

Chapter 7

Strengthening America's Industrial Supply Chains

Although industrial processes have relied on complex supply chains for some time, recent disruptions that have threatened entire economies have substantially increased supply chains' prominence to businesses and policymakers. The COVID-19 pandemic exposed the fragility of global supply chains and demonstrated that, in times of need, critical supplies produced elsewhere may not be available to Americans. Worryingly, some countries have used their dominant position in upstream supply chains to disrupt downstream production throughout the world. Fortunately, businesses, researchers, and governments are taking proactive steps to better understand supply chains and their attendant risks, and to improve them. Securing its supply chains will be key to fulfilling America's next golden age of industrial production.

The Trump Administration has taken steps to recognize and address supply chain risks to American security. Through trade policy, bilateral negotiations, and investigations of national security risks, the Administration has substantively enhanced the competitiveness of American manufacturing as well as helped to secure domestic sourcing of critical inputs. Complementing these actions, fiscal policies, such as those in the One Big Beautiful Bill Act (OBBBA), spur the expansion of American research and investment to support the reshoring of American supply chains. Meanwhile, executive offices are also using the power of Federal procurement to support America's manufacturing capacity by providing anchor demand for nascent industries.

This chapter first details vulnerabilities embedded within modern supply chains. Next, it describes key barriers to improving supply chain resilience. Finally, it

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summarizes prominent actions taken during the first year of the second Trump Administration to strengthen America's supply chains.

The Problem: Supply Chain Risks

Comprehensive assessments of supply chain vulnerabilities and their aggregate implications are being impeded by two factors: first, limitations in granular, industry-specific data; and second, the relatively nascent theoretical literature available to study them. In particular, "despite the growing recognition of the importance of resilient supply chains, a systematic investigation of macroeconomic consequences of supply chain disruptions has remained largely elusive" (Acemoglu and Tahbaz-Salehi 2025, 680).

Technological advances have considerably expanded the breadth of products available to consumers, and this breadth often goes hand-in-hand with increased complexity of production. For example, the typical passenger car today contains about 30,000 components (Wakelin 2021), a twofold to fivefold increase from three decades ago (McAlinden and Smith 1993). At the same time, production processes have become increasingly multinational: in 2022, about 42 percent of the United States' trade derived from products shipped across multiple borders, about 5 percentage points more than in 2007 (Research Institute for Global Value Chains 2023). This refinement of inputs and expansion in sourcing reflect more sophisticated supply chains. Even as these supply chain advances have created novel opportunities and numerous benefits for the United States, they also reflect complexity that can embody considerable risk.

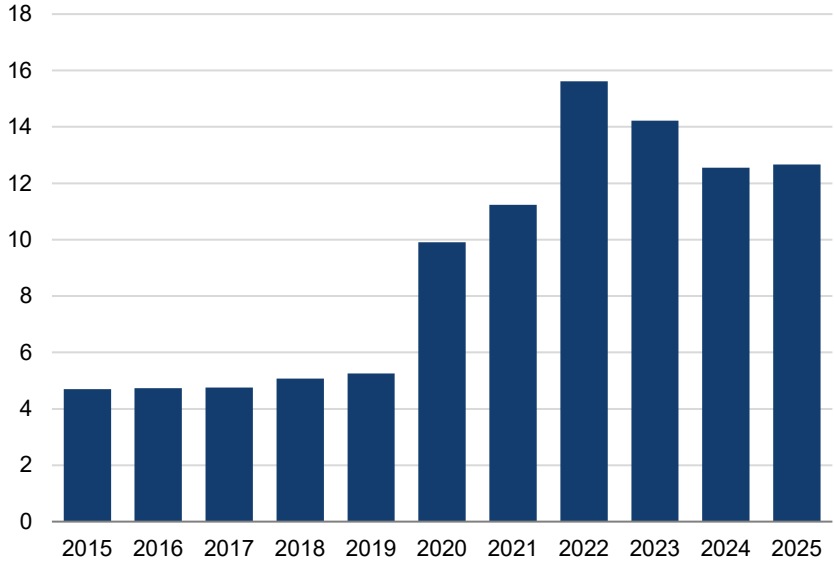
Public awareness of supply chain risks increased during the extraordinary events stemming from the COVID-19 pandemic. Lockdowns throughout the world, disruptions to logistics, and exceptional shifts in demand all coincided to exert extreme pressure on producers, including those of critical goods, such as personal protective equipment (Cecire et al. 2020). At the time, Federal actions, such as the use of the Defense Production Act (DPA), helped alleviate disruptions and enabled businesses to expand production faster than they could have on their own (U.S. Government Accountability Office 2021).

In subsequent years, many businesses recognized the benefits of taking more proactive measures to manage their supply chains, mitigate risks, and enhance resilience vis-à-vis disruptions. One illustration of businesses' increased focus on their supply chains is shown in figure 7-1: the number of major filings from publicly traded firms in the United States that mention "supply chain" has more than doubled from prepandemic levels, on an annual basis.

Since the COVID-19 pandemic, many businesses have increased their understanding of their supply chains, expanded their stockpiles, and engaged in

Figure 7-1. Number of Publicly Traded Firms in the United States That Mention "Supply Chain"

Thousands of SEC filings (10-K and 10-Q forms)



Source: SEC (Securities and Exchange Commission).

research and development to reduce their reliance on linchpin inputs. While these actions have considerably improved supply chain resilience, critical vulnerabilities persist. Such vulnerabilities were prominently highlighted in April 2025, when China abruptly implemented an export licensing system for certain rare earth elements (REEs) and derivative products. REEs have unique properties, making them exceptionally well suited for a vast range of uses, including consumer electronics, automobiles, and the defense industry. Because China accounts for nearly all the mining, processing, and refining of REEs globally, its export controls were enough to cause factory shutdowns around the world within weeks of implementation, including in the United States (McLain and Felton 2025).

At the time of this writing, the full aftermath of China's REE export licensing continues to evolve. Yet the Trump Administration has already taken multiple actions to ensure sustained access to REEs for American businesses. The Administration's actions to strengthen the U.S. critical minerals industry (National Archives 2025a) and secure pharmaceutical precursors (White House 2025a) have helped solidify cooperation with partners and allies to deter such disruptions from occurring again (White House 2025b) while simultaneously expanding sourcing, both domestically and abroad, to reduce dependencies on any one source (White House 2025c, 2025d).

While events such as pandemics and export controls on critical inputs have historically been uncommon, they are not the only sources of supply chain risk. Even as "it is tempting to think of supply chain disruptions as rare events, . . . the large number of possible disruption causes, coupled with the vast scale of modern supply chains, makes the likelihood that some disruption will strike a given supply chain in a given year quite high" (Snyder et al. 2016, 89, cited by Elliott, Golub, and Leduc 2022). According to a McKinsey Global Institute survey of experts in the aerospace, automobile, computer and electronic, and pharmaceutical sectors, even before the COVID-19 pandemic, these industries experienced supply chain disruptions lasting 1–2 months once every 3.7 years on average, with longer disruptions taking place once every 4.9 years (Lund et al. 2020). Such disruptions can have material consequences for affected firms' balance sheets: Lund and colleagues (2020, 6) estimate that "adjusted for the probability and frequency of disruptions, companies can expect to lose more than 40 percent of a year's profits every decade on average . . . [and] a single severe event that disrupts production for 100 days—something that happens every five to seven years on average—could erase almost a year's earnings in some industries."

The interconnectedness of modern supply chains can lead to the broad propagation of shocks. For example, local economic disruptions after a major earthquake in Japan in 2011 led to persistent declines in production of affiliated U.S. companies, due to their reliance on imported inputs (Boehm, Flaaen, and Pandalai-Nayar 2019). When a supplier is hit by a natural disaster, both the supplier's customers and its customers' *other* suppliers face disruptions to production (Barrot and Sauvagnat 2016). Such cross-firm propagation of supply chain disruptions can also have substantive aggregate effects: national economic dynamics are weighed down by both domestic and international delays in production, as well as delays to shipping (Alessandria et al. 2023). Interconnectedness can be particularly disruptive in the United States, since certain domestic sectors have outsized importance as intermediate suppliers, contributing to the propagation of sector-specific shocks throughout the economy (Acemoglu et al. 2012).

Conversely, modern-day supply chains are not solely sources of downside risk. Baqaee and colleagues (2025) find that supply chain dynamics can be a key contributor to aggregate productivity growth. Supply chains can also *dampen* the propagation of certain shocks. For example, structural changes in economic networks may have contributed to the United States' Great Moderation, the period starting in the 1990s when macroeconomic volatility subsided (Acemoglu, Ozdaglar, and Tahbaz-Salehi 2017). Acemoglu and Tahbaz-Salehi (2025) find that greater fragmentation of supply chains can boost aggregate output in general, though it can also amplify aggregate vulnerability to tail risks. MacDuffie, Fujimoto, and Heller (2021) argue for a reframing of supply chain management strategies, shifting away from an efficiency-versus-resilience

paradigm to one that seeks to ensure that supply chains are sufficiently agile and protected to promote both competitiveness in normal times and continuity in the face of disruptions.

Framing the Problem: Barriers to Resilient Supply Chains

Disruptions to supply chains can originate from many sources. Some of these are natural, such as fires, weather, and earthquakes. Other disruptions have human origins, some unintended, as with a foreign economic downturn, and others are deliberate, such as when governments weaponize key industries in pursuit of economic or noneconomic objectives. The sources of disruption complicate the problem for firms and governments managing supply chain risks.

This section describes various barriers firms face when trying to mitigate their supply chain risks. A key barrier is opportunity cost: many efforts to improve supply chain resilience require resources (e.g., financing and labor), and businesses face trade-offs in allocating scarce resources. Information gaps can play a critical role, too, particularly for processes relying on inputs that themselves depend on extensive supply chains and for those that rely on multiple inputs. Additionally, the interconnectedness of firms' supply chains generates externalities: private market forces on their own underprice the value of resilient supply chains, as individual firms do not account for the spillover benefits to their upstream sources and downstream customers. Amid all these forces arising in competitive markets, supply chain risks can also be amplified by noncompetitive practices that distort market signals and skew firms' incentives.

A Stylized Example

Consider a stylized example: an island with only one gas station. The gas station relies on a single ship to transport gasoline from the mainland. If that ship needs unexpected repairs for a prolonged period of time, the gas station's reserves will start running low, reducing the island's supply of gasoline. Market forces will start to push the price of gasoline higher in order to bring demand in line with supply. The higher gasoline price partially mitigates the lost volume of business to the gas station, but the customers are worse off, as they buy less gasoline at higher prices. Additionally, the disruption can propagate throughout the island economy if downstream sectors, such as transportation, have to curtail their activities, in turn affecting a broader range of firms further downstream.

Recognizing this risk, the gas station could take several preemptive actions to avoid such outcomes. For example, the station could hold larger inventories of gasoline or diversify its logistics network, either of which can incur costs during normal times. Yet market forces may not suffice to ensure that the station reduces its supply chain risk. Immediately after a disruption, its profits

are partially insured by its ability to charge a higher sales price. And, as with any business, the station owner faces trade-offs in how to invest its resources. Diversifying its supply chain requires increased time devoted to logistics, and smaller orders split across multiple suppliers may reduce the station's market power, pushing up the price it has to pay.

The benefit to the firm of ensuring supply chain resilience only accrues in the event of a disruption; during normal times, resilience is costly. Firms that ignore supply chain risk can charge lower prices during normal times, allowing these firms' market share to grow, and forcing out more prudent enterprises. Investing more in supply chain resilience also means investing less in other areas, such as workforce development and research and development.

The example of the island gas station illustrates problems that must be overcome in a market economy. First, firms' decisions on supply chain resilience do not reflect all the benefits of their actions. These benefits are positive externalities and suggest that market forces will provide inadequate incentives for firms to optimally mitigate risk. Many mitigation strategies for supply chain resilience are like other forms of insurance, which are often underprovisioned (O'Hara and Shaw 1990, Kunreuther, Pauly, and McMorrow 2013). The positive externalities from addressing supply chain risk provide an opportunity for government intervention to lead to more socially optimal outcomes.

Second, information gaps (Allen 2014; Bernard, Moxnes, and Saito 2019) can be costly for firms to overcome, requiring time for firms to find new suppliers when supply chain disruptions occur. A recent survey of global supply chain leaders found that while 95 percent of businesses have visibility into supplier risks of at least the tier-one level; just 42 percent had such visibility into at least the tier-two level (Foster, Huy-Dat, and Trautwein 2025).[1] Even among the businesses with tier-two visibility, fewer than half have direct contact with them on a regular basis. Barriers to increased engagement include resource constraints and privacy concerns among some tier-one suppliers (Foster, Huy-Dat, and Trautwein 2025).

Government policy must also account for the third problem: resilience has an opportunity cost that must be paid by society, and whose benefits primarily accrue only in the case of a disruption. Together, these three problems call for careful policy responses that address market failures while also navigating the trade-offs between the benefits and costs of different strategies to address supply chain risk.

[1] Tiers" in supply chains refer to the number of degrees removed between a company and an intermediate supplier. A company directly purchases from tier-one suppliers, while a tier-two supplier sells to a tier-one supplier.

Opportunity Cost

It is rarely possible to fully eliminate risk from supply chains, and firms may optimally trade off higher risk exposure in exchange for benefits in other dimensions. For example, production often exhibits economies of scale, in which increasing the quantity of output reduces the per-unit cost of a good. All else remaining equal, in the presence of economies of scale, firms can increase their profits by concentrating production at one location.

Similarly, regions can exhibit agglomeration effects, in which local clusters of firms engaging in similar work benefit from their mutual proximity, such as through faster dissemination of best practices and increased access to skilled labor. Particularly when both economies of scale and agglomeration effects are present, classic economic theory posits that society is better off when production is concentrated in the localities with the comparative advantage (Ricardo 1817). Yet, as the island gas station example illustrates, such concentration can present risks, which may offset some of the benefits of solely relying on those locations with comparative advantage.

Numerous studies have highlighted the trade-offs that can arise between investments in resilience and efficiency (Ivanov, Sokolov, and Dolgui 2014; Katsaliaki, Galetsi, and Kumar 2021). For example, some firms may seek to reduce their reliance on single-sourcing by switching to generic parts (Sheffi 2005; Sáenz and Revilla 2014). However, using generic parts limits opportunities for the customization and innovation that can be achieved through collaboration and long-lasting relationships with suppliers (Fujimoto et al. 2019), and closely integrated relationships can also support faster recoveries to certain disruptions (Alfaro and Chen 2012). Additionally, some risks entail highly consequential but also highly unlikely outcomes; efforts to mitigate such tail risks might impede firms' ability to address course-of-business concerns, which can arise in all states of the world. MacDuffie, Fujimoto, and Heller (2021, 6) argue that "supply chains in competition-intensive industries should not take any anti-disaster measures that seriously sacrifice their competitiveness." As essential as functioning supply chains are for businesses, opportunity costs can reflect material deterrents for investments in resilience.

The Problem of Incomplete Information

The length and breadth of modern supply chains pose challenges for firms' ability to fully understand where their inputs come from. For example, in the aftermath of a major earthquake in Japan in 2011, the multinational automobile manufacturer Toyota embarked on an extensive review of its supply chain, including the sources for its suppliers (McLain 2021). Even after moving as many as 10 layers upstream and covering more than 400,000 items, the project was not completed (Elliott, Golub, and Leduc 2022). Incomplete information is also a problem for critical components. In a representative survey of U.S. suppliers

and end users of legacy semiconductors in 2024, nearly half (44 percent) did not know whether their products contained chips manufactured in China (Bureau of Industry and Security 2024). Given geography's significant influence on exposure to certain types of supply chain risks, such as those related to physical shipment, such information gaps can undermine firms' assessments of their vulnerabilities and resilience.

Beyond the sheer complexity that can be involved in mapping out supply chains, firms face impediments from the competing incentives that upstream suppliers have for divulging information about their capacity and own supply chains. For example, the increased transparency of a supplier's inputs could enable its customer to better distinguish between that supplier's production costs and mark-up, enhancing the customer's bargaining power. Similarly, while excess capacity can help an upstream supplier mitigate disruptions to its plants or accommodate surges in demand, it can also indicate the upstream suppliers' dependency on the downstream customer for sales. The customer firm, in turn, could leverage its dependency to negotiate for more favorable contracts. Such downside risks to their bargaining power have led many upstream suppliers to treat their own supply chains as trade secrets; Toyota encountered similar dynamics when trying to map out its full supply chain (McLain 2021).

Externalities

Efforts to mitigate supply chain risks can yield considerable positive externalities. For example, when a firm diversifies its sourcing, its own business activities are less susceptible to idiosyncratic disruptions from any individual supplier.[2] The firm's customers, in turn, can benefit as well, as their access to the firm's product becomes more reliable. Moreover, the firms' other suppliers can also benefit from more sustained, predictable demand.

Even as the ramifications of supply chain vulnerabilities have become highly salient since the COVID-19 pandemic, the academic literature has relatively few studies on the externalities stemming from these vulnerabilities and how policy should address them (Antràs and Chor 2022; Grossman, Helpman, and Lhuillier 2023; Grossman, Helpman, and Sabal 2024). One recent exception is Grossman, Helpman, and Lhuillier (2023), who assess externalities stemming from the multinational nature of modern supply chains. Their theoretical framework comprises two tiers of production, in which a single input is used to generate differentiated consumable goods. Downstream producers choose whether to source the input domestically or from abroad (locality) and whether to rely on multiple sources (resilience), each presenting a trade-off between greater resilience and costly redundancy. Grossman, Helpman, and Lhuillier (2023)

[2] As with most other strategies, relying on multiple sources also entails trade-offs. E.g., the firm may need to spend more effort to ensure standardization across sources, or to coordinate transitions to newer designs or production practices.

find that separate policies are needed to address externalities stemming from resilience (i.e., the number of sources) and locality (i.e., the reliance on sources domestic or abroad), with locality policy varying with the relative cost and risk of domestic sources.

In complementary work, Grossman, Helpman, and Sabal (2024) study a multitier environment in which midstream firms rely on multiple inputs and multiple customers, and can manage risks to both their own productive capacity and to the reliability of their sourcing through investments. In this setting, government policy addresses externalities stemming from (1) variation in firms' bargaining power with their upstream and downstream counterparts, (2) spillover effects from investments in firms' own productive resilience, and (3) spillover effects from firms' investments in relationships with suppliers. When policy takes the form of investment subsidies for production resilience and network formation, subsidies vary with each firm's location in the supply chain: subsidies are larger for producers that are more upstream, as the benefits from their resilience endogenously propagate to downstream producers.

Noncompetitive Practices

Market-distorting practices by individual companies, oligopolies, or countries can lead to firms making second-best decisions that increase their supply chain risk by affecting the prices and varieties of available products. For example, firms that engage in dumping—flooding markets with below-cost sales to chase competitors out of the market and increase market share—distort activity both in their specific market and also in downstream ones. While downstream producers may benefit in the short run by the access to cheaper inputs, in the long run they face increased risks due to the limited choice in suppliers.

For example, if dumping firms are geographically concentrated, downstream businesses may find it optimal to increase their exposure to concentration risk because alternate sources are either relatively expensive or nonexistent. Particularly in low-margin industries, even downstream firms that are aware of the additional risks they are taking on may be constrained in their actions, as switching to higher-cost sources would erode their profits during normal times and undermine their ability to attract customers and continue to operate. The consequences of noncompetitive practices do not solely affect downstream firms; entry into markets by new or existing firms can also be discouraged by dumping. When dumping pushes down prices, otherwise profitable investments are no longer viable (OECD 2025). Such practices can deter the reshoring of particular industries, if not addressed.

A notable focus of the recent literature is on the ways in which major countries might leverage their economic influence to advance their foreign policy goals, also known as geoeconomics, which can deliberately target or indirectly influence multinational supply chains (Clayton, Maggiori, and Schreger 2024;

Liu and Yang 2025). Leaving aside broader considerations surrounding geoeconomics that fall outside the scope of this chapter, government actions that curb anticompetitive practices can improve both businesses' resource allocation and supply chain resilience.

The Solution: The Trump Administration's Actions to Strengthen Supply Chains

The previous section emphasized that opportunity costs, imperfect information, externalities, and noncompetitive practices prevent firms from internalizing the full economic cost of supply chain disruptions, unless these factors are addressed. Consistent with the findings of Grossman, Helpman, and Lhuillier (2023) and Grossman, Helpman, and Sabal (2024), public policy can intervene positively to boost critical supply chain resilience and should harness private incentives to act rather than risk duplicating or undermining them.

Public action should prioritize instances where the positive externalities to resilience are largest, which will typically arise when the good in question has limited substitutes. Limited substitutability may reflect key inputs into multiple supply chains (e.g., rare earth elements), or may be final products of critical importance (e.g., antibiotics). In certain cases, a broad group of goods may be critical collectively, while individual products within that group are substitutable. For example, adequate access to food is essential for life, but the criticality of any particular food product is attenuated by the presence of alternative sources (e.g., wheat and rice). Efforts to identify critical elements of supply chains without accounting for substitutes and other cross-product interactions risk succumbing to the "strategic materials fallacy:" overlooking economic dynamism can distort assessments of which supply chain vulnerabilities are the highest priority and, at times, whether perceived vulnerabilities actually pose material risks (Førland 1991).

The Trump Administration has begun addressing supply chain vulnerabilities using various policy tools. At the macroeconomic level, actions to reduce excessive regulation and accelerate permitting reform promote the more-efficient deployment of capital and can increase firms' ability to build new production capacity. These regulatory and permitting reforms complement fiscal policies in the OBBBA, which allow full, immediate expensing of manufacturing plants and similar properties, business equipment, and domestic research and experimental expenses (U.S. Congress 2025). As discussed in chapter 1 of this *Report*, the Council of Economic Advisers estimates that these policies will boost the level of real business investment in the United States by 6.7 to 9.7 percent over the four years after OBBA's passage, relative to a counterfactual in which OBBBA was not passed. The increased scale of domestic manufacturing capacity should support a broad-based improvement in supply chain resilience.

Moreover, increases in innovation spurred by the tax incentives for domestic research and experimental expenses should enhance product variation and reduce the criticality of any individual product in industrial supply chains. These policies are quite broad in scope, providing support for whichever industries happen to be growing the most in the coming years.

To complement its domestic actions, the Trump Administration has taken multiple steps to reduce distortions caused by policies abroad. For example, through September, the United States has initiated 47 antidumping investigations in 2025 (International Trade Administration n.d.) and 12 Section 232 investigations evaluating the effect of imports on national security (Bureau of Industry and Security n.d.). Additionally, the ongoing trade negotiations spurred by the Trump Administration's reciprocal tariffs are actively targeting nontariff barriers to trade, which often distort cross-border trade flows as well as firms' decisions on where to source and produce. Alleviating these barriers can spur exports, reduce the cost of forming new trade relationships, and increase access to input sources domestically, which all lead to more resilient supply chains. For example, the U.S.-European Union Framework Agreement calls for the removal of a range of nontariff barriers to industrial, agricultural, and digital exports from the United States, as well as a reduction in tariff and quota barriers, to expand market access for U.S. exporters (White House 2025b). In tandem with removing nontariff barriers to trade, efforts by the Administration to combat illegal goods transshipment, such as the additional 40 percent tariff under Executive Order 14326 (National Archives 2025b), support increased transparency in multinational supply chains, helping firms make better-informed decisions on their sourcing. Collectively, the Administration's domestic and international efforts to reduce economic distortions can further enable firms to take proactive steps to mitigate their own supply risks.

In addition, the Trump Administration recognizes that strategic government interventions are needed to address the negative externalities caused by supply chain vulnerabilities. In these cases, the Administration has deployed a range of tools to address specific issues, including public-private partnerships and executive actions.

Public-Private Partnerships

The Trump Administration has engaged in public-private partnerships to support supply chain diversity and resilience. Many of these engagements seek to expand the number of available sources and technologies available to producers. For example, in July 2025 the Department of War entered into a public-private partnership with MP Materials, a U.S. company involved in the mining, processing, and developing of rare earth minerals (MP Materials 2025). Through this partnership, the department is providing upfront capital as well as a long-lasting price floor on MP Materials' sales. This combination of funding and future

stability will help MP Materials expand its capacity, including the construction of a new billion-dollar manufacturing facility for magnets. The new facility is slated to boost the company's total U.S. rare earth magnet manufacturing capacity to 10,000 metric tons upon completion, substantially expanding sourcing available from the United States for both commercial and defense customers. Through such capacity-expanding ventures, the Trump Administration is reducing supply chain vulnerabilities for critical inputs.

Another key way in which the U.S. government leverages public-private partnerships is through financial agreements to support the research, development, and deployment of novel technologies. For example, the Trump Administration has already taken actions in numerous industries, ranging from critical minerals to data center infrastructure and semiconductors to nuclear energy, to foster innovation and support efforts to scale production (U.S. Department of Energy 2025; National Archives 2025c, 2025d). Expansions in the range of technologies and producers in key sectors can help support supply chain resilience by offering downstream producers more flexibility in the event their primary sources are disrupted. The benefits of such diversity are particularly pronounced for bottleneck goods such as semiconductors and for goods like pharmaceuticals that are critical to well-being.

In tandem, the Trump Administration has expanded use of DPA authorities to invest in the maritime industrial base, partner with domestic nuclear energy companies, expand domestic critical mineral production capacity, and establish domestic sales requirements related to certain copper products (National Archives 2025a, 2025d, 2025e; White House 2025f). As discussed in chapter 8 of this *Report*, the DPA is an important vehicle through which the Department of War engages with and strengthens the defense industrial base. However, a broader range of Federal agencies have authority under the DPA to prioritize certain contracts or orders to promote national defense, expand productive capacity and supply, foster collaboration between industry and the government, and create executive reserves for use in times of national emergency. The DPA offers agencies critical means to engage with the business sector to support resilient supply chains for essential goods ranging from food to health resources to civil transportation (Russell 2025). By expanding the scope of these engagements to address additional vulnerabilities in U.S. supply chains, the Trump Administration is further leveraging the potential of partnerships between public and private stakeholders to ensure resilience.

Executive Actions

Similar to the decisive actions taken amid the COVID-19 pandemic, the Trump Administration has engaged in multiple all-of-government efforts to swiftly address shortfalls in America's critical supply chains. For example, through Executive Order 14213, President Trump established the National Energy

Dominance Council (NEDC), recognizing that "domestic energy production is vital both for mitigating price shocks to American families and de-risking the energy supply chain" (National Archives 2025f; White House 2025g). Consistent with its focus on the energy supply chain, Executive Order 14213 underscores the interconnectedness between energy resources and nonenergy natural resources, such as critical minerals, energy technologies, and energy infrastructure. The NEDC is called to "advise the President on improving the processes for permitting, production, generation, distribution, regulation, transportation, and export of all forms of American energy, including critical minerals" (National Archives 2025f, sec. 4(ii)). Such a holistic perspective is critical to effectively identify and mitigate supply chain vulnerabilities across key interconnected industries.

The Trump Administration has also worked to secure stockpiles of critical resources. For example, the OBBBA allocated about $400 million to maintain and replenish the Strategic Petroleum Reserve, alongside $2 billion to improve the stockpiling of critical minerals in the National Defense Stockpile Transaction Fund (U.S. Congress 2025). Additionally, through Executive Order 14336, President Trump called for the Department of Health and Human Services to obtain and maintain a six-month supply of active pharmaceutical ingredients (APIs) of drugs "that are especially critical to the health and security interests of the Nation" (National Archives 2025g, sec. 2(a)). As the President noted in Executive Order 14336, it is often more effective to stockpile APIs rather than finished drugs, as the former tend to be cheaper and last longer in storage.

Additionally, the Trump Administration has advanced targeted regulatory relief for industries critical to national security, strengthening domestic supply chains. For example, in April and July 2025, President Trump granted exemptions from certain environmental regulations for specific businesses in the chemical manufacturing, coal-fired electricity, iron ore processing, and medical device sterilization industries, due to national security interests (White House 2025h, 2025i, 2025j, 2025k, 2025l). The covered chemical manufacturing plants are inputs into manufacturing processes for semiconductors, advanced manufacturing, and national defense systems (White House 2025m). This targeted regulatory relief was motivated by the assessment that "these sectors are critical to maintaining national security and economic stability. Shutdowns could comprise our grid and lead to electricity shortages and reliance on foreign energy, increase our reliance on foreign supply chains for semiconductors, reduce our ability to provide sterile medical equipment for public health and military readiness, and reduce the supply of steel that we need to support critical infrastructure" (White House 2025m).

Complementing these targeted regulatory relief actions are broader reforms, such as efforts to streamline the Federal Acquisition Regulation in order to "remov[e] undue barriers, such as unnecessary regulations, while simultaneously allowing for the expansion of the national and defense industrial

bases" (National Archives 2025h, 16447). Additionally, consolidating the Federal government's procurement will help improve coordination and the ability to leverage Made in America preferences to support domestic manufacturing (National Archives 2025i). Since the Federal government is the largest single purchaser of goods and services in the world, consolidating buying power across Federal agencies can be used to support critical American-made goods in existing industries vital to national security, and to provide the anchor demand required for industry to justify reshoring and expanding domestic production.

The Trump Administration also recognizes that in a dynamic, innovating economy, the industries of tomorrow may have different needs than those of today. Effective policy must therefore be forward-looking and flexible enough to ensure that efforts to support supply chain resilience do not inadvertently exacerbate supply chain ossification. To provide just one example, in July 2025, the Administration released America's AI Action Plan, a multipronged strategy to advance the United States' artificial intelligence (AI) industries and help achieve "a new golden age of human flourishing, economic competitiveness, and national security for the American people" (Kratsios, Sacks, and Rubio 2025, 1). One of the central pillars of this Action Plan focuses on building America's AI infrastructure, which covers everything from semiconductors to the energy grid to critical infrastructure cybersecurity—all essential elements of the supply chains necessary to support frontier industries that are likely to be key drivers of future economic growth. Through proactive strategies like America's AI Action Plan, the Trump Administration provides businesses the confidence that critical supply chains will remain reliable even as the economy undergoes transformative evolutions.

Conclusion

Well-functioning supply chains are critical for individual businesses' success and lay the foundation for economic and national security. The intricacy of modern industrial supply chains, which can interlink multiple specialized manufacturers, has been a key source of America's economic well-being and prosperity. At the same time, this intricacy can be a double-edged sword, increasing individual firms' and the broader economy's exposure to risk. Given competing demands on firms' resources, incomplete information, externalities, and noncompetitive practices, private markets cannot support socially optimal levels of supply chain resilience on their own; government intervention is essential to effectively mitigate key risks and sustain critical supply chains. The consequences of vulnerable supply chains have been repeatedly brought into focus in recent years, notably after disruptions during the COVID-19 pandemic and China's recent export controls on rare earth elements.

In its first year, the Trump Administration has taken multiple efforts to improve America's supply chain vulnerabilities through a combination of macroeconomic, diplomatic, and sector-specific policies. However, as the global economy and international trading patterns continue evolving, to mitigate emerging supply chain risks, government policy will need to adapt to changing circumstances.