrontation over Taiwan, an escalation in China's support for Russia, or other contingencies. Congress also direct the Administration to consult with Congress on the progress of these discussions.
 24. Congress direct the U.S. Trade and Development Agency, the Development Finance Corporation, and the National Institute of Standards and Technology (NIST) to report on how they are incorporating promotion of U.S.-supported technical standards into U.S.-funded development projects or technical assistance provided abroad.
 25. Congress direct the Administration to establish a secure electric vehicle (EV) and new energy vehicle (NEV) supply chain by considering legislation that would foster U.S.-EU-UK coordination on:
 - Raising or maintaining tariffs on Chinese EV, NEV, and related inputs and technology; and
 - Promoting supply chain diversification and resilience in the EV and NEV markets.

Section 2: Taiwan

The Commission recommends:

26. Congress should direct the U.S. Department of Defense (DOD) to expand the training of Taiwan's military to locations in the United States for the purpose of conducting weapons familiarization with systems that have been ordered by but not yet delivered to Taiwan in order to speed Taiwan's adoption of those systems once delivered. Congress should authorize DOD to station standing observer teams from Taiwan at U.S. train-

ing installations and bases to observe and participate in such training.

27. Congress should pass legislation establishing a joint “center of excellence” operated by the United States and Taiwan to uncover, analyze, and counter China’s disinformation and offensive cyber operations against Taiwan. This center could be modeled on the NATO Cooperative Cyber Defence Centre of Excellence and foster cooperation, capabilities, and information sharing on disinformation and cybersecurity through education, training, and research.
28. Congress direct the U.S. Department of State and relevant agencies to produce an unclassified report examining the expected economic impact of a People’s Liberation Army blockade and/or quarantine of Taiwan. The report should seek to assess the following under each scenario: (1) the impact on global trade and output on timelines up to one year; (2) the top ten sectors that will be most disrupted by a sustained blockade; and (3) the expected impact on the domestic economies of each G7 country from such action.

Section 3: Hong Kong

The Commission recommends:

29. Congress direct the U.S. Department of State to include in the annual report required by the Hong Kong Autonomy Act information on the Hong Kong government’s restriction of émigrés’ access to their financial accounts in the territory, including from the government-run Mandatory Provident Fund (MPF) pension scheme. Based on the findings of the report, the Administration should impose sanctions, as authorized under the 2020 Hong Kong Autonomy Act, on individuals involved in limiting freedom of emigration. Congress may consider further steps to prevent U.S.-based financial institutions involved in managing the funds of Hong Kongers from aiding in violating freedom of emigration by withholding pension funds from their rightful owners at the behest of Hong Kong’s government.
30. Congress amend the Hong Kong Autonomy Act to add to the contents of the required annual report an evaluation of limitations on Hong Kong’s judicial independence. Specifically, the evaluation should assess whether the chief executive or any other body acting on behalf of China’s government has exercised undue influence over the Hong Kong judicial system in ways that violate the right to a fair and independent trial as guaranteed under the Basic Law of Hong Kong. Based on the findings of the report, Congress may impose sanctions, as authorized under the 2020 Hong Kong Autonomy Act, on individuals involved with the Hong Kong judiciary serving in Hong Kong, including foreign national judges that serve on the Hong Kong Court of Final Appeal.

**ADDITIONAL VIEWS OF COMMISSIONERS
CAROLYN BARTHOLOMEW, JAMES MANN, AND
REVA PRICE**

We supported this report and voted in favor of it. We have, however, serious concerns about one of the recommendations and opposed it during the Commission's consideration of possible recommendations for 2023.

Over the years of this Commission, we have worked to ensure that the recommendations are connected to and rooted in the work done by the Commission that year. The recommendation to create a risk matrix for evaluating electronic products from China does not meet that basic standard. Rooted in proposals to ban all mobile-based software applications from China and to impose a 25% tariff on all chip-enabled electronic devices imported from China or from Chinese entities, this recommendation is a first step in far-reaching ideas with unknown consequences for American consumers. Commissioners had a lengthy discussion about this recommendation during our consideration of what to recommend to Congress this year. The more we discussed it, the more questions some of us had. Given that the Commission had spent no time on the idea throughout our hearings and research agenda, it was unclear to us what a risk matrix framework would be, what it would measure, and how it would be implemented, let alone what steps might be taken afterward, including tariffs. Indeed, the Commission has laid plans to explore these issues in a hearing early in 2024, but the recommendation we question is being rushed forward in advance of any such hearing.

A hallmark of the Commission's work, year in and year out, is our bipartisanship. We have been able to come to agreement in tumultuous times and in spite of the many conflicting partisan currents swirling around us. That success is based on our willingness and our work to come to consensus on what we recommend, not always an easy task. In rare occasions, the Commission has moved forward with a recommendation that is opposed by some of us. This is one of those occasions. We hope that the inclusion of this recommendation is not a sign that the Commission's ethos has fundamentally changed.

ADDITIONAL VIEWS OF COMMISSIONER ROBIN CLEVELAND

For most of the last twenty years, the Commission has succeeded in developing a strong, bipartisan consensus in policy recommendations to Congress on U.S.-China relations. Regrettably, this year stands as an exception which is especially troubling given China's clear support for the aggressors in wars against our strategic allies, Ukraine and Israel.

This year, one of the Commission's top ten recommendations is a sweeping, yet vague, proposal compelling any publicly traded American company to be forced to disclose investments, total assets, joint ventures and research collaboration with Chinese companies or entities. It is unclear what the Commission is suggesting in who must disclose, how, to whom or why. A business importing plastic flowers for an arts and crafts store appears to be as much the target as the titans of global finance.

Over the years, I have strongly supported well-crafted recommendations to close legal loopholes and address double standards Chinese companies have taken advantage of when raising money on U.S. exchanges. Similarly, I have co-chaired hearings and supported investigations highlighting steps the U.S. could take to protect consumers from risks related to imports of agricultural, pharmaceutical, and other products which are toxic, hazardous or rely on forced labor. In each instance, the purpose of a recommendation was clearly defined as was the Commission's commitment to regulatory fairness, transparency, and protection of the health, well-being and savings of American citizens. The evidence of the strength of these bipartisan recommendations has been legislative action by Congress and successive Administrations.

A recommendation to strengthen rules, regulations and law to restrict investment by U.S. companies in support of the military ambitions of our adversary would serve our national and economic security interests. The current recommendation undermines free market principles and is inexplicable in relevance to the work of important government regulatory and oversight institutions. The recommendation distracts from the long-standing focus of our work to address: (1) risks related to illegal, dangerous, and covert Chinese theft, acquisition, ownership or investment in companies, land, technology and intellectual property critical to U.S. and allied economic growth and security; and (2) threats related to the Chinese Communist Party's aggressive, global political and military campaign to expand authoritarianism at the expense of democracy.

The long-term solution to the serious and multiple threats posed by the Chinese Communist Party does not lie in bending or breaking free market principles. Imitating the Chinese Communist Party's opaque policies and practices of compulsory disclosure will suppress competition, trade and American opportunity.

APPENDIX I

CHARTER

The Commission was created on October 30, 2000, by the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001, Pub. L. No. 106–398 (codified at 22 U.S.C. § 7002), as amended by:

- The Treasury and General Government Appropriations Act, 2002, Pub. L. No. 107–67 (Nov. 12, 2001) (regarding employment status of staff and changing annual report due date from March to June);
- The Consolidated Appropriations Resolution, 2003, Pub. L. No. 108–7 (Feb. 20, 2003) (regarding Commission name change, terms of Commissioners, and responsibilities of the Commission);
- The Science, State, Justice, Commerce, and Related Agencies Appropriations Act, 2006, Pub. L. No. 109–108 (Nov. 22, 2005) (regarding responsibilities of the Commission and applicability of FACA);
- The Consolidated Appropriations Act, 2008, Pub. L. No. 110–161 (Dec. 26, 2007) (regarding submission of accounting reports, printing and binding, compensation for the executive director, changing annual report due date from June to December, and travel by members of the Commission and its staff);
- The Carl Levin and Howard P. “Buck” McKeon National Defense Authorization Act for Fiscal Year 2015, Pub. L. No. 113–291 (Dec. 19, 2014) (regarding responsibilities of the Commission).

22 U.S.C. § 7002. United States-China Economic and Security Review Commission

(a) Purposes

The purposes of this section are as follows:

(1) To establish the United States-China Economic and Security Review Commission to review the national security implications of trade and economic ties between the United States and the People’s Republic of China.

(2) To facilitate the assumption by the United States-China Economic and Security Review Commission of its duties regarding the review referred to in paragraph (1) by providing for the transfer to that Commission of staff, materials, and infrastructure (including leased premises) of the Trade Deficit Review Commission that are appropriate for the review upon the submittal of the final report of the Trade Deficit Review Commission.

(b) Establishment of United States-China Economic and Security Review Commission

(1) In general

There is hereby established a commission to be known as the United States-China Economic and Security Review Commission (in this section referred to as the “Commission”).

(2) Purpose

The purpose of the Commission is to monitor, investigate, and report to Congress on the national security implications of the bilateral trade and economic relationship between the United States and the People’s Republic of China.

(3) Membership

The Commission shall be composed of 12 members, who shall be appointed in the same manner provided for the appointment of members of the Trade Deficit Review Commission under section 127(c)(3) of the Trade Deficit Review Commission Act (19 U.S.C. 2213 note), except that—

(A) appointment of members by the Speaker of the House of Representatives shall be made after consultation with the chairman of the Committee on Armed Services of the House of Representatives, in addition to consultation with the chairman of the Committee on Ways and Means of the House of Representatives provided for under clause (iii) of subparagraph (A) of that section;

(B) appointment of members by the President pro tempore of the Senate upon the recommendation of the majority leader of the Senate shall be made after consultation with the chairman of the Committee on Armed Services of the Senate, in addition to consultation with the chairman of the Committee on Finance of the Senate provided for under clause (i) of that subparagraph;

(C) appointment of members by the President pro tempore of the Senate upon the recommendation of the minority leader of the Senate shall be made after consultation with the ranking minority member of the Committee on Armed Services of the Senate, in addition to consultation with the ranking minority member of the Committee on Finance of the Senate provided for under clause (ii) of that subparagraph;

(D) appointment of members by the minority leader of the House of Representatives shall be made after consultation with the ranking minority member of the Committee on Armed Services of the House of Representatives, in addition to consultation with the ranking minority member of the Committee on Ways and Means of the House of Representatives provided for under clause (iv) of that subparagraph;

(E) persons appointed to the Commission shall have expertise in national security matters and United States-China relations, in addition to the expertise provided for under subparagraph (B)(i)(I) of that section;

(F) each appointing authority referred to under subparagraphs (A) through (D) of this paragraph shall—

(i) appoint 3 members to the Commission;

(ii) make the appointments on a staggered term basis, such that—

(I) 1 appointment shall be for a term expiring on December 31, 2003;

(II) 1 appointment shall be for a term expiring on December 31, 2004; and

(III) 1 appointment shall be for a term expiring on December 31, 2005;

(iii) make all subsequent appointments on an approximate 2-year term basis to expire on December 31 of the applicable year; and

(iv) make appointments not later than 30 days after the date on which each new Congress convenes;

(G) members of the Commission may be reappointed for additional terms of service as members of the Commission; and

(H) members of the Trade Deficit Review Commission as of October 30, 2000, shall serve as members of the Commission until such time as members are first appointed to the Commission under this paragraph.

(4) Retention of support

The Commission shall retain and make use of such staff, materials, and infrastructure (including leased premises) of the Trade Deficit Review Commission as the Commission determines, in the judgment of the members of the Commission, are required to facilitate the ready commencement of activities of the Commission under subsection (c) or to carry out such activities after the commencement of such activities.

(5) Chairman and Vice Chairman

The members of the Commission shall select a Chairman and Vice Chairman of the Commission from among the members of the Commission.

(6) Meetings

(A) Meetings

The Commission shall meet at the call of the Chairman of the Commission.

(B) Quorum

A majority of the members of the Commission shall constitute a quorum for the transaction of business of the Commission.

(7) Voting

Each member of the Commission shall be entitled to one vote, which shall be equal to the vote of every other member of the Commission.

(c) Duties

(1) Annual report

Not later than December 1 each year (beginning in 2002), the Commission shall submit to Congress a report, in both unclassified and classified form, regarding the national security implications and impact of the bilateral trade and economic relationship between the United States and the People's Republic of China. The report shall include a full analysis, along with conclusions and recommendations for legislative and administrative actions, if any, of the national security implications for the United States of the trade and current balances with the People's Republic of China in goods and services, financial transactions, and technology transfers. The Commission shall also take into account patterns of trade and transfers through third countries to the extent practicable.

(2) Contents of report

Each report under paragraph (1) shall include, at a minimum, a full discussion of the following:

(A) The role of the People's Republic of China in the proliferation of weapons of mass destruction and other weapon systems (including systems and technologies of a dual use nature), including actions the United States might take to encourage the People's Republic of China to cease such practices.

(B) The qualitative and quantitative nature of the transfer of United States production activities to the People's Republic of China, including the relocation of manufacturing, advanced technology and intellectual property, and research and development facilities, the impact of such transfers on the national security of the United States (including the dependence of the national security industrial base of the United States on imports from China), the economic security of the United States, and employment in the United States, and the adequacy of United States export control laws in relation to the People's Republic of China.

(C) The effects of the need for energy and natural resources in the People's Republic of China on the foreign and military policies of the People's Republic of China, the impact of the large and growing economy of the People's Republic of China on world energy and natural resource supplies, prices, and the environment, and the role the United States can play (including through joint research and development efforts and technological assistance) in influencing the energy and natural resource policies of the People's Republic of China.

(D) Foreign investment by the United States in the People's Republic of China and by the People's Republic of China in the United States, including an assessment of its economic and security implications, the challenges to market access confronting potential United States investment in the People's Republic of China, and foreign activities by financial institutions in the People's Republic of China.

(E) The military plans, strategy and doctrine of the People's Republic of China, the structure and organization of the People's Republic of China military, the decision-making process of the People's Republic of China military, the interaction between the civilian and military leadership in the People's Republic of China, the development and promotion process for leaders in the People's Republic of China military, deployments of the People's Republic of China military, resources available to the People's Republic of China military (including the development and execution of budgets and the allocation of funds), force modernization objectives and trends for the People's Republic of China military, and the implications of such objectives and trends for the national security of the United States.

(F) The strategic economic and security implications of the cyber capabilities and operations of the People's Republic of China.

(G) The national budget, fiscal policy, monetary policy, capital controls, and currency management practices of the People's Republic of China, their impact on internal stability in the People's Republic of China, and their implications for the United States.

(H) The drivers, nature, and implications of the growing economic, technological, political, cultural, people-to-people, and security relations of the People's Republic of China's with other countries, regions, and international and regional entities (including multilateral organizations), including the relationship among the United States, Taiwan, and the People's Republic of China.

(I) The compliance of the People's Republic of China with its commitments to the World Trade Organization, other multilateral commitments, bilateral agreements signed with the United States, commitments made to bilateral science and technology programs, and any other commitments and agreements strategic to the United States (including agreements on intellectual property rights and prison labor imports), and United States enforcement policies with respect to such agreements.

(J) The implications of restrictions on speech and access to information in the People's Republic of China for its relations with the United States in economic and security policy, as well as any potential impact of media control by the People's Republic of China on United States economic interests.

(K) The safety of food, drug, and other products imported from China, the measures used by the People's Republic of China Government and the United States Government to monitor and enforce product safety, and the role the United States can play (including through technical assistance) to improve product safety in the People's Republic of China.

(3) Recommendations of report

Each report under paragraph (1) shall also include recommendations for action by Congress or the President, or both, including specific recommendations for the United States to invoke Article XXI (relating to security exceptions) of the General Agreement on Tariffs and Trade 1994 with respect to the People's Republic of China, as a result of any adverse impact on the national security interests of the United States.

(d) Hearings

(1) In general

The Commission or, at its direction, any panel or member of the Commission, may for the purpose of carrying out the provisions of this section, hold hearings, sit and act at times and places, take testimony, receive evidence, and administer oaths to the extent that the Commission or any panel or member considers advisable.

(2) Information

The Commission may secure directly from the Department of Defense, the Central Intelligence Agency, and any other Federal department or agency information that the Commission considers necessary to enable the Commission to carry out its duties under this section, except the provision of intelligence information to the Commission shall be made with due regard for the protection from unauthorized disclosure of classified information relating to sensitive intelligence sources and methods or other exceptionally sensitive matters, under procedures approved by the Director of Central Intelligence.

(3) Security

The Office of Senate Security shall—

(A) provide classified storage and meeting and hearing spaces, when necessary, for the Commission; and

(B) assist members and staff of the Commission in obtaining security clearances.

(4) Security clearances

All members of the Commission and appropriate staff shall be sworn and hold appropriate security clearances.

(e) Commission personnel matters

(1) Compensation of members

Members of the Commission shall be compensated in the same manner provided for the compensation of members of the Trade Deficit Review Commission under section 127(g)(1) and section 127(g)(6) of the Trade Deficit Review Commission Act (19 U.S.C. 2213 note).

(2) Travel expenses

Travel expenses of the Commission shall be allowed in the same manner provided for the allowance of the travel expenses of the Trade Deficit Review Commission under section 127(g)(2) of the Trade Deficit Review Commission Act.

(3) Staff

An executive director and other additional personnel for the Commission shall be appointed, compensated, and terminated in the same manner provided for the appointment, compensation, and termination of the executive director and other personnel of the Trade Deficit Review Commission under section 127(g)(3) and section 127(g)(6) of the Trade Deficit Review Commission Act. The executive director and any personnel who are employees of the United States-China Economic and Security Review Commission shall be employees under section 2105 of title 5 for purposes of chapters 63, 81, 83, 84, 85, 87, 89, and 90 of that title. [Amended by P.L. 111–117 to apply section 308(e) of the United States China Relations Act of 2000 (22 U.S.C. 6918(e)) (relating to the treatment of employees as Congressional employees) to the Commission in the same manner as such section applies to the Congressional-Executive Commission on the People's Republic of China.]

(4) Detail of government employees

Federal Government employees may be detailed to the Commission in the same manner provided for the detail of Federal Government employees to the Trade Deficit Review Commission under section 127(g)(4) of the Trade Deficit Review Commission Act.

(5) Foreign travel for official purposes

Foreign travel for official purposes by members and staff of the Commission may be authorized by either the Chairman or the Vice Chairman of the Commission.

(6) Procurement of temporary and intermittent services

The Chairman of the Commission may procure temporary and intermittent services for the Commission in the same manner provided for the procurement of temporary and intermittent services for the Trade Deficit Review Commission under section 127(g)(5) of the Trade Deficit Review Commission Act.

(f) Authorization of appropriations

(1) In general

There is authorized to be appropriated to the Commission for fiscal year 2001, and for each fiscal year thereafter, such sums as may be necessary to enable the Commission to carry out its functions under this section.

(2) Availability

Amounts appropriated to the Commission shall remain available until expended.

(g) Applicability of FACA

The provisions of the Federal Advisory Committee Act (5 U.S.C. App.) shall apply to the activities of the Commission.

(h) Effective date

This section shall take effect on the first day of the 107th Congress.

(Pub. L. 106–398, § 1 [[div. A], title XII, § 1238], Oct. 30, 2000, 114 Stat. 1654 , 1654A–334; Pub. L. 107–67, title VI, §§ 645(a), 648, Nov. 12, 2001, 115 Stat. 556; Pub. L. 108–7, div. P, § 2(b)(1), (c)(1), Feb. 20, 2003, 117 Stat. 552; Pub. L. 109–108, title VI, § 635(b), Nov. 22, 2005, 119 Stat. 2347; Pub. L. 110–161, div. J, title I, Dec. 26, 2007, 121 Stat. 2285; Pub. L. 113–291, div. A, title XII, § 1259B(a), Dec. 19, 2014, 128 Stat. 3578.)

Amendments

2014—Subsec. (c)(2). Pub. L. 113–291 added subpars. (A) to (K) and struck out former subpars. (A) to (J) which described required contents of report.

2007—Subsec. (c)(1). Pub. L. 110–161 substituted “December” for “June”.

2005—Subsec. (g). Pub. L. 109–108 amended heading and text of subsec. (g) generally. Prior to amendment, text read as follows: “The provisions of the Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the Commission.”

2003—Pub. L. 108–7, § 2(b)(1)(A), inserted “Economic and” before “Security” in section catchline.

Subsec. (a)(1), (2). Pub. L. 108–7, § 2(b)(1)(B), inserted “Economic and” before “Security”.

Subsec. (b). Pub. L. 108–7, § 2(b)(1)(C)(i), inserted “Economic and” before “Security” in heading.

Subsec. (b)(1). Pub. L. 108–7, § 2(b)(1)(C)(ii), inserted “Economic and” before “Security”.

Subsec. (b)(3). Pub. L. 108–7, § 2(b)(1)(C)(iii)(I), which directed the amendment of introductory provisions by inserting “Economic and” before “Security”, could not be executed because “Security” does not appear.

Subsec. (b)(3)(F). Pub. L. 108–7, § 2(c)(1), added subpar. (F) and struck out former subpar. (F) which read as follows: “members shall be appointed to the Commission not later than 30 days after the date on which each new Congress convenes;”.

Subsec. (b)(3)(H), (4), (e)(1), (2). Pub. L. 108–7, § 2(b)(1)(C)(iii)(II), (iv), (D)(i), (ii), which directed insertion of “Economic and” before “Security”, could not be executed because “Security” does not appear.

Subsec. (e)(3). Pub. L. 108–7, § 2(b)(1)(D)(iii)(II), inserted “Economic and” before “Security” in second sentence.

Pub. L. 108–7, § 2(b)(1)(D)(iii)(I), which directed the amendment of first sentence by inserting “Economic and” before “Security”, could not be executed because “Security” does not appear.

Subsec. (e)(4), (6). Pub. L. 108-7, §2(b)(1)(D)(iv), (v), which directed the amendment of pars. (4) and (6) by inserting “Economic and” before “Security”, could not be executed because “Security” does not appear.

2001—Subsec. (c)(1). Pub. L. 107-67, §648, substituted “June” for “March”.

Subsec. (e)(3). Pub. L. 107-67, §645(a), inserted at end “The executive director and any personnel who are employees of the United States-China Security Review Commission shall be employees under section 2105 of title 5 for purposes of chapters 63, 81, 83, 84, 85, 87, 89, and 90 of that title.”

APPENDIX II

BACKGROUND OF COMMISSIONERS

Carolyn Bartholomew, Chairman

Chairman Carolyn Bartholomew was reappointed to the Commission by then House Speaker Nancy Pelosi for a term expiring December 31, 2023. She previously served as the Commission's Chairman for five report cycles and served as Vice Chairman for six report cycles.

Chairman Bartholomew has worked at senior levels in the U.S. Congress, serving as a long-time counsel, legislative director, and chief of staff to then House Speaker Nancy Pelosi. She was a professional staff member on the House Permanent Select Committee on Intelligence and also served as a legislative assistant to then U.S. Representative Bill Richardson.

In these positions, Chairman Bartholomew was integrally involved in developing U.S. policies on international affairs and security matters. She has particular expertise in U.S.-China relations, including issues related to trade, human rights, and the proliferation of weapons of mass destruction. Chairman Bartholomew led efforts in the establishment and funding of global AIDS programs and the promotion of human rights and democratization in countries around the world. She was a member of the first Presidential Delegation to Africa to Investigate the Impact of HIV/AIDS on Children and a member of the Council on Foreign Relations' Congressional Staff Roundtable on Asian Political and Security Issues.

In addition to U.S.-China relations, her areas of expertise include terrorism, trade, human rights, U.S. foreign assistance programs, appropriations, and international environmental issues. She has been a consultant to non-profit organizations and served on the board of directors of the Kaiser Aluminum Corporation from 2007 to 2020. She is the Chairman of the board of Radio Free Asia (RFA) and serves on the board of the Committee for Freedom in Hong Kong.

Chairman Bartholomew received a Bachelor of Arts degree from the University of Minnesota, a Master of Arts in Anthropology from Duke University, and a Juris Doctorate from Georgetown University Law Center. She is a member of the State Bar of California.

Alex N. Wong, Vice Chairman

Vice Chairman Alex Wong is a senior fellow at The Hudson Institute. His research spans U.S. national security policy and foreign affairs, with a particular focus on U.S. strategy in the Indo-Pacific region and the future of the Korean Peninsula.

Mr. Wong most recently served as the Deputy Special Representative for North Korea and the Deputy Assistant Secretary for North Korea at the U.S. Department of State. In that position, he was the

No. 2 negotiator in denuclearization talks with North Korea and guided the U.S.-led international pressure campaign.

Previously, Mr. Wong led the State Department's efforts to implement the Free and Open Indo-Pacific Strategy as the Deputy Assistant Secretary for Regional and Security Affairs in the State Department's East Asia bureau. In 2020, Mr. Wong was unanimously approved by the Senate Foreign Relations Committee to be the U.S. Ambassador for Special Political Affairs at the United Nations, a position in which he would have represented the United States on all matters before the UN Security Council.

Prior to his most recent stint at the State Department, Mr. Wong was the Foreign Policy Advisor and General Counsel to Senator Tom Cotton (R-AR) and the Foreign and Legal Policy Director for the Romney-Ryan 2012 presidential campaign.

Mr. Wong is a licensed attorney, spent years counseling Fortune 100 clients on international trade and governmental investigations matters, and began his legal career as a clerk for the honorable Janice Rogers Brown of the United States Court of Appeals for the District of Columbia Circuit.

Mr. Wong graduated *summa cum laude* from the University of Pennsylvania and received his J.D. with high honors from Harvard Law School where he was the Managing Editor of the Harvard Law Review and an editor of the Harvard International Law Journal.

Vice Chairman Wong was reappointed to the Commission by then House Republican Leader Kevin McCarthy for a term expiring December 31, 2023.

Robert I. Borochoff

Commissioner Robert I. Borochoff was reappointed to the Commission by then House Republican Leader Kevin McCarthy for a term expiring December 31, 2023. He is a successful lifetime entrepreneur and civic leader with a long record of achievement in business, public policy promotion, community leadership, and philanthropy. He has over four decades of service to the business community, public endeavors, and government at the local, state, and federal level.

Bob Borochoff has been an established leader in the food and beverage industry for the past 42 years. His restaurants, special events, and catering ventures have been called upon by numerous groups and individuals including international corporations and three U.S. presidents. He began his hospitality career as a teen in California. In 1984, he formed his own company and first restaurant. By 1990, the company grew to provide event management, entertainment, and production, and began providing services for concerts, festivals, corporate events, trade shows, and conferences, while simultaneously owning successful restaurants. As a successful entrepreneur, Borochoff has also invested in real estate, an entertainment amphitheater, and numerous other businesses.

Borochoff currently serves as President and CEO of The Borochoff Group, Inc. which he formed in 2003 as a vehicle to purchase restaurants and businesses for investment and growth. In March 2006, The Borochoff Group bought the iconic restaurant chain Café Adobe, founded in 1981.

His efforts to give back to the restaurant industry are extensive and he has served in many leadership roles. He is an emeritus member of the Board of the National Restaurant Association serving since 1988, a member of the Greater Houston Restaurant Association since 1980, where he was twice President and twice honored at “Restaurateur of the Year,” and a longtime Board Member of the Texas Restaurant Association beginning in 1983.

Borochoff currently serves as a Commissioner of the Texas Finance Commission, which regulates the financial services industry in Texas. He was appointed by Texas Governor Greg Abbott and is now serving his second six-year term. He is a member of the Board of Directors of the Greater Houston Partnership (one of the largest Chambers of Commerce in the nation), serving ten years on its Executive Committee and Public Policy Steering Committee. Borochoff previously served ten years as Vice Chairman of the Board of Trustees for the Harris Center for Mental Health and IDD. He is an Advisory Board Member of the Archer Center at The University of Texas.

Borochoff is the recipient of numerous awards and honors. He was named the “Humanitarian of the Year” in 2015 by the AJC. In 2018, Borochoff was presented with the “Chairman’s Award” from the National Restaurant Association, the only restaurateur to receive the honor that year.

Calling Houston his home since 1974, Bob is married to his wife, Jane. He is a proud father to his son, Bradley, and his adult married twins, Blaire and Brent. Bob and Jane are the proud grandparents of Lyla, Katarina, and Judah.

Robin Cleveland, PhD

Commissioner Robin Cleveland was reappointed to the Commission by Senate Republican Leader Mitch McConnell for a term expiring December 31, 2024.

Commissioner Cleveland served in a number of positions with U.S. Senator Mitch McConnell including in his personal office, on the Senate Select Committee on Intelligence, the Senate Foreign Relations Committee, and as Clerk of the Foreign Operations Subcommittee of the Senate Appropriations Committee. In 2002, Dr. Cleveland was appointed as the Associate Director for National Security and International Affairs in the Office of Management and Budget, Executive Office of the President. During her tenure in the White House, Dr. Cleveland worked to improve Department of Defense programs and processes to ensure weapons systems successfully met battlefield requirements. Dr. Cleveland also co-lead the inter-agency effort to develop and implement two Presidential initiatives: the Millennium Challenge Corporation (MCC) and the President’s Emergency Plan for AIDS Relief (PEPFAR). MCC and PEPFAR reflect her commitment to advance humanitarian and development goals while strengthening policy, performance, and resource management. In 2005, Dr. Cleveland was appointed as Counselor to the President of the World Bank where she had a broad policy, budget, and fund-raising portfolio including debt relief programs in Africa.

After three decades of government service, Cleveland received her PhD in Counseling and is now in private practice. While pursuing her degree, Dr. Cleveland was the Executive Director of the Office

of Student Life at the Graduate School of Education and Human Development at The George Washington University.

Commissioner Cleveland graduated from Wesleyan University with honors and received her Masters and PhD in Counseling from The George Washington University.

Aaron Friedberg

Aaron Friedberg is Professor of Politics and International Affairs at Princeton University, where he has been a member of the faculty since 1987, and is co-director of Princeton's Center for International Security Studies. He is also a non-resident senior fellow at the American Enterprise Institute and a counselor to the National Bureau of Asian Research. From 2003 to 2005 he served as a Deputy Assistant for National Security Affairs in the office of the Vice President and he was subsequently appointed to the Defense Policy Board. In 2000–2001 he was a member of a panel tasked by Congress with reviewing the CIA's analysis of China. He has conducted studies for a number of government agencies, including the Office of Net Assessment in the Office of the Secretary of Defense and the National Security Council.

In 2001–2002 Friedberg was selected as the first occupant of the Henry A. Kissinger Chair at the Library of Congress. He has been a research fellow at the Australian Strategic Policy Institute, the Norwegian Nobel Institute, the Smithsonian Institution's Woodrow Wilson International Center for Scholars in Washington, D.C., and Harvard University's Center for International Affairs. He is a member of the Council on Foreign Relations and the International Institute for Strategic Studies in London.

Friedberg is the author of several books, including *A Contest for Supremacy: China, America, and the Struggle for Mastery in Asia* (2011), *Beyond Air-Sea Battle: The Debate Over U.S. Military Strategy in Asia* (2014), and *Getting China Wrong* (2022).

Dr. Friedberg received his A.B., M.A., and Ph.D. degrees from Harvard University.

Commissioner Friedberg was appointed by Senate Republican Leader Mitch McConnell for a term expiring December 31, 2023.

Kimberly T. Glas

Commissioner Kimberly Glas was reappointed by Senate Majority Leader Charles Schumer for a term expiring December 31, 2024. She served as Vice Chair of the Commission for the 2022 report cycle.

Commissioner Glas joined the National Council of Textile Organizations (NCTO) in May 2019 as President and CEO representing domestic manufacturers of textiles and apparel.

She has over two decades experience in government and policy advocacy focused on economics, trade, and manufacturing.

She served as Executive Director of the BlueGreen Alliance, a non-profit partnership of labor unions and environmental organizations. In that capacity, she led an organization that works to advance policies to help achieve a stronger economy and a more sustainable future at the intersection of energy, the environment, and trade.

Before leading the BlueGreen Alliance, Commissioner Glas served as the Deputy Assistant Secretary for Textiles, Consumer Goods, and Materials at the U.S. Department of Commerce. In that role, she worked to improve the domestic and international competitiveness of the broad product range of U.S. industries.

Commissioner Glas served for a decade on Capitol Hill working extensively on manufacturing, trade, and economic policy issues for Congressman Michael H. Michaud from Maine and Congressman John J. LaFalce from New York. As Deputy Chief of Staff and Legislative Director for Congressman Michaud, she led efforts to establish the House Trade Working Group, a key coalition of Members of Congress that works extensively on trade policy and domestic competitiveness issues to this day.

Ms. Glas earned a Bachelor of Arts in History and graduated *summa cum laude* from the State University of New York at Geneseo.

The Honorable Carte P. Goodwin

Senator Carte P. Goodwin was reappointed to the Commission by Senate Democratic Leader Chuck Schumer for a term expiring December 31, 2023.

He is an attorney with the law firm of Frost Brown Todd, LLP where he serves as the Partner-in-Charge of its Charleston office, vice chair of the Appellate Practice Group, and a member of CivicPoint, the firm's government affairs subsidiary. Goodwin's practice includes litigation and appellate advocacy, and advising clients on government relations, regulatory matters, and commercial transactions. He currently serves as the Chair of the West Virginia Bar Appellate Committee and is a permanent member of the Judicial Conference of the U.S. Court of Appeals for the Fourth Circuit. In 2020, he was recognized by the State Bar's philanthropic association as a West Virginia Bar Foundation Fellow, and previously served as President of the West Virginia Bar Association.

In July of 2010, then West Virginia Governor Joe Manchin III appointed Goodwin to the United States Senate to fill the vacancy caused by the passing of Senator Robert C. Byrd, where he served until a special election was held to fill the remainder of Senator Byrd's unexpired term.

From 2005 to 2009, Goodwin served four years as General Counsel to then Governor Manchin, during which time he also chaired the Governor's Advisory Committee on Judicial Nominations. In addition, Goodwin chaired the West Virginia School Building Authority and served as a member of the State Consolidated Public Retirement Board. Following his return to private practice in 2009, Goodwin was appointed to chair the Independent Commission on Judicial Reform, along with former Supreme Court Justice Sandra Day O'Connor, which was tasked with evaluating the need for broad systemic reform to West Virginia's judicial system.

Goodwin also previously worked as a law clerk for the Honorable Robert B. King of the United States Court of Appeals for the Fourth Circuit. A native of Mt. Alto, West Virginia, Goodwin received his Bachelor of Arts degree in Philosophy from Marietta College in Marietta, Ohio, in 1996 and received his Doctor of Law

degree from the Emory University School of Law, graduating Order of the Coif in 1999.

Goodwin currently resides in Charleston, West Virginia, with his wife, Rochelle; son, Wesley Patrick; and daughter, Anna Vail.

Jacob Helberg

Jacob Helberg is a Senior Policy Advisor to the Chief Executive Officer of Palantir Technologies and the author of *The Wires of War: Technology and the Global Struggle for Power* (Simon & Schuster, October 2021). Helberg is an Adjunct Senior Fellow for the Technology and National Security Program at CNAS and a Senior Advisor at the Stanford University Center on Geopolitics and Technology. He is a member of the Manufacturing Leadership Council at the National Association of Manufacturers. From 2016 to 2020, Helberg was Google's global lead for the company's internal global product policy efforts to combat foreign interference. Prior to joining Google, Helberg was a member of the founding team of GeoQuant, a geopolitical risk forecasting technology company acquired by Fitch Ratings. Jacob Helberg received his M.S. in cybersecurity risk and strategy from New York University.

Commissioner Helberg was appointed to the Commission by then House Speaker Kevin McCarthy for a term expiring December 31, 2024.

James Mann

James Mann is a Washington-based author who has written a series of award-winning books about American foreign policy and about America's relations with China. He is a former newspaper reporter, foreign correspondent, and columnist who worked for more than twenty years for the Los Angeles Times. He is now a fellow-in-residence at Johns Hopkins School of Advanced International Studies.

A former Beijing correspondent for the Los Angeles Times, Mann has written three books about America and China. The first, *Beijing Jeep*, is the story of a single American company and its frustrations starting to do business in China. Fortune magazine placed the book on its list of the 75 all-time greatest books for American business executives to read. The second book, *About Face: A History of America's Curious Relationship with China*, narrates the history U.S. diplomacy with China, starting in the late 1960s. The book won the New York Public Library's Helen Bernstein award for best book of the year. The third book, *The China Fantasy*, is a critique of the notion that trade and foreign investment will lead to democracy or political liberalization in China.

His best-known work is *Rise of the Vulcans: A History of Bush's War Cabinet*, which became a New York Times best seller. The Wall Street Journal called it "a work of serious intellectual history," and New York Times reviewer Michiko Kakutani called it "compelling, lucid, shrewd and blessedly level-headed."

Mann has also been a contributor to National Public Radio and to several magazines, including The Atlantic, The New Republic, the New York Review of Books, and The American Prospect. His work was included in the book *The American Idea: The Best of the*

Atlantic Monthly: 150 Years of Writers and Thinkers Who Shaped Our History.

Mann was born in Albany, New York, and graduated from Harvard College. He lives in Washington with his wife Caroline Dexter, formerly a classics professor at Howard University. They have two children and five grandchildren.

James Mann was appointed to the Commission by Senate Democratic Leader Chuck Schumer for a term expiring December 31, 2023.

Reva Price

Reva Price is the former Director of Outreach and Senior Advisor for former Speaker of the House Nancy Pelosi. During her more than seventeen-year tenure with Speaker Pelosi, Commissioner Price played a central role across the spectrum of domestic and foreign policy issues. She handled key aspects of several foreign policy portfolios with particular emphasis on China as well as the Middle East. She was also responsible for building relationships with a varied and wide segment of groups, coalitions, and non-governmental organizations, strengthening communication and awareness of the Speaker's priorities and activities to the American people. She was appointed to the Commission by then House Speaker Nancy Pelosi for a term expiring December 31, 2024.

Prior to working on Capitol Hill, Commissioner Price spent more than two decades working for non-profit organizations in Washington, DC engaged in both domestic and international affairs. She advocated for her organization's policy priorities to the Congress, the Administration, and International Organizations including the OSCE and the United Nations. She is a graduate of the State University of New York at Binghamton.

Randall Schriver

Mr. Randall Schriver is the Chairman of the Board of the Project 2049 Institute and a partner at Pacific Solutions LLC. He is also a lecturer for Stanford University's "Stanford-in-Washington" program, is on the Board of Advisors to the Sasakawa Peace Foundation USA, and is on the Board of Directors of the US-Taiwan Business Council.

Just prior, he served for two years as the Assistant Secretary of Defense for Indo-Pacific Security Affairs where he led a team of nearly one hundred professionals and was the principal advisor to the Secretary of Defense on matters related to the Indo-Pacific region.

Prior to his Senate confirmation, Mr. Schriver was one of five founding partners of Armitage International LLC, a consulting firm that specializes in international business development and strategies. He was also CEO and President of the Project 2049 Institute, a non-profit research organization dedicated to the study of security trend lines in Asia. He was also an adjunct lecturer for Stanford University's "Stanford-in-Washington" program where he taught a quarter long course on U.S. foreign policy every fall and spring for fourteen years.

Previously, Mr. Schriver served as Deputy Assistant Secretary of State for East Asian and Pacific Affairs. He was responsible for China, Taiwan, Mongolia, Hong Kong, Australia, New Zealand, and the Pacific Islands. From 2001 to 2003, he served as Chief of Staff and Senior Advisor to the Deputy Secretary of State. From 1994 to 1998, he worked in the Office of the Secretary of Defense, including as the senior official responsible for U.S. bilateral relations with the People's Liberation Army and the bilateral security and military relationships with Taiwan.

Prior to his civilian service, he served as an active duty Navy Intelligence Officer from 1989 to 1991, including a deployment in support of Operation Desert Shield/Desert Storm. After active duty, he served in the Navy Reserves for nine years, including as Special Assistant to the Chairman of the Joint Chiefs of Staff and as an attaché at U.S. Embassies Beijing and Ulaanbaatar.

Mr. Schriver hails from Oregon and received a Bachelor of Arts degree in history from Williams College and a Master of Arts degree from Harvard University. He has won numerous military and civilian awards from the U.S. government and was recently presented with the Department of Defense Medal for Distinguished Public Service (highest civilian award). While at the State Department he was presented with the Order of the Propitious Clouds by the President of Taiwan for service promoting U.S.-Taiwan relations. He is married to Jordan Schriver, and is father to Lucas, Rory, Brody, and Mae.

Commissioner Schriver was appointed by Senate Republican Leader Mitch McConnell for a term expiring December 31, 2023.

Michael R. Wessel

Commissioner Michael R. Wessel, an original member of the Commission, was reappointed by then House Speaker Nancy Pelosi for a term expiring December 31, 2024.

Commissioner Wessel served on the staff of former House Democratic Leader Richard Gephardt for more than two decades, leaving his position as general counsel in March 1998. In addition, Commissioner Wessel was Congressman Gephardt's chief policy advisor, strategist, and negotiator. He was responsible for the development, coordination, management, and implementation of the Democratic leader's overall policy and political objectives, with specific responsibility for international trade, finance, economics, labor, and taxation.

During his more than 20 years on Capitol Hill, Commissioner Wessel served in a number of positions. As Congressman Gephardt's principal Ways and Means aide, he developed and implemented numerous tax and trade policy initiatives. He participated in the enactment of every major trade policy initiative from 1978 until his departure in 1998. In the late 1980s, he was the executive director of the House Trade and Competitiveness Task Force, where he was responsible for the Democrats' trade and competitiveness agenda as well as overall coordination of the Omnibus Trade and Competitiveness Act of 1988. He currently serves as staff chair of the Labor Advisory Committee for Trade Negotiations and Trade Policy to the USTR and Secretary of Labor.

Commissioner Wessel was intimately involved in the development of comprehensive tax reform legislation in the early 1980s and every

major tax bill during his tenure. Beginning in 1989, he became the principal advisor to the Democratic leadership on economic policy matters and served as tax policy coordinator to the 1990 budget summit.

In 1988, he served as national issues director for Congressman Gephardt's presidential campaign. During the 1992 presidential campaign, he assisted the Clinton presidential campaign on a broad range of issues and served as a senior policy advisor to the Clinton Transition Office. In 2004, he was a senior policy advisor to the Gephardt for President Campaign and later co-chaired the Trade Policy Group for the Kerry presidential campaign. In 2008, he was publicly identified as a trade and economic policy advisor to the Obama presidential campaign and advised the Clinton campaign in 2016 and Biden campaign in 2020.

He coauthored a number of articles with Congressman Gephardt and a book, *An Even Better Place: America in the 21st Century*. Commissioner Wessel served as a member of the U.S. Trade Deficit Review Commission in 1999–2000, a congressionally created commission charged with studying the nature, causes, and consequences of the U.S. merchandise trade and current account deficits.

Today, Commissioner Wessel is President of The Wessel Group Incorporated, a public affairs consulting firm offering expertise in government, politics, and international affairs. Commissioner Wessel holds a Bachelor of Arts and a Juris Doctorate from The George Washington University. He is a member of the Bars of the District of Columbia and of Pennsylvania and is a member of the Council on Foreign Relations. He and his wife Andrea have four children and two grandchildren.

Daniel W. Peck, Executive Director

Dan Peck is the Executive Director of the Commission, where he leads the Commission's full-time professional staff and provides support to the twelve Commissioners. In this role, he is responsible for Commission operations and budget, execution of the Commission's annual hearing cycle, development and publication of the Annual Report to Congress, as well as staff development and overseeing all other activities of the Commission.

Mr. Peck has previously served as the Senior Director for China Policy at the Office of the Secretary of Defense (OSD) and as the Director of Political Military Affairs at the American Institute in Taiwan (AIT) Washington Office, in support of the State Department's East Asian and Pacific Affairs (EAP) Bureau. During his 22 years as an Armor and Cavalry officer in the U.S. Army, including 12 years as a Foreign Area Officer (FAO) focused on China and the Asia Pacific, Mr. Peck served as a military attaché at the U.S. Embassy in Beijing, as an advisor and trainer to the Afghan National Army, and as a senior military analyst at the Defense Intelligence Agency. His military service includes two combat tours in Afghanistan, operational deployments to Kuwait and Bosnia, and overseas service in Korea and China.

Mr. Peck is an adjunct lecturer at The George Washington University where he teaches a course on China's military in the Security Policy Studies program at the Elliot School of International Affairs.

He has completed the International Symposium Course at China's National Defense University, has earned a master of arts in national security affairs and Asian studies from the Naval Postgraduate School and a bachelor of arts in international finance and marketing from the University of Miami, Florida, where he entered the U.S. Army as a distinguished military graduate from ROTC.

Mr. Peck is fluent in Chinese Mandarin and has been traveling to China since 1998, including living in China for more than four years. He has conducted extensive research travel to China and the region, including Taiwan, Tibet, Xinjiang, Hong Kong, every province of China, and a dozen neighboring and regional countries, while conducting field research or carrying out U.S. government programs with or related to China. He has formally studied Chinese language at the Defense Language Institute (DLI) in Monterey, Capital Normal University (CNU) in Beijing, the International Youth University in Beijing, and the Monterey Institute of International Studies (MIIS).

Dan is a native of Oregon, has two children, JD and Josie, and lives in Northern Virginia.

APPENDIX III

PUBLIC HEARINGS OF THE COMMISSION

Full transcripts and written testimonies are available online at the Commission's website: *www.USCC.gov*.

January 26, 2023: Public Hearing on “China’s Military Diplomacy and Overseas Security Activities” Washington, DC

Commissioners present: Carolyn Bartholomew, Chairman (Hearing Co-Chair); Robert I. Borochoff; Robin Cleveland; Aaron Friedberg; Hon. Carte P. Goodwin; James Mann; Reva Price; Hon. Randall Schriver (Hearing Co-Chair); Michael R. Wessel; Alex N. Wong, Vice Chairman.

Witnesses: Phillip Saunders, National Defense University; Kristen Gunness, RAND Corporation; Jordan Link, independent researcher; Richard Weitz, Hudson Institute; Jeffrey Becker, Center for Naval Analyses; Melodie Ha, Aeyon; April Herlevi, Center for Naval Analyses; Meia Nouwens, International Institute for Strategic Studies; Isaac Kardon,* Carnegie Endowment for International Peace.

February 24, 2023: Public Hearing on “China’s Challenges and Capabilities in Educating and Training the Next Generation Workforce” Washington, DC

Commissioners present: Carolyn Bartholomew, Chairman; Robert I. Borochoff; Robin Cleveland (Hearing Co-Chair); Aaron Friedberg; Hon. Carte P. Goodwin; Jacob Helberg; Reva Price (Hearing Co-Chair); Hon. Randall Schriver; Michael R. Wessel; Alex N. Wong, Vice Chairman.

Witnesses: Scott Rozelle, Stanford University; Prashant Loyalka, Stanford University; Zachary Howlett, National University of Singapore; Xin Xu, University of Oxford; Anna Puglisi, Center for Security and Emerging Technology; Jeffrey Ding, George Washington University; Dahlia Peterson, Center for Security and Emerging Technology; Denis Simon, University of North Carolina at Chapel Hill; Emily Hannum,* University of Pennsylvania.

*Did not appear in person but submitted material for the record

**March 23, 2023: Public Hearing on
“China’s Global Influence and Interference Activities”
Washington, DC**

Commissioners present: Robert I. Borochoff (Hearing Co-Chair); Robin Cleveland; Aaron Friedberg; Kimberly T. Glas; Hon. Carte P. Goodwin; Jacob Helberg; James Mann; Reva Price; Hon. Randall Schriver; Michael R. Wessel (Hearing Co-Chair).

Witnesses: Puma Shen, National Taipei University and Doublethink Lab; Andrew Chubb, Lancaster University; Caitlin Dearing Scott, International Republican Institute; Peter Mattis, Special Competitive Studies Project; Emily de La Bruyère, Horizon Advisory and Foundation for Defense of Democracies; Sarah Cook, Freedom House; Glenn Tiffert, Hoover Institution; Mareike Ohlberg, German Marshall Fund of the United States; Alex Joske, McGrathNicol; Rebecca Fair, Two Six Technologies; Daniel Currell,* George Mason University; Ian Oxnevad,* National Association of Scholars; Erin Baggott Carter,* University of Southern California; John Metz,* Athenai Institute; Rory O’Connor,* Athenai Institute.

**April 13, 2023: Public Hearing on
“China’s Pursuit of Defense Technologies: Implications
for U.S. and Multilateral Export Control and Investment
Screening Regimes”
Washington, DC**

Commissioners present: Carolyn Bartholomew, Chairman (Hearing Co-Chair); Robert I. Borochoff; Robin Cleveland; Aaron Friedberg; Kimberly T. Glas; Hon. Carte P. Goodwin; Jacob Helberg; James Mann; Reva Price; Randall Schriver; Michael R. Wessel; Alex N. Wong, Vice Chairman (Hearing Co-Chair).

Witnesses: Tai Ming Cheung, University of California San Diego; Christian Curriden, RAND Corporation; Elsa Kania, Center for a New American Security; Kevin Pollpeter, Center for Naval Analyses; Chad Ohlandt, RAND Corporation; Sarah Kirchberger, Institute for Security Policy, Kiel University; Gregory Allen, Center for Strategic and International Studies; Cordell Hull, National Security Institute; Martijn Rasser, Datenna Inc.; Emily Kilcrease, Center for a New American Security.

**May 4, 2023: Public Hearing on
“Rule by Law: China’s Increasingly Global Legal Reach”
Washington, DC**

Commissioners present: Carolyn Bartholomew, Chairman; Robert I. Borochoff; Robin Cleveland; Aaron Friedberg; Kimberly T. Glas; Hon. Carte P. Goodwin (Hearing Co-Chair); Jacob Helberg (Hearing Co-Chair); James Mann; Reva Price; Hon. Randall Schriver; Michael R. Wessel, Alex N. Wong, Vice Chairman.

Witnesses: Moritz Rudolf, Yale Law School’s Paul Tsai China Center; Vivienne Bath, Sydney Law School; Dan Harris, Harris Bricken; Isaac Kardon, Carnegie Endowment for International Peace; Brian

*Did not appear in person but submitted material for the record

Weeden, Secure World Foundation; Paul Scharre, Center for a New American Security; Yu-Jie Chen, Academia Sinica; Donald Clarke, George Washington University Law School; Diego Zambrano, Stanford University; Mark Cohen, Berkeley Center for Law & Technology.

**June 15, 2023: Public Hearing on
“Europe, the United States, and Relations with China:
Convergence or Divergence?”
Washington, DC**

Commissioners present: Carolyn Bartholomew, Chairman; Robert I. Borochoff; Robin Cleveland; Aaron Friedberg (Hearing Co-Chair); Kimberly T. Glas; Hon. Carte P. Goodwin; Jacob Helberg; James Mann (Hearing Co-Chair); Reva Price; Hon. Randall Schriver; Michael R. Wessel; Alex N. Wong, Vice Chairman.

Witnesses: Andrew Small, German Marshall Fund of the United States; Noah Barkin, Rhodium Group; Volker Stanzel, German Institute for International and Security Affairs; Ivana Karásková, Association for International Affairs; Alicia García-Herrero, Natixis; Lindsay Gorman, German Marshall Fund of the United States; Tim Rühlig, German Council on Foreign Relations; Janka Oertel, European Council on Foreign Relations; Veerle Nouwens, International Institute for Strategic Studies; Ivan Kanapathy, Center for Strategic and International Studies.

**August 21, 2023: Public Hearing on
“China’s Current Economy: Implications for Investors
and Supply Chains”
Washington, DC**

Commissioners present: Carolyn Bartholomew, Chairman; Robert I. Borochoff; Robin Cleveland (Hearing Co-Chair); Aaron Friedberg; Kimberly T. Glas (Hearing Co-Chair); Hon. Carte P. Goodwin; Jacob Helberg; Reva Price; Hon. Randall Schriver; Michael R. Wessel; Alex N. Wong, Vice Chairman.

Witnesses: Logan Wright, Rhodium Group; Nicholas Borst, Seafarer Capital Partners; Zongyuan Zoe Liu, Council on Foreign Relations; Christopher Gopal, global supply chain consultant and author; Ilaria Mazzocco, Center for Strategic and International Studies.

APPENDIX IIIA

LIST OF WITNESSES TESTIFYING BEFORE THE COMMISSION

2023 Hearings

Full transcripts and written testimonies are available online at the Commission's website: *www.USCC.gov*.

Alphabetical Listing of Witnesses Testifying before the Commission

Witness Name	Witness Affiliation	Hearing Date
Allen, Gregory	Center for Strategic and International Studies	April 13, 2023
Barkin, Noah	Rhodium Group	June 15, 2023
Bath, Vivienne	Sydney Law School	May 4, 2023
Becker, Jeffrey	Center for Naval Analyses	January 26, 2023
Borst, Nicholas	Seafarer Capital Partners	August 21, 2023
Carter, Erin Baggott*	University of Southern California	March 23, 2023
Chen, Yu-Jie	Academia Sinica	May 4, 2023
Cheung, Tai Ming	University of California San Diego	April 13, 2023
Chubb, Andrew	Lancaster University	March 23, 2023
Clarke, Donald	George Washington University Law School	May 4, 2023
Cohen, Mark	Berkeley Center for Law & Technology	May 4, 2023
Cook, Sarah	Freedom House	March 23, 2023
Currell, Daniel*	George Mason University	March 23, 2023
Curriden, Christian	RAND Corporation	April 13, 2023
de La Bruyère, Emily	Horizon Advisory and Foundation for Defense of Democracies	March 23, 2023
Dearing Scott, Caitlin	International Republican Institute	March 23, 2023

*Did not attend in person but submitted material for the record.

**Alphabetical Listing of Witnesses Testifying before the
Commission—*Continued***

Witness Name	Witness Affiliation	Hearing Date
Ding, Jeffrey	George Washington University	February 24, 2023
Fair, Rebecca	Two Six Technologies	March 23, 2023
García-Herrero, Alicia	Natixis	June 15, 2023
Gopal, Christopher	global supply chain consultant and author	August 21, 2023
Gorman, Lindsay	German Marshall Fund of the United States	June 15, 2023
Gunness, Kristen	RAND Corporation	January 26, 2023
Ha, Melodie	Aeyon	January 26, 2023
Hannum, Emily*	University of Pennsylvania	February 24, 2023
Harris, Dan	Harris Bricken	May 4, 2023
Herlevi, April	Center for Naval Analyses	January 26, 2023
Howlett, Zachary	National University of Singapore	February 24, 2023
Hull, Cordell	National Security Institute	April 13, 2023
Joske, Alex	McGrathNicol	March 23, 2023
Kanapathy, Ivan	Center for Strategic and International Studies	June 15, 2023
Kania, Elsa	Center for a New American Security	April 13, 2023
Karášková, Ivana	Association for International Affairs	June 15, 2023
Kardon, Isaac	Carnegie Endowment for International Peace	January 26, 2023 *, May 4, 2023
Kilcrease, Emily	Center for a New American Security	April 13, 2023
Kirchberger, Sarah	Institute for Security Policy, Kiel University	April 13, 2023
Link, Jordan	independent researcher	January 26, 2023
Liu, Zongyuan Zoe	Council on Foreign Relations	August 21, 2023
Loyalka, Prashant	Stanford University	February 24, 2023
Mattis, Peter	Special Competitive Studies Project	March 23, 2023
Mazzocco, Ilaria	Center for Strategic and International Studies	August 21, 2023
Metz, John *	Athenai Institute	March 23, 2023

* Did not attend in person but submitted material for the record.

**Alphabetical Listing of Witnesses Testifying before the
Commission—*Continued***

Witness Name	Witness Affiliation	Hearing Date
Nouwens, Meia	International Institute for Strategic Studies	January 26, 2023
Nouwens, Veerle	International Institute for Strategic Studies	June 15, 2023
O'Connor, Rory *	Athenai Institute	March 23, 2023
Oertel, Janka	European Council on Foreign Relations	June 15, 2023
Ohlandt, Chad	RAND Corporation	April 13, 2023
Ohlberg, Mareike	German Marshall Fund of the United States	March 23, 2023
Oxnevad, Ian *	National Association of Scholars	March 23, 2023
Peterson, Dhalia	Center for Security and Emerging Technology	February 24, 2023
Pollpeter, Kevin	Center for Naval Analyses	April 13, 2023
Puglisi, Anna	Center for Security and Emerging Technology	February 24, 2023
Rasser, Martijn	Datenna Inc.	April 13, 2023
Rozelle, Scott	Stanford University	February 24, 2023
Rudolf, Moritz	Yale Law School's Paul Tsai China Center	May 4, 2023
Rühlig, Tim	German Council on Foreign Relations	June 15, 2023
Saunders, Phillip	National Defense University	January 26, 2023
Scharre, Paul	Center for a New American Security	May 4, 2023
Shen, Puma	National Tapei University and Doublethink Lab	March 23, 2023
Simon, Denis	University of North Carolina at Chapel Hill	February 24, 2023
Small, Andrew	German Marshall Fund of the United States	June 15, 2023
Stanzel, Volker	German Institute for International and Security Affairs	June 15, 2023
Tiffert, Glenn	Hoover Institution	March 23, 2023
Weeden, Brian	Secure World Foundation	May 4, 2023
Weitz, Richard	Hudson Institute	January 26, 2023
Wright, Logan	Rhodium Group	August 21, 2023

* Did not attend in person but submitted material for the record.

**Alphabetical Listing of Witnesses Testifying before the
Commission—*Continued***

Witness Name	Witness Affiliation	Hearing Date
Xu, Xin	University of Oxford	February 24, 2023
Zambrano, Diego	Stanford University	May 4, 2023

APPENDIX IV
LIST OF RESEARCH MATERIAL
Research Reports Released in Support of the
2023 Annual Report

Disclaimer

The reports in this section were prepared at the request of the Commission to support its deliberations. They have been posted to the Commission's website to promote greater public understanding of the issues addressed by the Commission in its ongoing assessment of U.S.-China economic relations and their implications for U.S. national security, as mandated by Public Law No. 106-398, and amended by Public Laws No. 107-67, No. 108-7, No. 109-108, No. 110-161, and No. 113-291. The posting of these reports to the Commission's website does not imply an endorsement by the Commission or any individual Commissioner of the views or conclusions expressed therein.

Research Reports, Issue Briefs, and Backgrounders

China's Position on Russia's Invasion of Ukraine

April 2022 to October 2023

<https://www.uscc.gov/research/chinas-position-russias-invasion-ukraine>

Shein, Temu, and Chinese e-Commerce: Data Risks, Sourcing Violations, and Trade Loopholes

Written by Policy Analyst Nicholas Kaufman

April 2023

<https://www.uscc.gov/research/shein-temu-and-chinese-e-commerce-data-risks-sourcing-violations-and-trade-loopholes>

China's Paper on Ukraine and Next Steps for Xi's Global Security Initiative

Written by Research Fellow Andrew Hartnett, Policy Analyst Sierra Janik, and former Director Jonathan Ray, with contributions from Senior Policy Analyst Rachael Burton and Policy Analyst Ryan Mangefrida

March 2023

<https://www.uscc.gov/research/chinas-paper-ukraine-and-next-steps-xis-global-security-initiative>

***Dispute Settlement with Chinese Characteristics: Assessing
China's International Commercial Court***

Written by former Policy Analyst Leyton Nelson

February 2023

<https://www.uscc.gov/research/dispute-settlement-chinese-characteristics-assessing-chinas-international-commercial-court>

Chinese Companies Listed on Major U.S. Stock Exchanges

January 2023 (Periodically updated)

<https://www.uscc.gov/research/chinese-companies-listed-major-us-stock-exchanges>

PRC in International Organizations

December 2022 (Periodically updated)

<https://www.uscc.gov/research/prc-international-organizations>

APPENDIX V

CONFLICT OF INTEREST AND LOBBYING DISCLOSURE REPORTING

The Commission seeks to hold itself to the highest standards of transparency in carrying out its mission. In accordance with its policy for avoiding conflicts of interest, Commissioners who believe they have an actual or perceived conflict of interest must recuse themselves from the source or subject matter of the conflict. There were no recusals by Commissioners from any portions of the 2023 Report cycle.

Lobbying disclosure reports filed by any Commissioners who engage in “lobbying activities” as defined by the Lobbying Disclosure Act in connection with their outside employment activities may be accessed via public databases maintained by the House (<https://lobbyingdisclosure.house.gov/>) and Senate (<https://lda.senate.gov/system/public/>).

APPENDIX VI

ACRONYMS AND ABBREVIATIONS

ACI	anticoercion instrument
ADIZ	air defense identification zone
AI	artificial intelligence
AIP	air-independent propulsion
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
ASI	anti-suit injunction
ASIO	Australian Security Intelligence Organization
ASPI	Australian Strategic Policy Institute
ASW	anti-submarine warfare
AUKUS	Australia, United Kingdom, and United States
AUV	autonomous underwater vehicle
BIS	Bureau of Industry and Security (Department of Commerce)
BOC	Bank of China
BRI	Belt and Road Initiative
BRICS	Brazil, Russia, India, China, South Africa
BYD	Build Your Dreams
C4ISR	command, control, communications, computers, intelligence, surveillance, and reconnaissance
CAC	Cyberspace Administration of China
CASS	Chinese Academy of Social Sciences
CCG	China Coast Guard
CCL	Commerce Control List
CCP	Chinese Communist Party
CEBC	China-Brazil Business Council
CELAC	Community of Latin American and Caribbean States
CFIUS	Committee on Foreign Investment in the United States
CGTN	China Global Television Network
China-CEEC	China-Central and Eastern Europe Cooperation
CHIPS	Creating Helpful Incentives to Produce Semiconductors
CIA	Central Intelligence Agency
CICIR	China Institutes of Contemporary International Relations
CIPS	Cross-Border Interbank Payment System
CMC	Central Military Commission
CNKI	China National Knowledge Infrastructure Database
COSCO	China Ocean Shipping Company

CPAFFC	Chinese People's Association for Friendship with Foreign Countries
CPPCC	Chinese People's Political Consultative Conference
CSC	China Scholarship Council
CSET	Center for Strategic and Emerging Technology
CSIS	Center for Strategic and International Studies
CSRC	China Securities Regulatory Commission
CSSA	Chinese Students and Scholars Association
DDTC	Directorate of Defense Trade Controls (U.S. Department of State)
DOD	U.S. Department of Defense
DOJ	U.S. Department of Justice
DPP	Democratic Progressive Party
DUV	deep ultraviolet
EAR	Export Administration Regulations
ECFA	Economic Cooperation Framework Agreement
ECRA	Export Control Reform Act
EEZ	exclusive economic zone
EO	executive order
EU	European Union
EV	electric vehicle
FDI	foreign direct investment
FIRRMA	Foreign Investment Risk Review Modernization Act
GDP	gross domestic product
HA/DR	humanitarian assistance/disaster relief
HIPC	Heavily Indebted Poor Countries
HKD	Hong Kong dollars
HKMA	Hong Kong Monetary Authority
HKSAR	Hong Kong Special Administrative Region
HSBC	Hong Kong Shanghai Banking Corporation
ICBM	intercontinental ballistic missile
ICT	information and communications technology
IEEPA	International Emergency Economic Powers Act
IMET	International Military Education and Training
IMF	International Monetary Fund
IP	intellectual property
IPEF	Indo-Pacific Economic Framework
IPI	international procurement instrument
IPO	initial product offering
IRBM	intermediate-range ballistic missiles
ITAR	International Traffic in Arms Regulations
KMT	Kuomintang
LDA	Lobbying Disclosure Act
LegCo	Legislative Council (Hong Kong)
LGFV	local government financing vehicles
LiDAR	light detection and ranging
LLM	large language model
LOGINK	National Transportation and Logistics Public Information Platform
MCF	military-civil fusion
MCN	multi-channel network
MIIT	Ministry of Industry and Information Technology (China)

MND	Ministry of National Defense (China)
MOE	Ministry of Education (China)
MOFCOM	Ministry of Commerce (China)
MOST	Ministry of Science and Technology (China)
MOU	memorandum of understanding
MPF	Mandatory Provident Fund
MPS	Ministry of Public Security (China)
MRBM	medium-range ballistic missile
MSS	Ministry of State Security (China)
NASA	U.S. National Aeronautics and Space Administration
NATO	North Atlantic Treaty Organization
NEV	new energy vehicle
NGO	nongovernmental organization
NIST	National Institute of Standards and Technology
nm	nanometer
NORINCO	North Industries Group Corporation Limited (China)
NPC	National People's Congress
NSL	National Security Law
NSP	New Southbound Policy
ODNI	Office of the Director of National Intelligence
OIMC	Office for International Military Cooperation (Central Military Commission)
PBOC	People's Bank of China
PCAOB	Public Company Accounting Oversight Board
PISA	Program for International Student Assessment
PLA	People's Liberation Army
PPP	Purchasing Power Parity
PRC	People's Republic of China
R&D	research and development
RDA	Research, Development, and Acquisition
RMB	renminbi
S&T	science and technology
SASTIND	State Administration for Science, Technology, and Industry for National Defense
SCO	Shanghai Cooperation Organization
SMIC	Semiconductor Manufacturing International Company (China)
SOE	state-owned enterprise
STEM	science, technology, engineering, and mathematics
TPP	Taiwan People's Party
TSMC	Taiwan Semiconductor Manufacturing Company
TTC	Trade and Technology Council
UAE	United Arab Emirates
UAV	unmanned aerial vehicle
UFWD	United Front Work Department
UK	United Kingdom
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
USAGM	U.S. Agency for Global Media
VAT	value-added tax
VIE	variable interest entity structure
WTO	World Trade Organization

2023 COMMISSION STAFF

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