Chapter 9

Pursuing Free, Fair, and Balanced Trade

As documented in the 2018 *Economic Report of the President*, the Trump Administration inherited a legacy of asymmetric trading arrangements that had imposed steep costs on U.S. manufacturing and segments of the labor market. Indeed, some recent academic literature finds that import displacement after the establishment of Permanent Normal Trade Relations with the People's Republic of China was the single biggest factor in the decline of the U.S. employment-to-population rate after 1999 (Abraham and Kearney 2020). Also, this shock was associated not only with a precipitous decline in previously relatively-stable U.S. manufacturing employment but also with increased mortality from drug overdoses in adversely affected communities (Autor, Dorn, and Hanson 2019; Case and Deaton 2017; Pierce and Schott 2020).

The Trump Administration has worked over the past four years to renegotiate unfair trading arrangements that have harmed, in particular, U.S. manufacturing and manufacturing employment. Much of this work came to fruition in 2020, with several historic trade agreements entering into force this year. This chapter details the benefits of the trade accomplishments of 2020 and shows that further work in renegotiating trade agreements to safeguard American workers will play a key part in returning the U.S. economy to the economic prosperity of the Great Expansion. In addition, we describe the changing global economic environment, punctuated by the COVID-19 pandemic, that has caused firms and governments to rethink existing configurations of global supply chains and, in some cases, bring production closer to home.

On January 15, 2020, President Trump joined Chinese Vice Premier Liu He in signing the U.S.-China Economic and Trade Agreement—the Phase One Agreement—a landmark deal that requires structural reforms and other changes to China's economic and trade systems in the areas of intellectual property, technology transfer, agriculture, financial services, and currency and foreign exchange. The centerpieces of the agreement include not only the numerous, specific commitments that China made in these areas but also China's agreement to expand trade by importing an additional $200 billion in U.S. goods and services on top of 2017 import levels. The United States maintains significant tariffs on $370 billion worth of Chinese imports because China has not ended all of its unfair trade practices, setting the stage for a Phase Two agreement in the future.

In addition to achieving this historic trade deal with China, the Trump Administration has followed through on its pledge to restore U.S. manufacturing, farming, and business by signing into law the United States–Mexico–Canada Agreement (USMCA) on January 29, 2020, overhauling the North American Free Trade Agreement. With the rules of the agreement entering into force on July 1, 2020, USMCA promises to better balance trade with our neighbors to the north and south. USMCA establishes requirements for digital trade, environmental standards, and standards for workers' rights between the three countries. Also, American agricultural exports will increase by $2.2 billion under USMCA thanks to better access to Canadian markets secured through the new agreement. Overall, pre-COVID estimates by the nonpartisan U.S. International Trade Commission found that under moderate assumptions, USMCA will increase U.S. gross domestic product by $68.2 billion (0.35 percent) and create 176,000 U.S. jobs.

Prepandemic analyses indicated that both the Phase One Agreement and USMCA would grow the U.S. economy. However, with the COVID-19 pandemic spreading from China around the globe, worldwide lockdowns temporarily disrupted the projected benefits from negotiating these trade deals and

highlighted the substantial risk in centralizing supply chains in China. As China shut down factories in the city of Wuhan—a major manufacturing hub, and also the origin of the coronavirus—supply shocks rippled throughout the global economy and reached the United States long before the virus spread within the United States. This chapter examines COVID-19's effects on global supply chains and discusses evidence that companies are already reducing their reliance on Chinese manufacturing.

As the process of U.S. economic recovery continues, fair and reciprocal trade agreements will continue to be a critical component of returning to the economic prosperity of the Great Expansion. The Phase One Agreement, USMCA, an additional trade agreement with Japan, and a renegotiated trade agreement with South Korea, among others, underscore the Trump Administration's commitments to securing trade deals that drive growth in the economy and the labor market. These agreements are the culmination of the Administration's commitment to the American worker—addressing unfair trade practices that have adversely affected U.S. employment, while also incentivizing domestic hiring and capital formation.

International trade plays a critical role in driving economic growth, and thus in helping countries around the world achieve unprecedented prosperity in the 21st century. Institutions in which the United States plays a key leadership role, such as the World Trade Organization and its predecessor the General Agreement on Tariffs and Trade, established the institutional framework of the global trading system and facilitated growth in global trade. But the benefits of the global trading system have at times come at the cost of America's own national interest. The Trump Administration has actively pursued actions to make trade with the United States' international partners fairer and more sustainable. The Administration has imposed tariffs to protect national security and other U.S. economic interests. And by forging new trade agreements with China, our North American neighbors, and Japan, as well as a renegotiated agreement with South Korea and narrower agreements with several other countries, the Administration has ushered in a new international trade environment that promises to enhance U.S. economic growth and broad-based economic prosperity. The first three sections of this chapter examine these agreements.

Although growth in global trade has increasingly taken the form of trade in intermediate goods and the globalization of supply chains, events in recent years may slow that trend. The 2008 global recession, trade, and other geopolitical tensions (especially between the United States and China), and most recently the 2020 COVID-19 pandemic, have all underscored risks associated with trade that have prompted firms and governments around the world to reconsider the benefits and costs of their existing configurations of global supply chains. The Trump Administration's recent and ongoing activities focus on reaping the benefits of trade while advancing the interests of American industry and safeguarding national security. The last section of the chapter considers these issues related to global supply chains.

The Phase One Agreement with China

The U.S.-China Phase One Agreement is a first step in the resolution of U.S.-China trade disputes. These tensions came to the forefront in August 2017 with the announcement in the *Federal Register* of an investigation by the Office of the United States Trade Representative (USTR) into China's technology transfer and intellectual property (IP) protection policies under Section 301 of the Trade Act of 1974. This investigation led to a determination by the USTR that China engaged in certain unreasonable and discriminatory trade practices. The USTR took appropriate action by imposing tariffs on U.S. imports from China, triggering tariff increases by China and responsive tariff increases by the United States, from July 2018 to September 2019.

On December 13, 2019, the two countries agreed to the Phase One Agreement, which President Trump signed on January 15, 2020. This agreement has seven main chapters addressing structural reforms in the areas of IP, technology transfer, agricultural nontariff barriers, financial services, currency, and Chinese purchases of U.S. exports; and establishing a strong dispute resolution system. An eighth chapter provides details on amending the agreement, effective dates and termination, further negotiations, and "notice and comment" on implementing measures (USTR 2020b). The Chinese purchases of U.S. exports are an important component of this agreement, given that they were expected to provide immediate positive effects for U.S. producers. With the COVID-19 pandemic, Chinese purchases of U.S. exports this year started slowly but have increased significantly in recent months. The structural provisions are the important first steps in creating much-needed reform in the Chinese economy.

Background

In August 2017, the USTR opened an investigation into Chinese policies and practices regarding technology and IP under Section 301 of the Trade Act of 1974. The USTR issued a report in March 2018 that detailed a variety of unfair

Table 9-1. U.S. Tariff Actions against China, 2018–19

Tranche (month and year they took effect)	Value of Imports (billion dollars)	Tariff Rate (percent)	Retaliatory China Tariffs on U.S. Exports
1 (July 2018)	34	25	25% on $34 billion in goods
2 (August 2018)	16	25	25% on $16 billion in goods
3 (September 2018)	200	10; rose to 25 in June 2019	Range up to 25% on $53 billion in goods
4A (September 2019)	120	15	5–10% on $25 billion in goods

Source: Office of the U.S. Trade Representative.
Note: This table reflects the tariff rates when they went into effect, not necessarily the current state of play. Tranche 4B was set to take effect December 15, 2019, but due to the U.S.–China Phase 1 agreement, these tariffs were never imposed as noted in the text. Dollar values are in nominal terms.

Table 9-2. U.S. Bilateral Trade Deficit with China in Goods and Services

Type of Deficit	2018:Q2		2019:Q4		2020:Q3	
	Dollars (billions)	Share of GDP	Dollars (billions)	Share of GDP	Dollars (billions)	Share of GDP
Bilateral trade deficit in goods	–98.4	1.9	–77.4	1.4	–79.0	1.5
Bilateral trade deficit in goods and services	–88.7	1.7	–68.1	1.3	–74.6	1.4

Sources: Census Bureau; CEA calculations.
Note: The trade deficit is annualized to calculate the share of GDP. Dollar values are in nominal terms.

Chinese policies and practices: (1) forced technology transfer from U.S. inventors and companies to Chinese firms for market access in China; (2) nonmarket-based terms for technology licenses; (3) Chinese state-directed and facilitated acquisition of strategic U.S. assets; and (4) cyber-enabled intrusions into U.S. commercial networks to steal trade secrets for commercial gain (CEA 2019). Table 9-1 describes the four tranches of tariffs that the United States imposed to bring China to the negotiating table to reform these costly policies. China retaliated with its own tariff actions against the United States in each tranche. As part of the conclusion of the Phase One negotiations, the United States suspended a tariff rate increase from 25 percent to 30 percent on tranches 1 through 3 and reduced the tariff rate on tranche 4A from 15 percent to 7.5 percent. China also cut its 4A tranche tariff rates by half.

Since the Section 301 tariffs went into effect starting in July 2018, we have observed a decline in the bilateral trade deficit between the U.S. and China, from $88.7 billion ($354.8 at an annualized rate, or 1.7 percent of GDP) to $68.1 billion ($272.4 billion at an annualized rate, or 1.3 percent of GDP) at

the end of 2019 (table 9-2). The bilateral trade deficit has increased slightly during the COVID-19 pandemic, particularly as international trade in goods has recovered faster than international trade in services, but remains below pre–Section 301 levels.

Major Provisions

On December 13, 2019, the United States and the People's Republic of China announced that they had reached the Phase One Trade Agreement. This agreement came just two days before the United States was set to impose tranche 4B, which would have imposed 15 percent tariff rates on an additional $160 billion worth of U.S. imports from China. As a part of the agreement, the United States suspended the tariffs set for December 15 and agreed to halve tranche 4A tariffs on $120 billion of Chinese goods to 7.5 percent (USTR 2019b). On January 15, 2020, President Trump signed the Phase One Agreement with the People's Republic of China, establishing a foundation for a fair and reciprocal trade relationship between the two countries. This agreement requires structural reforms and other changes to China's economic and trade policies in these seven areas, each of which corresponds to a chapter in the agreement:

1. Addressing concerns related to intellectual property,
2. Ending China's practice of forced foreign technology transfer,
3. Lowering structural barriers to agricultural trade,
4. Expanding market access for U.S. financial service companies in China,
5. Addressing unfair currency practices,
6. Expanding trade through Chinese purchase commitments, and
7. Introducing a dispute resolution mechanism to effectively implement and resolve issues arising under the agreement.

Chapters 1 and 2 of the Phase One Agreement address U.S. concerns relating to intellectual property theft and forced foreign technology transfer and should help create a fair market and protect U.S. companies operating in China. Chapters 4 and 5 require China to lower financial service barriers and end unfair currency practices. Chapter 6 sets forth purchase commitments, including purchase commitments for agricultural commodities, which China must meet to help create a more balanced and fairer trading relationship that benefits the United States. The removal of structural barriers to agricultural trade in Chapter 3 should help achieve these purchase commitments. Finally, Chapter 7, which addresses dispute resolution, creates a process for discussing implementation of, and resolving issues arising under, the Phase One Agreement.

Intellectual Property

Chapter 1 of the Phase One Agreement includes specific commitments to strengthen protection and enforcement of IP in China and reduce IP theft, including with respect to trade secrets, pharmaceutical-related IP, and

enforcement against counterfeit and pirated goods. The Section 301 report found a $50 billion annual cost to the United States from IP theft (USTR 2018a). Several of the provisions in the Phase One Agreement are novel and require significant changes in China's practices. A large component of this addresses specific concerns regarding adequate and effective IP protection and enforcement in China. As part of China's implementation of the Phase One Agreement, China has published numerous draft measures for public comment and has issued final measures in areas including criminal prosecution standards for trade secret theft, civil enforcement of trade secrets, destruction of counterfeit and pirated goods, and online infringement on e-commerce platforms.

Reports from the Organization for Economic Cooperation and Development (OECD 2019) show China as the top source of counterfeit and pirated goods, endangering the public with goods that pose potential health and safety threats. The Phase One Agreement contains provisions on the expeditious takedown and destruction of counterfeit goods. The agreement also includes obligations for China to take effective action against e-commerce platforms that fail to take necessary measures against infringement and ensures that government agencies and state-owned enterprises use only licensed software.

Technology Transfer

In Chapter 2 of the Phase One Agreement, China agreed to end the practice of requiring or pressuring U.S. companies to transfer technology to Chinese entities, including in relation to joint ventures, acquisitions, or obtaining business licenses. These commitments extend to any informal, unwritten measures that China takes to force or pressure foreign companies to transfer their technology to Chinese entities, which is a key concern identified in the Section 301 investigation. China also committed to provide transparency, fairness, and due process in administrative proceedings and to ensure that any technology transfer and licensing take place on market terms. Moreover, China agreed not to support or direct outbound foreign direct investment activities aimed at acquiring foreign technology with respect to sectors and industries targeted by market-distorting industrial plans. Though Phase One negotiations were ongoing, China enacted its new Foreign Investment Law and amended its existing Administrative Licensing Law in order to address the use of "administrative means" to force technology transfer, and the disclosure of trade secrets and confidential business information submitted by administrative license applicants.

Agriculture

Chapter 3 of the Phase One Agreement lowers structural barriers to agriculture trade. As for nontariff agricultural barriers, China has removed many restrictive and burdensome import requirements, including lifting its effective ban on

Table 9-3. Agriculture Phase One Agreement Provisions

Product	Market Overview	Key Changes to Implement
Agricultural Biotechnology	Chinese demand for biotechnology, which is used for food and feed products, has drastically grown as Chinese wealth has grown. But existing regulations hinder U.S. exports.	Implement a transparent, predictable, efficient, science- and risk-based regulatory approval process for agricultural biotechnology products that contains strong administrative improvements. Limit approval wait times to an average of 24 months.
Animal feed	Chinese demand for feed has grown with its livestock supply, but U.S. feed exports have struggled due to restrictions in registering and licensing facilities and products.	Add 23 products to its list of allowable feed additive product imports. Streamline the registration-and-licensing process for U.S. feed exports.
Seafood	As Chinese seafood demand rises, regulations have held back U.S. seafood exports.	Legalize the importation of 26 new seafood products. Change seafood regulations so goods approved by the Food and Drug Administration and the National Oceanic and Atmospheric Administration can be imported by China.
Dairy and infant formula	Demand for imported dairy and infant formula products has a positive relationship with China's growing wealth, but strict regulations limit U.S. exports.	Streamline approval processes for U.S. facilities and products, and China's regulations will be simplified or eliminated.
Horticultural products	Although Chinese horticultural imports increased by 80% between 2013 and 2018, the U.S. market share of imports is only 10%.	Allow U.S. exports of potatoes, nectarines, blueberries, and avocados.
Meat, poultry, and live breeding cattle	After a 13-year ban, in 2017, China partially reopened its beef markets to U.S. exports, although regulatory restrictions remain. In 2015, China banned U.S. poultry, but this was partially removed in November 2019.	Expand market access for U.S. beef and poultry. Speed up and improve approval processes and health certifications. Hold necessary technical discussions for a protocol to allow U.S. live breeding cattle imports.
Pet food	Chinese poultry and bovine restrictions along with issues registering facilities have limited U.S. pet food exports in China, even as Chinese demand has grown.	Remove bans that restrict U.S. pet food exports. Streamline registration for U.S. facilities.
Rice	China is the world's largest importer of rice. Its tariff rate quota and phytosanitary protocol hurt U.S. exports.	Allow the importation of U.S. rice products within 20 days of their approval by the U.S. Department of Agriculture. Change how its tariff rate quota is applied so the quota is applied each year, and the process for allocation is not discriminatory and transparent for U.S. firms.

Source: U.S. Department of Agriculture (2020).

U.S. poultry products, which had been in place since 2015. Although not all the structural changes and commitments listed in table 9-3 have been completed, certain key changes have been made, resulting in improved market access for a number of U.S. agricultural products. The market overview for each product reveals that Chinese demand has continued to rise for these products, but before the Phase One Agreement, U.S. exports had been restricted. Changes made by China include the listing of additional U.S. food manufacturing and feed additive facilities eligible for export to China, recognition of the Food and Drug Administration's oversight of dairy food safety, and the removal of other sanitary and phytosanitary barriers. The lowering of barriers to agricultural trade, described in table 9-3, is necessary for the agricultural purchases China has promised.

Financial Services

Chapter 4 of the Phase One Agreement addresses long-standing barriers faced by a wide variety of U.S. financial services companies, including those in banking, insurance, securities, credit rating, and electronic payment services. These barriers include joint venture requirements, foreign equity limitations, and various discriminatory regulatory requirements. As one key example, China committed to allow U.S. securities, fund management, futures, and insurance companies to establish wholly foreign-owned companies in China, thereby providing the potential for U.S. companies to fully control and generate profits from their businesses. Removal of these barriers will allow U.S. financial services companies to compete on a more level playing field in China.

Currency

Chapter 5 of the Phase One Agreement includes policy and transparency commitments related to currency issues. The chapter addresses unfair currency practices by requiring strong commitments to refrain from competitive devaluations and targeting of exchange rates, while promoting transparency and providing mechanisms for accountability and enforcement. The enforcement mechanism enables either the U.S. Department of the Treasury or the People's Bank of China to refer exchange rate policy or transparency issues to the Bilateral Evaluation and Dispute Resolution Arrangement established in Chapter 7 of the agreement, which we discuss below.

China has a long history of pursuing a variety of economic and regulatory policies that provide their economy with a competitive advantage in international trade. This includes intervention in foreign exchange markets in concert with the maintenance of capital controls that together harm U.S. export competitiveness by facilitating the undervaluation of the renminbi. In August 2019, the U.S. Treasury ruled that China was manipulating its currency under the Omnibus Trade and Competitiveness Act of 1988.

After this determination, the U.S. Treasury and the People's Bank of China engaged in negotiations over currency issues to eliminate unfair Chinese practices that gain competitive advantages. More broadly, China made commitments in the Phase One Agreement to refrain from competitive devaluations and to not target its exchange rate for competitive purposes, and it agreed to publish relevant information related to exchange rates and external balances. In this context, in January 2020, the U.S. Treasury determined in its "Report to Congress on Macroeconomic and Foreign Exchange Policies of Major Trading Partners of the United States" that China would not be designated as a currency manipulator at that time.

Chinese Purchase Commitments

Chapter 6 of the Phase One Agreement specifies commitments for Chinese purchases of a selected group of U.S. goods and services. For the first year of the agreement, China has committed to purchase an additional $76.7 billion of U.S. goods and services over the 2017 baseline, followed by an additional $123.3 billion of purchases in the second year (table 9-4). Purchases are broken down into four sectors: manufactured goods (38.9 percent), energy (26.2 percent), services (19.0 percent), and agriculture (16.0 percent). From 2022 to 2025, the agreement states that the countries "project that the trajectory of increases in the amounts of manufactured goods, agricultural goods, energy products, and services purchased and imported into China from the United States will continue in calendar years 2022 through 2025."

As part of the trade deal, China will also reduce its structural trade barriers, which should result in an expansion of market-based access for U.S. goods and services aiding these purchase commitments, as described above for U.S. exports of agriculture. Because barriers to China's markets primarily take the form of nontariff barriers, specific purchase commitments help promote China's adherence to its structural reforms in the agreement. As a result of the Phase One Agreement, China has already begun taking actions to reduce its

Table 9-4. Additional U.S. Exports to China on Top of 2017 Baseline

Product Category	2020 (dollars, billions)	2021 (dollars, billions)	2020–21 Total (dollars, billions)	2020–21 Percentage of total
Manufactured goods	32.9	44.8	77.7	38.9
Energy	18.5	33.9	52.4	26.2
Services	12.8	25.1	37.9	19.0
Agriculture	12.5	19.5	32.0	16.0
Total	76.7	123.3	200.0	100.0

Source: "Trade Agreement between the United States of America and the People's Republic of China" (draft), Annex 6.1.
Note: the two-year percentage of of the total does not exactly add up to 100 due to rounding.

retaliatory tariffs, enabling greater market access and increased purchases. In two separate waves, China announced tariff reductions, or chose not to impose tariffs, on $75 billion worth of U.S. goods and available tariff exemptions on goods classified under 696 tariff codes (MOF 2020).

Due to the COVID-19 outbreak, international trade fell dramatically as economies around the world contracted. As a result, purchases from China early in the year were lower than anticipated. However, purchases have increased significantly in the past few months. The USTR (2020c) estimates that as of mid-October, China had purchased over $23 billion in U.S. agricultural products, about 71 percent of its target under the Phase One Agreement. Record or near-record U.S. exports to China are expected in 2020 for corn, pork, beef, pet food, alfalfa hay, pecans, peanuts, and prepared foods.

Dispute Resolution

Chapter 7 creates the Trade Framework Group, to be led by the United States Trade Representative with a designated Vice Premier of China. This group's purpose is to ensure implementation of the Phase One Agreement and resolve disputes in a fair and expeditious manner. The United States and China created the Bilateral Evaluation and Dispute Resolution Office to deal with day-to-day matters. Each party can file a complaint to the other for not acting in accordance with the agreement at the working level, and then escalate to the deputy and principal levels if no resolution is achieved. Each party may also raise matters of urgency directly at the principal level. Regular consultations are also set up to ensure compliance. Regular consultations are also set up to ensure compliance.

Unlike other trade agreements, the Phase One Agreement does not provide for independent third-party dispute resolution. If the two parties cannot resolve a dispute, then the complaining party is authorized under the agreement to take proportionate responsive action that it considers appropriate against the offending party. This can take the form of tariffs on goods imported from the other party or the suspension of a provision in the agreement benefiting that other party, among other actions. The responsive action may remain in effect until the resolution of the dispute. If the respondent party finds that the complaining party's action was taken in bad faith, its only recourse is withdrawal from the agreement upon 60 days' notice.

Chapter 7 of the Phase One Agreement provides for a series of meetings or telephone calls to ensure the success of the agreement, including monthly Designated Official calls, quarterly deputy calls, and twice-yearly principal-level calls. In addition, technical groups from the United States and China confer on a regular basis. During a principal-level call in August 2020, the parties noted sustained commitment to the success of the agreement as well as noticeable progress toward reaching the agreement's goals. They discussed China's steps to engender "greater protection for intellectual property rights,

remove impediments to American companies in the areas of financial services and agriculture, and eliminate forced technology transfer" (USTR 2020d). This call also served as a discussion on the significant increases of Chinese purchases of U.S. products and any additional action needed to implement the Phase One Agreement. Both parties remain committed to the success of the agreement, with progress already made and a shared commitment to future necessary steps.

What Is Not in Phase One?

The Phase One Agreement with China is designed to lay the groundwork for a Phase Two negotiation. The Phase One Agreement does not address certain underlying structural issues, creating interest for a Phase Two Agreement in the future (White House 2020a). The two countries still have very different economic systems as China asserts the state as the principal actor in the economy, creating friction between the two countries. Despite some tariff concessions, the United States maintains most of the Section 301 tariffs still in effect because China has not addressed all the issues identified in the Section 301 investigation.

Some of the main issues remaining include China's massive government subsidies to and its preferential treatment of state-owned enterprises (SOEs). Many Chinese SOEs depend on government subsidies and loans from state-owned banks to compete with more efficient private firms. Important sectors in China's economy are state-directed, leading to policies and practices that provide significant artificial advantages to domestic companies while discriminating against or otherwise disadvantaging foreign competitors. China's "Made in China 2025" program is a plan announced in 2015 that aims to make China a global high-technology manufacturing power (McBride and Chatzky 2019). Many see this as a threat to U.S. leadership in high-technology industries, citing China's subsidies, the setting of market share targets for Chinese companies, and the use of policies designed to substitute Chinese products for other countries' products in the Chinese market and eventually abroad. China has released a list of 33 areas in which investment by foreign firms is extremely limited or not allowed. These areas include infrastructure, the media, agriculture, and some types of scientific research.

Another issue of concern is China's engagement in cyber-enabled theft and its intrusions into U.S. commercial computer networks for commercial purposes. According to the U.S. Department of Justice, China is involved in more than 90 percent of economic espionage cases and more than 67 percent of the trade secret theft cases the department has overseen since 2011 (DOJ 2018). National security concerns regarding technology and cyberspace are also significant issues, including concerns related to the Chinese companies Huawei and ZTE. The United States has banned the use of Huawei and ZTE 5G equipment by U.S. companies and citizens, and has been urging its allies

to follow suit by not investing in Huawei's 5G technology services due to the potential for China to spy on customers (Vaswani 2020). Australia, New Zealand, and the United Kingdom are other major countries that have banned Huawei from their 5G networks.

The United States–Mexico–Canada Agreement

The United States–Mexico–Canada Agreement (USMCA), which took effect on July 1, 2020, is a new agreement that replaces the North American Free Trade Agreement (NAFTA). Free trade agreements establish areas between two or more countries "in which the duties and other restrictive regulations of commerce . . . are eliminated on substantially all the trade between the constituent territories in products originating in such territories" (WTO 2020). NAFTA established free trade in goods and services between the United States, Canada, and Mexico. The ability to maintain free trade in goods and services in the NAFTA area depends on rules pertaining to everything from customs administration to identification of the scope of covered services to dispute settlement. The original NAFTA rules were more than 25 years old.

USMCA updated these rules in order to reflect the lessons learned under NAFTA and other trade agreements, as well as economic and technological developments. Among these, USMCA ensures the free movement of data across borders, improves trade facilitation, strengthens intellectual property protection for U.S. firms, limits access to international arbitration in investment disputes (thus steering such disputes to the courts of the country hosting the investment), and modifies the requirements for an automobile to be eligible for duty-free treatment. In particular, the agreement requires that a higher percentage of an automobile's parts be sourced within the USMCA region for production if the vehicle is to qualify for duty-free treatment. Altogether, over the next five years, USMCA is projected to increase U.S. gross domestic product (GDP) by $68.2 billion (0.35 percent) and create 176,000 U.S. jobs, according to pre-COVID estimates by the independent, nonpartisan U.S. International Trade Commission (USITC).

Rules of Origin for Automobile Production

For certain products, USMCA revises the rules of origin, which establish the value that must be added, or processes that must occur, in the territory of one or more USMCA parties for a good to be considered a USMCA-originating good. If considered a USMCA-originating good, it will be entitled to preferential duty-free treatment upon importation into the territory of a USMCA party (USTR 2020a). In particular, USMCA increases the regional content requirements for automobiles traded under the agreement. NAFTA required 62.5 percent (by value) of an automobile's parts to be sourced in North America, and USMCA raises the requirement to 75 percent, depending on the vehicle type (USTIC

2019). In addition, under USMCA, North American auto manufacturers that trade under the agreement must purchase at least 70 percent of their steel and aluminum from the United States and its territories, Canada, or Mexico. Finally, annually 40 to 45 percent of the manufacturing costs of imported automobiles must be produced by workers who earn at least $16 per hour.

Although the USITC estimates that these provisions will create on net 28,000 jobs in the U.S. automobile industry, they will likely reduce growth in other sectors of the economy. And though these negative effects are more than offset by other USMCA provisions, these provisions will collectively raise the costs of producing automobiles in the United States, and thus increasing the consumer prices of cars and reducing real incomes (USITC 2019).

Digital Trade

USMCA contains the most comprehensive set of provisions for digital trade in a U.S. trade agreement. The agreement prohibits discriminatory restrictions on trade in digital products and services between USMCA partners and ensures the free movement of data across borders. Moreover, a U.S. company is not required to disclose proprietary source codes and algorithms to USMCA partners or to locate its computing facilities in their territory as a condition of doing business (USITC 2019). Altogether, these provisions are designed to reduce barriers to U.S. investment in Mexico and Canada, including in the financial services sector. The data transfer provisions are estimated to reduce U.S. trade costs by between 0.6 and 4.5 percentage points for a broad class of sectors, ranging from agriculture to manufacturing to business services (USITC 2019).

Many of the economic benefits of USMCA are generated through these digital trade provisions. Specifically, the USITC estimates that these provisions will reduce "trade policy uncertainty" (USITC 2019). Although the agreement prevents USMCA partners from establishing restrictions on trade in digital services, data flowed freely among the United States, Canada, and Mexico before the signing of the agreement. Nonetheless, research suggests that uncertainty about whether such regulations will eventually be imposed can reduce trade and investment between countries, and a reduction in this uncertainty can yield economic benefits (USITC 2019).

Intellectual Property Protection

USMCA introduces many provisions to enhance the protection and enforcement of the IP rights of U.S. firms. First, USMCA requires that countries grant patent extensions in response to unreasonable delays in their patent-granting offices (USITC 2019). USMCA also provides procedural safeguards for the recognition of new geographical indications, including strong standards for protection against issuances of geographical indications that would prevent U.S. producers from using common names, such as mozzarella, as well as establish a mechanism for consultation between the parties on future

geographical indications pursuant to international agreements (CRS 2020a; USTR 2020a). In addition, the agreement calls for a minimum copyright term of life of the author plus 70 years, and for those works with a copyright term that is not based on the life of a person, a minimum of 75 years after first authorized publication (USTR 2020a).

The USMCA provides for the most comprehensive protection for trade secrets of any prior U.S. trade agreement. It requires countries to provide, including with respect to trade secret theft by SOEs, civil procedures and remedies, criminal procedures and penalties, prohibitions against impeding licensing of trade secrets, judicial procedures to prevent disclosure of trade secrets during the litigation process, and penalties for government officials for the unauthorized disclosure of trade secrets (USTR 2018c). USMCA confirms that the enforcement of IP also applies to the digital environment, ensuring that firms relying on digital trade receive adequate protection (USITC 2019).

Labor

USMCA enshrines core worker rights, which will have the most notable effect in Mexico. The Mexican labor market is hampered by a largely informal economy and a lack of protections for workers (ILO 2014). Many workers are part of undemocratic unions, also known as "ghost unions," that are not supported by the majority of the workers they allegedly represent. These unions form illegitimate collective bargaining agreements, alternately known as protection contracts, with an employer-dominated union, without workers seeing or ratifying the agreement. Such protective contracts are estimated to represent a significant percentage of collective bargaining agreements in Mexico. When workers try to form their own union, their employer tells them that they were already a part of one and subject to the parameters stipulated in the agreement they never had a chance to see (Mojtehedzadeh 2016). USMCA addresses each of these issues by supporting Mexico's creation of independent bodies to resolve labor disputes—guaranteeing democratic worker representation and collective bargaining rights—and providing enforcement tools to ensure that Mexico meets the USMCA's labor obligations (USTR 2020a).

Although these provisions will primarily affect Mexico by promoting higher wages and improving labor market conditions for workers, the U.S. economy could also benefit. To the extent that these provisions reduce this disparity between Mexican and U.S. wages, U.S. firms will be less likely to offshore production to Mexico, increasing the bargaining power of U.S. workers. In addition, U.S. export markets may benefit from the increased purchasing power of the Mexican consumer (USITC 2019).

Reform of the Investor–State Dispute Mechanism

NAFTA contained provisions allowing an investor of one NAFTA party to submit to international arbitration claims that another NAFTA party (the host party)

Table 9-5. The Impact of Canada and Mexico Increasing De Minimis Thresholds

Model Results	Canada (dollars, millions)	Mexico (dollars, millions)
Current value of all e-commerce shipments	22,000	8,715
Current value of U.S. e-commerce shipments	7,260	2,527
Expected change in value of U.S. e-commerce shipments	332	91

Source: U.S. International Trade Commission.

had breached investment-related obligations in NAFTA and thereby harmed the investor or its investment in the territory of the host party. This arbitration mechanism, known as the Investor-State Dispute Settlement (ISDS), raised concerns about its effect on the ability of host state regulators to exercise their prerogative to regulate in the public interest. Under USMCA, the ISDS will no longer be available between the United States and Canada after June 30, 2023. Instead, investment-related claims by U.S. investors against Canada and by Canadian investors against the United States will need to be filed in local courts (USITC 2019).

For disputes between U.S. and Mexican investors, USMCA limits the scope of claims that can be submitted to ISDS, except where investors have certain government contracts in specific economic sectors. When such conditions are met, it is the view of the United States and Mexico that the risk of breach of investment-related obligations and consequent harm warrant maintaining the availability of ISDS. When these conditions are not met, aggrieved U.S. and Mexican investors must first attempt to resolve their disputes in domestic courts. Only if these efforts are unsuccessful after a period of 30 months may they have recourse to ISDS. The USITC estimates that these changes to ISDS for Mexico will reduce both domestic and foreign capital investment in Mexico by $2.9 billion (0.44 percent) while slightly increasing investment in the United States (USITC 2019).

Agricultural Provisions

Agricultural trade among member countries that was already duty-free under NAFTA will continue to be duty-free under USMCA. Moreover USMCA expands market access opportunities for U.S. dairy, poultry, and egg exports to Canada. Canada imposes tariff rate quotas (TRQs) on dairy products, which restrict the amount of dairy products it can import from other countries. Although Canada will be permitted to retain its TRQs, USMCA will boost exports of U.S. dairy products to Canada. Similarly, the agreement will preserve U.S. TRQs for sugar, while slightly increasing U.S. imports of sugar from Canada (USITC 2019). USMCA also provides a mechanism for biotechnology cooperation and fair treatment in quality grading for American wheat and nondiscrimination and transparency commitments regarding the sale and distribution of alcoholic beverages. In total, USMCA is expected to increase U.S. agricultural exports by $2.2 billion per year (1.1 percent) (USITC 2019).

Table 9-6. U.S. Employment Sector Effects of the United States–Mexico–Canada Agreement

Sector	Value (thousands)	Percent Increase over Five Years
Employment, overall	175.7	0.12
Agriculture	1.7	0.12
Manufacturing and mining	49.7	0.37
Services	124.3	0.09

Source: U.S. International Trade Commission.

Table 9-7. Effects of the United States–Mexico–Canada Agreement on U.S. Trade (percent changes relative to the baseline in 2017)

Aspect of Trade	Exports (percent)	Exports (dollars, billions)	Imports (percent)	Imports (dollars, billions)
U.S. trade with Canada	5.9	19.1	4.8	19.1
U.S. trade with Mexico	6.7	14.2	3.8	12.4

Source: U.S. International Trade Commission.

Trade Facilitation

Several USMCA provisions will improve "trade facilitation"—that is, the administrative procedures that enable traded goods to be processed quickly and efficiently at the border. USMCA changes the threshold below which goods are exempt from formal customs procedures (the de minimis threshold) for goods entering Canada and Mexico, while the United States will retain its current thresholds for imports from these countries (USITC 2019). This will help expedite the customs process for low- and moderate-value packages (i.e., with a value under $2,500), which will benefit U.S. e-commerce firms in particular by lowering processing costs. Other measures will boost trade facilitation for e-commerce firms, for example by permitting electronic authentication for transactions, e-signatures, and paperless trading. Altogether, these provisions will boost U.S. e-commerce exports by $424 million (USITC 2019).

Overall Economic Effects

USMCA will have a positive effect on many industries in the U.S. economy, creating jobs and increasing wages for U.S. workers in the agricultural, manufacturing, and services sectors. Over the next five years, USMCA will increase U.S. GDP by $68.2 billion (0.35 percent) and will create 176,000 jobs across a broad range of sectors, according to pre-COVID estimates by the USITC (table 9-6). It will also boost exports to and imports from USMCA partners by $64.8 billion (table 9-7).

Box 9-1. Bahrain's and the United Arab Emirates' Agreements with Israel

On September 15, 2020, the United States hosted representatives from Bahrain and the United Arab Emirates as they signed agreements to normalize relations with Israel. The President of the United Arab Emirates subsequently issued a decree stating that the United Arab Emirates' law requiring a boycott of Israel was repealed. Since the founding of Israel in 1948, the Arab League has maintained a boycott of the country. (The Arab League consists of 22 Middle Eastern and African countries and entities: Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, the Palestinian Authority, Qatar, Saudi Arabia, Somalia, Sudan, Syria (suspended since 2011), Tunisia, the United Arab Emirates, and Yemen.)

Due to the boycott, both Israel and the boycotting countries miss opportunities for increased trade relations. Before 2020, only two Arab states had normalized relations with Israel: Egypt (1979) and Jordan (1994). (There was also a secondary boycott of companies that did business with Israel. It ended with the Oslo Accords in 1993.) The Palestinian Authority also maintains relations with Israel. A literature review of the Arab boycott found that it imposed trade costs on Israel of roughly $1 billion a year (Anthony et al. 2015).

If trade between Israel and Bahrain and the United Arab Emirates grows in line with other countries that have normalized relations with Israel, it would increase by an estimated $537 million annually. In order to estimate the trade effect of Bahrain and the United Arab Emirates normalizing relations with Israel, we use the examples of Egypt and Jordan. In 2019, Israel imported $195 million worth of goods from Egypt and Jordan, and exported $209 million of goods to them. This is roughly 0.12 percent of Egypt and Jordan's combined GDP. The CEA estimates that if Israeli imports and exports to Bahrain and the United Arab Emirates increased to this same percentage of Bahrain's and the United Arab Emirates' GDP, annual Israeli imports and exports with them would increase to $258 million and $278 million, respectively. The vast majority of this increase will occur with the United Arab Emirates, as its economy is much larger than Bahrain's.

Other Trade Agreements

Beyond USMCA and the Phase One agreement, the Trump Administration has sought to improve the United States' terms of trade with other countries. In 2018, the United States renegotiated parts of its trade deal with South Korea to ensure fair trade for the U.S. auto industry. In 2019, the United States reached a "Stage One" trade agreement with Japan to reduce or eliminate tariffs on many U.S. food and agricultural goods exports, and then in 2020 opened talks with the United Kingdom to pursue a free trade agreement. In addition, the United

States hosted representatives from Bahrain and the United Arab Emirates as they signed agreements to normalize relations with Israel (see box 9-1).

U.S.–Japan Trade Agreements

On October 7, 2019, the United States and Japan signed a "Stage One" outcome from bilateral negotiations consisting of two individual agreements: the U.S.-Japan Trade Agreement (USJTA), and the U.S.-Japan Digital Trade Agreement (USTR 2019c, 2019d). The USJTA provides for Japan cutting or eliminating agricultural tariffs and quota restrictions for scores of U.S. products, such as beef and nuts, in return for limited cuts and the elimination of import tariffs on U.S. industrial and agricultural goods (CRS 2019; Schott 2019). Each side respectively agreed to remove or reduce restrictions on about $7.2 billion in imports ($14.4 billion total), covering roughly 5 percent of all trade between the countries (CRS 2019).

The Digital Trade Agreement covers $40 billion in digital trade, and negotiators modeled many of the provisions in the deal after those in the USMCA (USTR 2020e). The agreement ensures barrier-free data flows, prohibits data localization laws that mandate having domestic computing facilities, and prohibits arbitrary disclosures of imported source codes and algorithms. Other provisions include prohibitions on customs duties on electronic transmissions (CRS 2019).

Several topics were not included in negotiations and were left for a larger, future deal (CRS 2019). A key Japanese trade objective revolves around automobiles, Japan's top export to the United States. Japan hopes to reduce current U.S. tariffs on its auto exports, as was originally negotiated in the Trans-Pacific Partnership, and to ensure that new tariffs are not imposed (Goodman et al. 2019). Although Japan imposes no tariffs on U.S. auto exports, the United States maintains that nontariff barriers, such as certain testing protocols for automobiles, limit U.S. exports with the result that Japan's automotive exports to the U.S. are 23 times higher than its imports from the United States (USTR 2019a; CRS 2019). Consistent with recent practice, the United States will also seek provisions on exchange rate issues (USTR 2018b).

The U.S.–South Korea Free Trade Agreement

On September 24, 2018, the United States and South Korea signed an agreement to revise the U.S.–South Korea Free Trade Agreement (KORUS). The agreement mainly focuses on automobile trade, considering that the largest share of the $9 billion trade deficit that the U.S. has with South Korea is concentrated in the automobile sector (Tankersley 2018; Overby et al. 2020). For example, a key provision centers on U.S. auto exports to South Korea that adhere to U.S. safety regulations. Under the renegotiated agreement, South Korea's allowance for U.S. exports of automobiles meeting U.S. safety standards doubled, from 25,000 to 50,000 per manufacturer per year, allowing U.S.

exporters to ramp up sales and marketing for future exports and thus avoid concerns about reaching the 25,000 limit. The United States will maintain its 25 percent tariff on Korean trucks through 2041 (USTR 2018e).

Beyond automobiles, KORUS and accompanying side letters also address several other issues. These include updating certain trade remedy provisions and improving customs procedures in South Korea related to verification of U.S. origin, something that is necessary for U.S. exporters to claim tariff benefits under the agreement without unnecessary delays (CRS 2018; USTR 2018d).

Limited Trade Agreements with Brazil and Ecuador

On October 19, 2020, the United States and Brazil reached an agreement that focuses on trade rules and transparency, contributing to the elimination of nontariff barriers between the two countries. The deal will facilitate the processing of goods at the countries' borders, enhance regulatory transparency, promote good regulatory practices, and strengthen rules addressing corruption. Other trade issues are expected to be addressed in a more comprehensive agreement, including those related to IP and agricultural issues (CRS 2020b).

On December 8, 2020, the United States and Ecuador signed an agreement that builds on the U.S.-Ecuador Trade and Investment Council Agreement that has been in effect since 1990. Like the agreement with Brazil, the new agreement with Ecuador will promote bilateral trade by updating trade facilitation between the two countries, enhancing regulatory transparency, and strengthening anticorruption efforts. The new agreement also seeks to foster trade and investment opportunities for small and medium-sized enterprises in the two countries.

U.S.–U.K. Negotiations

The United Kingdom formally exited the European Union on January 31, 2020, but has remained in a "status quo" transition period through December 31, 2020 (Henley, Rankin, and O'Carroll 2020). Consequently, the U.K. began negotiating its own trade agreements in 2020, which could enter into force from January 1, 2021. In May 2020, the U.S. and the U.K. launched negotiations on a comprehensive free trade agreement and conducted intensive negotiations throughout 2020. The United States' objectives for the agreement are to reduce or eliminate market access barriers to U.S. industrial, agricultural, services, and digital products to the U.K., including regulatory differences that impede bilateral trade, and to deepen the already-extensive economic relationship between the U.S. and the U.K. to support employment and economic growth (USTR 2020f). Though the U.S. and the U.K. share the goal of an ambitious agreement, the U.K. has political sensitivities in areas such as agricultural market access and regulations governing product standards and food safety (Packard 2020).

Separately, after the transition period between the United Kingdom and the European Union ends on January 1, 2021, the U.K. will no longer be covered by existing EU agreements with other countries, including the United States. Therefore, the U.S. and the U.K. completed new bilateral agreements and mechanisms to ensure that there is no disruption to trade in certain products—such as wine, distilled spirits, and marine and telecommunications equipment—all of which are covered by existing U.S.-EU agreements (USTR 2020f). Finally, the United States and the United Kingdom have other bilateral trade differences, including the U.K.'s implementation of digital services taxes targeting U.S. multinational firms, unresolved World Trade Organization disputes on large civil aircraft that have resulted in retaliatory tariffs on both U.S. and U.K. exports to each other, and U.S. tariffs on steel and aluminum imports and the resulting EU (and U.K.) retaliatory tariffs (CEA 2019; Elliott and Mason 2020; Isaac 2020).

The Rise of Global Supply Chains

In early 2020, the global economic outlook changed dramatically as the coronavirus responsible for the COVID-19 spread first through china and then through much of the rest of the world. The COVID-19 pandemic disrupted economic activity everywhere it spread, as people restricted their movement to avoid health risks, and governments closed schools and nonessential businesses in order to mitigate the public health threat. Moreover, in an increasingly globalized economy, localized outbreaks of the virus created effects that rippled beyond local borders to the rest of the world. The emergence of global supply chains over the past decades meant, for example, that covid-19 disrupted production in auto assembly plants in north america even before the pandemic spread to the United States, as plants in North America assembled parts produced in wuhan, china. The risks posed by disease, natural disasters, and trade wars have caused firms and governments to rethink global supply chains and, in some cases, bring production closer to home (Schlesinger 2020).

China and the Emergence of Global Supply Chains

The past three decades have seen a rapid expansion of international trade, and in particular, the use of global supply chains, as firms in the United States and around the world have relocated production off shore to take advantage of lower costs of labor and other inputs. Global supply chains have allowed for specialization and net gains from trade, resulting in increased productivity and lower costs for consumers (Grossman and Rossi-Hansberg 2008). Firms seeking lower manufacturing costs often found them in China, with its large supply of labor and resulting low labor costs (Cui, Meng, and Lu 2018).

Although U.S. consumers and importing firms, as well as competitive exporters, have benefited from globalized supply chains, some recent

academic literature indicates that the establishment of Permanent Normal Trade Relations (PNTR) with China at the end of 2001 imposed steep costs on U.S. manufacturing employment and innovation (Pierce and Schott 2016; Autor, Dorn, and Hanson 2019). PNTR status meant that the United States extends permanently nondiscriminatory treatment to the products of China (GPO 2000). Import competition from countries with low labor costs including China has exacerbated a reduction in U.S. manufacturing employment, accounting for a quarter of the total decline in U.S. manufacturing employment between 1990 and 2007 and causing lower labor force participation, higher unemployment, and lower wages in affected communities (Autor, Dorn, and Hanson 2013). Abraham and Kearney (2020) find that import displacement after the establishment of PNTR with China was the single biggest factor in the decline of the overall U.S. employment-to-population rate after 1999, although automation also played a role.

Displaced American workers have struggled to transition to new opportunities, resulting in higher utilization of government safety net programs, including unemployment, disability, and healthcare benefits (Autor, Dorn, and Hanson 2013). The lack of valuable work reduced young males' marriage prospects, which was a factor in there being a greater share of single-headed households in communities affected by the China trade shock (Autor, Dorn, and Hanson 2019). Moreover, the worsening labor market conditions exacerbated socioeconomic distress, leading to substance abuse and increased mortality from drug overdoses, suicides, and liver diseases (Autor, Dorn, and Hanson 2019; Case and Deaton 2017; Pierce and Schott 2020).

U.S. Firms Begin to Hedge the Risks of Global Supply Chains

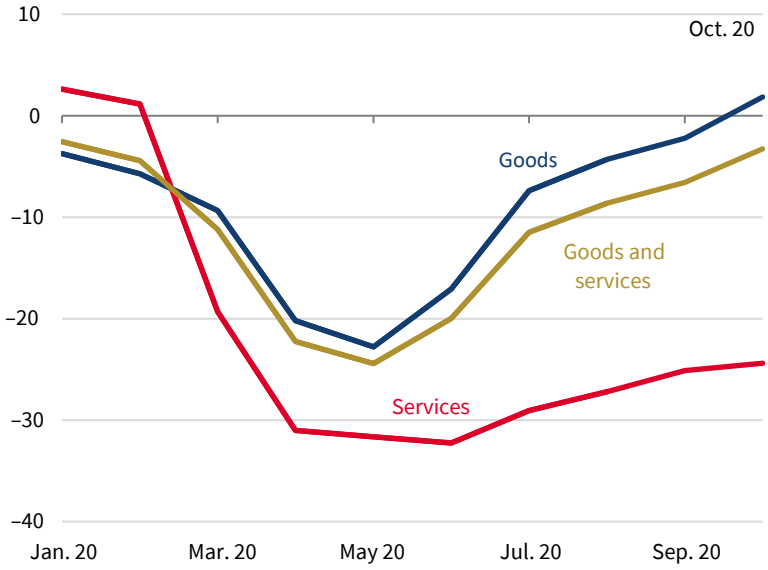
There are, however, some indications that the globalization of American supply chains has begun to partially reverse. First, the 2008 financial crisis was an unprecedented shock to the global economy, from which the expanding use of global supply chains has never quite recovered. The expansion of global supply chains, measured as a share of trade, slowed after the crisis and even reversed in 2015, the most recent year for which data are available, due to slowing economic growth and trade reforms (World Bank 2020). More recently, tensions between the United States and China and the global COVID-19 pandemic have brought into focus some of the risks of global supply chains, causing firms and governments to look for ways to reduce exposure to these risks (Lund et al. 2020).

The Trade Slowdown in Response to COVID-19

As the COVID-19 pandemic spread around the globe, it disrupted economic activity through private and public responses to quell its transmission. Real GDP for all the OECD countries fell 12.2 percent in the first half of 2020, while U.S. real GDP fell 10.2 percent (not at an annualized rate). Reductions in trade

Figure 9-1. U.S. Imports, 2020

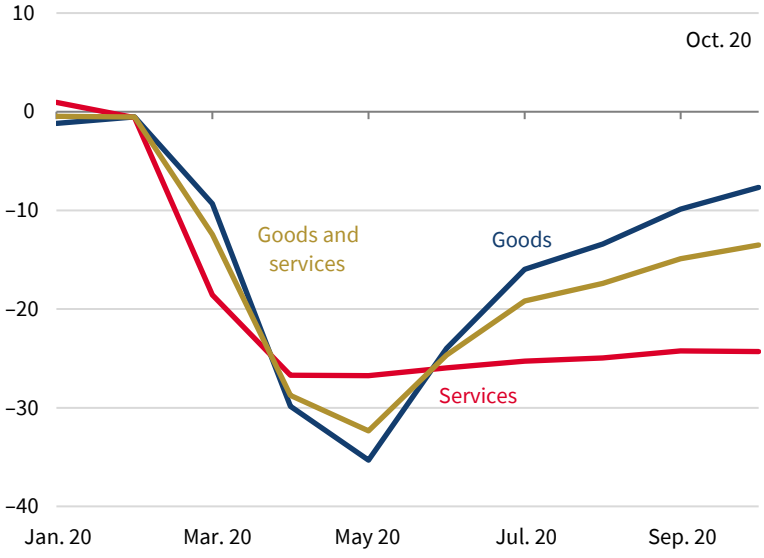
Year-over-year change (percent)



Sources: Census Bureau; CEA calculations.

Figure 9-2. U.S. Exports, 2020

Year-over-year change (percent)



Sources: Census Bureau; CEA calculations.

Table 9-8. Imports and Exports of Services by Sector, through September 2020

Sector	Imports		Exports	
	2020 Level (dollars, billions)	2020 Change from 2019 (percent)	2020 Level (dollars, billions)	2020 Change from 2019 (percent)
Travel	33.8	–69.8	67.1	–58.4
Transportation	58.7	–34.6	47.7	–37.2
Maintenance and repair services	4.7	–27.1	12.7	–44.7
Construction	0.8	–26.6	2.0	–28.1
Telecommunications, computers, and information services	30.5	–16.0	45.1	–2.1
Financial services	32.8	–2.4	113.0	0.2
Charges for use of intellectual property	35.9	0.7	95.3	–2.1
Government goods and services	20.5	2.4	19.2	3.3
Other business services	95.6	1.0	155.1	–1.7
Personal, cultural, and recreational services	19.8	13.3	15.1	–22.1
Insurance services	49.7	17.8	12.4	–10.4
Total	383.0	–21.8	584.5	–19.7

Sources: Census Bureau; CEA calculations.

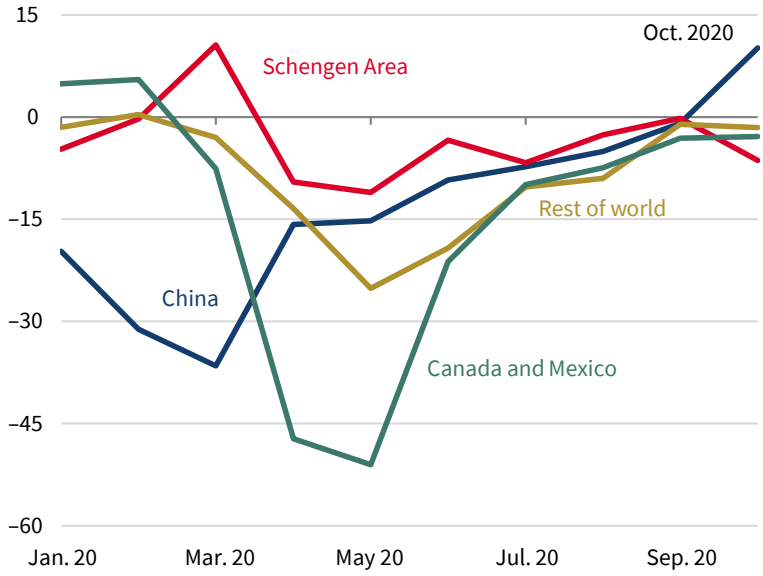
exacerbated declines in GDP. Global merchandise exports as reported by the World Trade Organization fell 14.0 percent in the first half of 2020 compared with the first half of 2019, and U.S. merchandise trade (exports plus imports) fell by 13.6 percent over the same period.

Total U.S. trade of goods and services (exports plus imports) through October was $645 billion (13.7 percent) below 2019 levels, with the second quarter falling $355 billion (25.1 percent). The drop in trade was largest in May, with imports down 24.4 percent year-over-year and exports down 32.3 percent (figures 9-1 and 9-2). Separating U.S. trade by goods and services reveals that the pandemic had a particularly large effect on trade in services. Moreover, though monthly trade in goods has shown signs of recovering, trade in services has remained over 20 percent below the previous year.

Trade in services, a major sector of the U.S. economy, was hit particularly hard by the international travel restrictions implemented by the United States and many other countries around the globe to prevent or slow the spread of COVID-19. The impact, however, has been concentrated in travel and transportation, with other service sectors seeing relatively lower declines in trade. On January 31, 2020, President Trump issued a travel ban for most non-U.S. citizens coming from China (White House 2020b). Then, on March 11, President Trump issued a travel ban for most non-U.S. citizens coming from the Schengen Area, which consists of 26 European countries with a common visa policy (White House 2020c). Also, effective March 14, the Centers for Disease

Figure 9-3. U.S. Imports of Goods Percent Change from Selected Countries, 2020

Year-over-year change (percent)



Sources: Census Bureau; CEA calculations.

Control and Prevention (CDC) issued a no sail order for all cruise ships (CDC 2020). International tourism and passenger travel services have taken the largest hit from COVID-19.

The effect of the travel restrictions and the private sector's response to COVID-19 is apparent when looking at the level of service trade broken down by the type of service. As discussed, the largest decreases are in travel and transportation services (table 9-8). Imports and exports of travel have fallen 69.8 percent and 58.4 percent, respectively, accounting for over two-thirds of the total drop in service trade. The European Union, much of which was covered by the Schengen ban, has seen the largest decline in service trade with the United States, with imports from the EU down 47.4 percent and exports to the EU down 37.8 percent in 2020 through September.

Through October 2020, imports of goods to the United States have decreased by 9.2 percent year-over-year. Most of the drop came in the second quarter, when nominal U.S. imports of goods fell by 20.0 percent. However, imports to the United States have fallen at different times for different countries (figure 9-3).

In the first quarter of 2020, imports from China plummeted reaching their lowest point in March at 36.5 percent below their March 2019 value. This quarter was also when COVID-19 was widely present in China, and China shut

down its economy to address the health crisis. By comparison, in March, U.S. imports of goods from the rest of the world were only 1.3 percent below their March 2019 value, indicating that the economic effect of COVID-19 was mainly concentrated in China but had begun spreading to other countries.

In the second quarter of 2020, U.S. imports of goods saw their steepest declines in total. In April and May, imports were down 23.4 percent compared with the same period a year earlier. This drop was primarily driven by a 48.0 percent drop in imports from Canada and Mexico. Imports from the Schengen Area and the rest of the world also dropped, while imports from China rebounded, although they remained below 2019 levels. This pattern of imports may be explained by the fact that China was reopening its economy in the second quarter, while many other countries, including the United States, were shutting theirs down beginning in March. As governments around the world imposed shelter-in-place orders shuttering many businesses, imports fell. Imports of goods began to rebound in June and July as governments lifted these orders.

The Decline in Imports of Intermediate Goods

As discussed above, the emergence of global supply chains has driven a dramatic increase in international trade in recent years. Global supply chains drive trade in intermediate goods, which are goods used in the production of finished goods. The COVID-19 pandemic has had a particularly disruptive effect on supply chains through its effects on trade in intermediate goods.

Because global supply chains intricately connect distant locations, localized shutdowns due to COVID-19 disrupted economic activity around the world through "supply chain contagion" (Baldwin and Tomiura 2020). On January 23, 2020, China closed the city of Wuhan, a major manufacturing hub in Hubei Province, and locked down additional cities shortly thereafter, leading to supply chain disruptions in the United States as Chinese businesses ceased production of intermediate goods intended for the U.S. (Xie 2020). Luo and Tsang (2020) use a network model to estimate that about 40 percent of the impact of the Hubei lockdown on global output occurred through the effect on supply chains both inside and outside China.

The pandemic's effect on supply chains can be seen by analyzing data on international trade flows. These data are segmented into categories of goods—consumption, capital, and intermediate goods—using the broad economic categories defined by UN Comtrade (2016). Consumption goods are finished goods that are durable (long lasting) or nondurable (one-time use) goods that are readily available to a consumer to purchase directly or through a retailer or wholesaler. Capital goods are durable goods used in the production of other goods. Finally, as discussed, intermediate goods are goods used as inputs in the production of finished goods, and accordingly are important for supply chains.

Table 9-9. U.S. Imports: Change from 2019 Levels for Selected Countries and Regions, by Type of Good, through October 2020

Country or Region	Capital		Consumption		Intermediate	
	Dollars (billions)	Percent	Dollars (billions)	Percent	Dollars (billions)	Percent
Canada	–3.2	–16.7	–0.8	–3.1	–27.0	-18.3
China	–11.1	–7.9	–18.9	–16.8	–14.9	-14.2
Mexico	–10.6	–11.5	0.3	0.7	–17.2	-14.8
Schengen Area	6.3	10.0	–7.7	–8.8	4.7	3.2
Rest of world	9.5	8.0	–4.6	–2.6	–39.6	-11.8
World	–9.0	–2.1	–31.7	–7.1	–94.0	-11.1

Sources: Census Bureau; CEA calculations.

As discussed above, early in 2020, imports of goods to the United States declined, primarily as a result of China's lockdowns. In April and May, as the pandemic spread and governments around the world adopted shelter-in-place orders, imports of goods slowed down more dramatically. Imports began to recover in June and July as governments lifted their shelter-in-place orders. However, while imports of consumption goods rebounded sharply in June, imports of intermediate goods remained at about 15 percent below 2019 levels. By October, imports of consumption goods were 3 percent above 2019 levels; however, imports of intermediate goods continued to lag behind, at 3 percent below 2019 levels.

Through October 2020, U.S. imports of intermediate goods from the world decreased 11.1 percent year-over-year, primarily driven by the declines in imports from Canada, Mexico, and China (table 9-9). Imports of consumption goods are down only $31.7 billion from 2019 levels, while intermediate goods are down $94.0 billion.

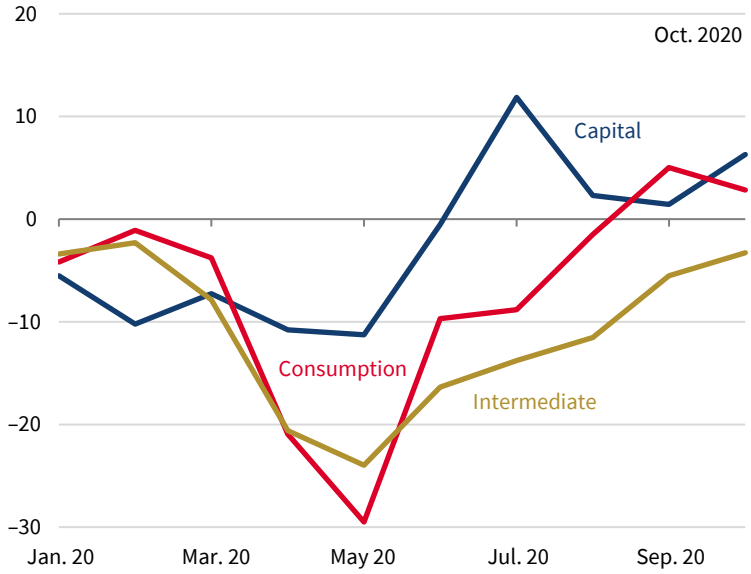
Imports of consumption goods may have rebounded faster than imports of intermediate goods because as governments lifted shelter-in-place orders, consumers were able to increase their spending faster than firms were able to ramp up their production. As production continues to rebound, it is not yet clear whether U.S. imports of intermediate goods will return to pre-pandemic levels, or whether some supply chains will relocate to the United States.

Evidence That Firms Are Reducing Their Exposure to China

With the COVID-19 pandemic and trade policy uncertainty highlighting risks in global supply chains, U.S. businesses are considering moving production away from China to either other Asian countries, closer to the U.S. (near-shoring), or back to the U.S. (reshoring). Although a lag in the data commonly used to measure global supply chains prevents the CEA from directly observing recent changes in supply chains, surveys can provide a leading indicator of firms'

Figure 9-4. U.S. Imports of Goods from the World by Type of Good, 2020

Year-over-year change (percent)



Sources: Census Bureau; CEA calculations.

plans to locate facilities. In the past year, several surveys have attempted to evaluate the extent to which firms in the United States and elsewhere plan to change supply chains through the relocation of production or the diversification of input sourcing.

In January 2020, before the full extent of the COVID-19 pandemic was known, the Bank of America surveyed analysts covering 3,000 firms ($67 trillion in market capitalization) across North America, Europe, the Asia-Pacific region (excluding China), and China, finding "clear evidence" of movement in global supply chains. Across 12 sectors, 80 percent of firms with global supply chains ($22 trillion in market capitalization) are expected to shift "at least a portion of their supply chains" from current locations. The report concludes that "the trend is clear: global supply chains are on course to be uprooted and brought home, or transplanted to strategic allies." In a July update, the Bank of America found that three quarters of that 80 percent were expanding their reshoring plans (Bank of America 2020a, 2020b).

A March UBS survey of chief financial officers (CFOs) in the U.S., North Asia, and China suggests that 20 to 30 percent of capacity represented by these executives will relocate from China (UBS 2020). If actuated, this would move between $500 billion and $750 billion in current Chinese exports out of China. A June 2020 UBS survey shows that, among U.S. firms with manufacturing in China, 76 percent have moved or are planning to move some of

their manufacturing capacity out of China. Leading candidate destinations for relocation are the United States, Canada, Japan, and Mexico.

Among North Asian (excluding Chinese) firms responding to the UBS survey, 85 percent of CFOs have moved or are planning to move capacity from China to home markets in Japan, Taiwan, and South Korea (UBS 2020). This represents over 30 percent of the Chinese production among the firms in the survey. The CFOs identified Vietnam, Thailand, and India as potential locations. Even Chinese firms have relocated or are planning to do so—60 percent of CFOs indicated that they would relocate a combined 30 percent of their Chinese production. Further, respondents reported plans to establish or expand supply chains closer to customers.

Among U.S. firms, 34 percent of CFOs reported that they had manufacturing in China, of whom 76 percent have moved or are planning to move capacity out of China. For those planning to move, they indicated that they would shift a combined 46 percent of their Chinese production. Plans to relocate are most common among healthcare firms (92 percent), consumer staples (89 percent), and technology (80 percent), followed by consumer discretionary (76 percent), industrials (69 percent), and materials (57 percent). The Bank of America (2020a) finds similar results for the Asia-Pacific region (excluding Chinese) firms. Half of the sectors have firms that have already moved or intend to move, largely to Southeast Asia and India. The survey finds that firms in 83 percent of U.S. sectors representing $3.8 trillion in market capitalization have already moved or are intending to do so.

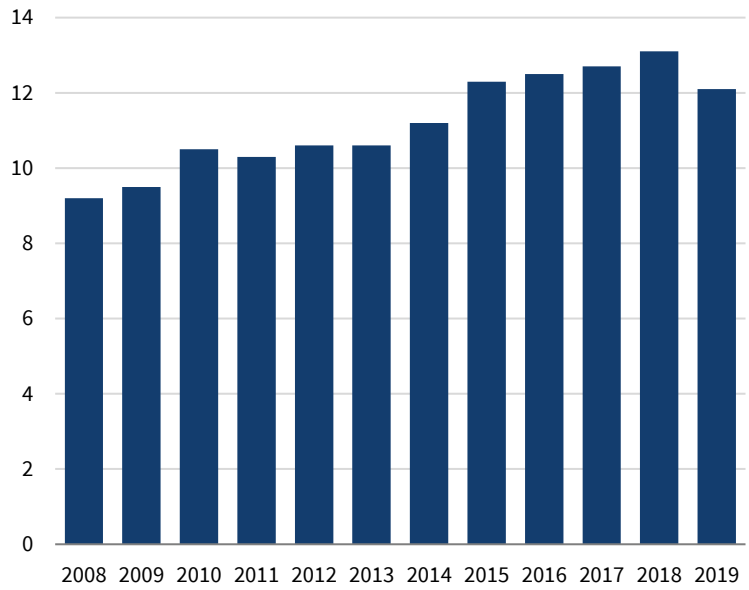
Recent data on manufactured imports from low-cost Asian producers support the survey evidence that firms are moving supply chains out of China. The management consulting company Kearney reports the ratio of the value of manufactured goods imported to the U.S. from 14 low-cost Asian countries relative to the value of U.S. domestic gross output of manufactured goods (Kearney 2020). A decline in this manufacturing import ratio does not necessarily indicate that production is reshoring to the U.S., but it does indicate substitution away from supply chains running through these 14 countries.

In 2019, the manufacturing import ratio fell for the first time since 2011 (figure 9-5). The decline, from 13.1 percent in 2018 to 12.1 percent in 2019, was driven by a 7 percent contraction in imports from the low-cost Asian countries (the numerator), with U.S. domestic gross output of manufactured goods (the denominator) essentially unchanged. The decline in imports was led by a 17 percent contraction in trade with China. Whereas 65 percent of goods imported from the 14 Asian low-cost countries came from China in 2018:Q4, only 56 percent did so as of 2019:Q4. Though transshipment, where goods are altered slightly to change their originating status, is likely a partial factor, this cannot explain the entirety of the shift.

Another Kearney measure, the "near-to-far" ratio, measures the value of U.S. imports from Mexico divided by the value of imports from the same

Figure 9-5. U.S. Manufacturing Import Ratio, 2008–19

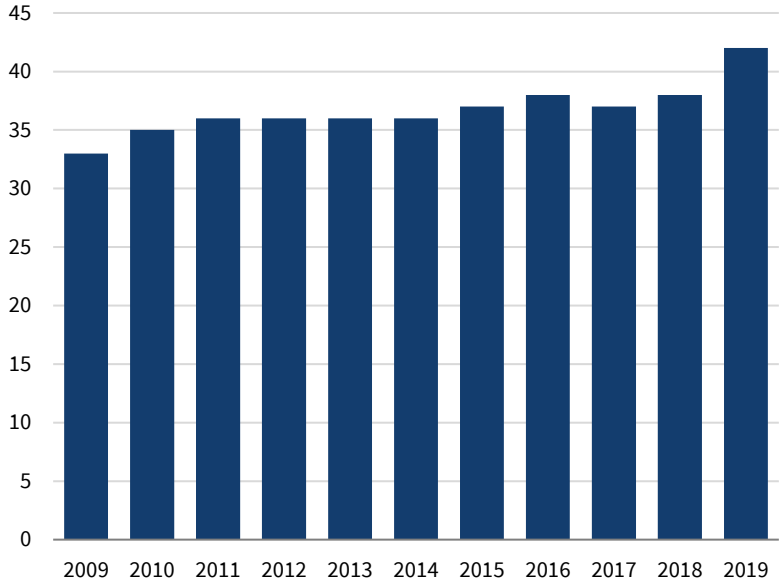
Ratio (percent)



Sources: USITC; Bureau of Economic Analysis; Kearney (2020).

Figure 9-6. U.S. Near-to-far Ratio, 2009–19

Percent (imports from Mexico / imports from Asian low-cost countries)



Sources: USITC; Bureau of Economic Analysis; Kearney (2020).

14 Asian low-cost countries. An increase in the ratio indicates greater near-sourcing from Mexico relative to Asia (figure 9-6). Much like the reshoring index, the near-to-far ratio jumped in 2019 as U.S. importers substituted away from Asia and toward imports from Mexico.

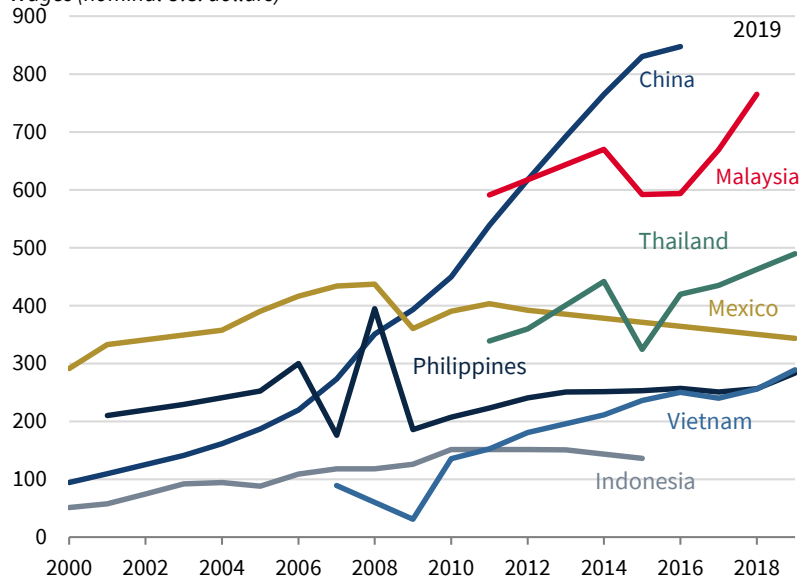
Drivers of Shifting Supply Chains

Although no single factor is responsible for global supply chain dynamics, the confluence of higher wages in China, technology and automation, trade policy tensions and tariffs, and the COVID-19 pandemic have all been factors in a change in how firms evaluate supply chains. In this section, we briefly discuss these factors and interactions between them.

Wages in China have risen relative to many other countries in recent years. In the 1970s, observers noted the seemingly "unlimited" labor supply in China as workers migrated from rural China to urban areas (Cui, Meng, and Lu 2018). Whereas 80 percent of the population lived in rural areas in the 1970s, the rural share of the population had shrunk to 43.9 percent by 2015. Owing partially to China's "one child" policy, China's population is aging, exacerbating a restriction in labor supply now and in the future. The resulting rising wages are eroding Chinese cost competitiveness (figure 9-7) and incentivizing firms to consider manufacturing in Southeast Asia or closer to home with

Figure 9-7. Average Monthly Nominal Wages in U.S. Dollars, 2000–2019

Wages (nominal U.S. dollars)



Source: International Labor Organization.

greater automation. Higher Chinese wages in comparison with other manufacturing centers persist, even when controlling for productivity.

Businesses are also increasingly aware of growing geopolitical tension between the U.S. and China. Even if the U.S. and China remove tariffs in the short term, businesses are adjusting for long-term tensions. COVID-19 has compounded these concerns, as firms recognize the need to increase resiliency. As firms consider moving out of China, they may look to automation to make up differences in labor productivity or to offset wage costs from relocating supply chains to countries with higher wages. The Bank of America estimates that by 2025, global robot installations will increase by 2.5 million, doubling 2019 levels (Bank of America 2020a).

U.S. tariffs on Chinese goods have been factors in the relocation of supply chains. In addition to tariffs, businesses are also aware of the broader geopolitical context of the U.S.-China relationship, and believe that regardless of near-term tariff policy, the two countries will face frictions. For this reason, Bank of America analysts cite both tariffs and national security as primary reasons for anticipated reconfigurations of global supply chains, with U.S.-China tariffs expected to persist regardless of the Phase One trade deal (Bank of America 2020b). Since the Bank of America published its survey, the COVID-19 pandemic appears to have further exacerbated U.S.-China tensions. As evidence of the role of national security concerns in driving supply chain relocation, Intel and TSMC (manufacturers of computer chips) have located plants in the United States, despite higher labor and capital costs (Wu 2020).

Conclusion

The Trump Administration has reasserted U.S. interests in international trade policy by forging new bilateral trade agreements with China and Japan, renegotiating the U.S. trade deal with South Korea, and reshaping regional trade by modernizing the United States' trade agreement with its most important trading partners, Canada and Mexico. The Phase One Agreement with China, when fully implemented, promises to achieve an unprecedented expansion of U.S. exports to China, and commits China to internal reforms that will make the country an improved trading partner for the United States. USMCA achieves new protections for U.S. interests across a range of areas, including digital services, intellectual property, and labor. These agreements go well beyond the lower tariffs that have been the focus of past trade agreements by addressing structural and technical barriers to free and fair trade. Along with progress on other trade agreements, these two major milestones will continue to drive U.S. economic growth and create American jobs.

The COVID-19 pandemic reduced overall international trade and has brought into sharp focus some risks of existing global supply chain configurations that previously may not have been fully priced in. These supply chains

have the potential to tap into countries' comparative advantages to create mutual gains from trade. But global supply chains are susceptible to disruptions from pandemics, along with natural disasters and geopolitical tensions. As the private sector considers the relocation of supply chains, governments must weigh the benefits for some consumers and firms against the emerging understanding of the full costs to sectors facing import competition, as well as the costs associated with the risks of supply chain disruption.