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POLICY BRIEF

26-12 Made with China: Global Supply Chains and the Limits of US Decoupling

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INTRODUCTION

US policymakers have failed to significantly reduce America's dependence on Chinese-made goods and services despite years of trying.

The steep tariffs employed during the first Trump administration and the Biden administration significantly shrank direct, bilateral imports from China as a share of total US imports: They dropped by about 7 percentage points, to 11 percent, from 2017 through 2024.[1] Some observers hail this as progress in decoupling the world's two largest economies and as justification for the high tariffs on China today.

But this view misses the less rosy picture gleaned by including *indirect* Chinese imports—Chinese-made products, parts, and

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1 China's share of US goods imports alone was 22 percent in 2017, falling to 9 percent by the end of 2025. See Bown (2026) for details.

other content embedded in the United States' imports from other countries. Imagine a computer imported to the United States from Vietnam that contains Chinese components. Our analysis finds that the combined value of US direct and indirect imports from China fell just 2 percentage points as a share of the comparable US import total in the same period.

Our broader measure implies that the high US tariffs of the period were largely ineffective in reducing US imports of Chinese content. The measures failed to achieve significant US decoupling from China during this period, leaving America vulnerable to interruptions of key supplies originating in China while taxing purchases of nonsensitive goods.

These findings suggest the second Trump administration's current broad tariff policies will also likely fail to curb America's reliance on Chinese imports, some of which are essential inputs to important industries. Indeed, US tariffs on China will be counterproductive if their effects obscure reality and lull policymakers into underestimating risks to US security.

This Policy Brief reviews how tariffs rearranged US supply chains, details how we calculate Chinese value added in all US imports, quantifies how much Chinese content is coming from third countries, describes the policy implications of these trade developments, and offers our policy recommendations.

President Donald Trump's 2018–19 trade war with China dramatically altered bilateral goods trade flows between the two economies. The Office of the US Trade Representative (USTR), in its 2024 review of the effects of the trade war, touted the decline in bilateral imports, saying, "tariffs have decreased China's market share of US imports," and that diversion to alternative suppliers is "potentially supporting more diverse and resilient supply chains for American producers and consumers" (USTR 2024, 52). These trade trends accelerated last year as US imports from China fell by more than a quarter in 2025 from the year before.[2]

2 See Congressional Research Service, US Library of Congress, 2026, US-China Trade Relations.

For some observers, the decline in China's bilateral exports is evidence of US-China decoupling.[3] Rather than actual delinking, however, we argue that observed shifts in bilateral flows largely reflect the rearrangement of global supply chains by firms seeking to avoid high US tariffs. Facing high taxes on their direct exports, Chinese firms have largely gone around them by increasing sales to so-called "connector countries," which in turn increased their exports to the United States. No mature strategy to reduce US supply chain vulnerabilities would fail to account for dependencies inherent in these indirect imports. Chinese-made content coming into the United States through these third countries has the same benefits and risks as direct imports: They allow the United States to access low-cost parts and components, some of which are available only or largely from China, while exposing the United States to potential Chinese chokepoints.

The growth in Chinese exports to connector countries has been widely noted, but a quantitative measure of the extent of such flows has lagged recent US tariff changes.[4] This Policy Brief fills the gap by using publicly available data to trace Chinese value added as it weaves through global production networks into US imports, providing an aggregate measure of US reliance on Chinese suppliers. These value-added trade measures also allow us to apportion the share of Chinese content that comes through alternative trade partners.

A simple example illustrates why this distinction between bilateral trade flows and value-added flows matters when thinking

3 For example, in their analysis of the short-run impact of the 2025 tariffs on the US economy, Fajgelbaum and Khandelwal (2026) conclude that "tariffs have been successful at raising federal revenue and decoupling trade with China," while finding other promised outcomes were largely unrealized.

4 As reported by Alfaro and Chor (2026), estimates available from the OECD show that "the share of Chinese value added embodied in US gross imports fell from 15.7% to 15.3% between 2017–2022, reversing what had been a steady rise for most of the 2010s…." Our analysis uses a different data source (see the appendix, available on the PIIE website, for comparisons with the OECD trade in value-added database) and carries the estimates forward to 2024.

about trade dependencies. (Table 1 provides a guide to terminology used in this brief.) Suppose the United States imports a $1,000 laptop from Vietnam. Conventional customs accounting records this as a bilateral Vietnamese export to the United States of $1,000. However, suppose that 60 percent of that total final value came from parts that originated in China. Trade in value-added accounting methods use information on trade flows and input-output relationships to trace the origin of value through global production networks. These methods would record the laptop's US value-added imports from Vietnam as $400 and US value-added imports from China as $600. Because China produces more sophisticated electronic components than Vietnam, a relative newcomer to these supply chains, the Chinese content of the Vietnamese laptop should be recognized in supply chain security assessments.

Our analysis shifts the decoupling narrative by focusing on the ultimate source of imported content rather than the last border crossed before arriving in the United States. Using recently available data from the Asian Development Bank (ADB), we apply well-established trade in value-added methods to uncover the origin of the goods and services used to produce US imports. We begin by reviewing what analysis of standard customs bilateral trade data reveals about the effect of tariff changes on US bilateral imports from China and from alternative source countries.[5] Next we explain how value-added measures provide a broader perspective on supply chain reorganization. We then deploy these value-added measures to identify Chinese content in the exports of those countries making the largest gains in the US market, revealing its growth over time and by broad industrial sector.

5 We use the term "bilateral trade" as synonymous with the "gross trade" measured by national customs administrations. It is the value of goods and services traded between two partners bilaterally, regardless of the ultimate source of the content of those goods and services.

Table 1

Terms describing alternative import measures

Term	Description
Bilateral imports from China	Total value of goods and services imported by the United States through direct bilateral trade with China, measured using data provided by US Bureau of Economic Analysis (BEA).
China's total value-added exports to the United States	Total value of goods and services created in China and embodied in US imports.[a] Value-added content comes from China through bilateral trade and it is embodied in exports from third countries.
Direct channel for Chinese value added	Chinese value added that reaches the United States through China's bilateral exports to the United States.
Indirect channel for Chinese value added	Chinese value added that reaches the United States through third countries' bilateral exports to the United States.

a. This Policy Brief follows the standard ICIO/MRIO accounting, which attributes value added to the economy where production takes place, not to firm ownership. As a result, value created by Chinese-owned affiliates in third countries is generally recorded as value added of the host economy rather than China, even if some returns may ultimately accrue to Chinese investors. For an FDI-augmented framework that traces value added in the presence of foreign-invested enterprises, see Wang et al. (2021).

We show that assessments using bilateral import data overstate the extent of US-China decoupling. While the bilateral data appear to show a precipitous decline in US dependence on China, China's share of US value-added imports declined by just 2 percentage points by 2024 from its pre-trade-war level. Interestingly, we find that only US supply chains adapted to tariff increases by diverting Chinese parts and components through factories in third countries; we do not find similar trends in the value-added trade flows of other G7 countries.

The policy implications of these findings reflect the limits of using blanket tariffs to strategically restructure US supply chains.

We summarize how our analysis exposes the failure of current trade policy to promote decoupling from China. We argue that a more effective approach would include targeted tariffs, but that they must be complemented by policies that help build the production, infrastructure, and legal capacity of partners with the potential to become new US suppliers. Drawing on insights into how developing countries build domestic capacity, we argue that certain current Trump administration trade policies are counterproductive to securing US supply chains. These include US tariffs under Section 301(b) of the Trade Act of 1974 to combat forced labor as well as mechanisms within the newly signed Articles of Reciprocal Trade.

Lastly, we highlight differences emerging between the trade patterns of the United States and those of other G7 partners and suggest that cooperation, rather than trade aggression, is needed to develop more reliable and secure supplies.

US TARIFFS REDUCED BILATERAL IMPORTS FROM CHINA

US imports from China declined substantially after 2017, consistent with a tariff-induced break in earlier trends. As illustrated by figure 1, which presents real import values relative to the June 2018 level, US imports from China began to fall in early 2019, in the wake of the first three rounds of the US-China trade war, and they remained low during the COVID-19 pandemic.[6] Although demand for Chinese goods rose as the US economy recovered from its pandemic collapse, real imports from China peaked in late 2022 and then resumed their decline. Bown (2026) finds that after the second Trump administration's multiple tariff rounds, the average US weighted tariff on China reached above 50 percent, before falling back following bilateral negotiations in October. By the end of 2025, real US imports from China had dropped 40 percent below the pre-trade war level set in June 2018. Bown (2026) states that "the direction of travel is clear: Trade between the two countries is unwinding faster than ever."

6 Lovely (2023) examines policies of the first Trump administration and the Biden administration designed to reorder US supply chains through reshoring manufacturing, "friendshoring" supply chains, and decoupling from China.

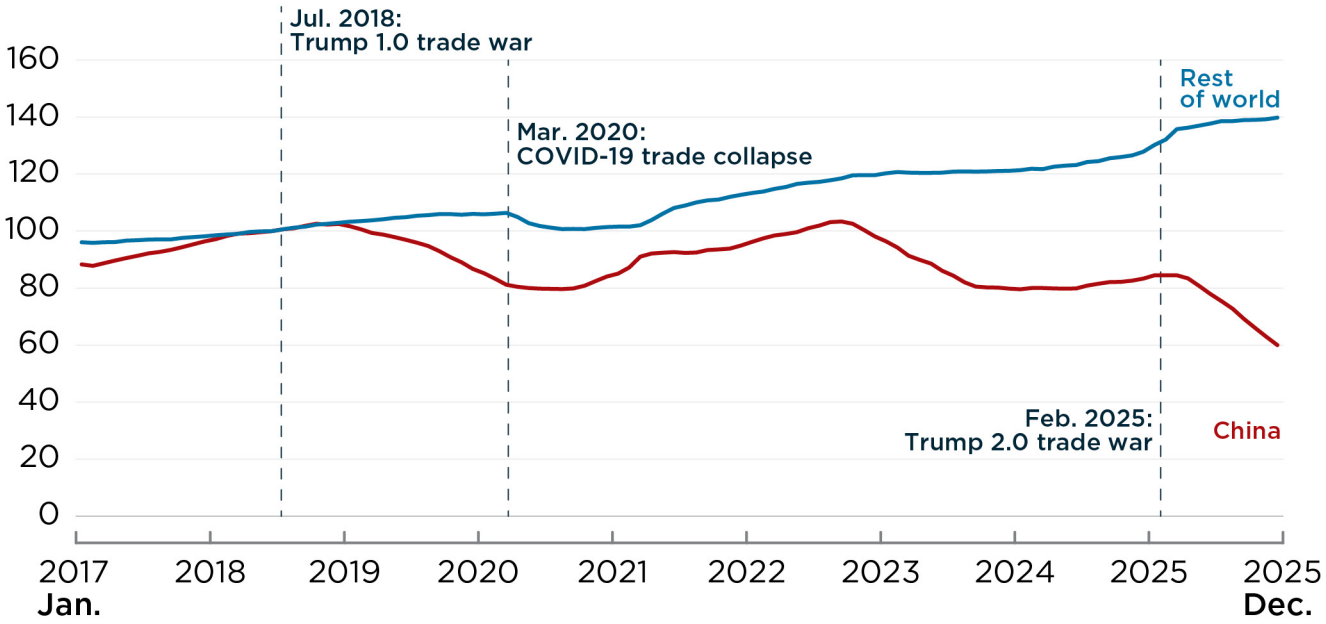
Careful empirical studies have established that US tariffs levied during the trade war were a significant cause of the decline in US imports from China. Examining month-to-month changes in import values, Fajgelbaum et al. (2020) estimate that the average fall in import value for Chinese products hit with trade-war tariffs was 31.7 percent. Looking over a longer period, Amiti, Redding, and Weinstein (2020) find that import elasticities increase in magnitude over time, suggesting that short-run declines in US imports resulting from tariffs would accelerate once supply chains had time to reorganize. Their results are consistent with the rapid decline in imports from China after 2023, despite few changes to trade-war tariff rates under the Biden administration.

As also seen in figure 1, the real value of US imports from the rest of the world followed a different trend, declining during the pandemic but rebounding thereafter, ending in 2025 40 percent higher than in June 2018. Taken at face value, the divergence between US imports from China and from the rest of the world suggests a rapid decoupling between the United States and China, with the United States decreasing its reliance on a country that it deems both a security threat and an unfair competitor. This interpretation, however, suggests that vulnerabilities from overdependence and potential supply chain chokepoints come mainly from bilateral imports, ignoring the ultimate source of specific parts and components inside the final goods that reach American shores. As supply chains are reorganized geographically, Chinese intermediates continue to reach the US market embedded in exports from third countries.[7]

7 Recent export controls implemented by both the United States and China seek to limit access to restricted products as they travel through supply chains, explicitly signaling that dependencies exist throughout the value chain and not just through bilateral trade.

Figure 1

US real monthly import values, 2017–25 (index, June 2018=100)



Note: Indexed value of US real monthly goods imports, 12-month trailing sums; data drawn from US Census.

Source: Chad P. Bown, The Trump-China Trade Wars: Five Takeaways from US Imports in 2025, PIIE RealTime Economics blog, March 16, 2026.

US TARIFFS ON CHINA REARRANGED US IMPORT SOURCING

US import sourcing reconfigured around the trade-war tariffs, shifting away from bilateral trade with China and toward greater purchases from the rest of the world. Analyzing highly disaggregated trade data, Lovely, Xu, and Zhang (2021) find that newly taxed US imports from China were partially replaced by purchases from other suppliers. Exporters that held larger pre-trade-war market share experienced the biggest increase in US sales in newly tariffed sectors.[8]

8 Fajgelbaum et al. (2024) find that, in response to bilateral tariff increases from both the United States and China during the 2018–19 trade war, so-called bystanders (countries other than the United States and China) increased their exports to the United States, barely changed their exports to China, and increased their exports to the rest of the world in products with higher US-China tariffs.

Examining a longer time horizon, Freund et al. (2024) document substantial US import diversion by 2022. While confirming that trade-war tariffs depressed import sourcing from China, they find no significant effect of tariffs on total US import growth in the products where China's share declined most rapidly. Instead, Chinese imports were replaced by goods from other developing countries with revealed comparative advantage in the same products.[9]

Alfaro and Chor (2023) also document the shift in US purchasing away from China and toward alternative sources by 2022.[10] Dubbing these supply chain movements the "Great Reallocation," they note that the full impact of the US-China trade war would be revealed only over time. These initial assessments are revisited in Alfaro and Chor (2026), which confirms that the emerging reallocation of US import patterns observed in 2022 continued through 2025, with import market shares lost by China filled almost entirely by the United States' largest incumbent partners. Alfaro and Chor also document a lagged American shift away from China for "sticky" products: relatively skill-intensive imports and, starting in 2021, for goods whose production relies on specialized inputs or long-lived buyer-supplier relationships.

9 Revealed comparative advantage is an index used to infer a country's competitive export strength. It is calculated as the share of the country's exports comprised by a specific product relative to its share of world exports. In contrast to Freund et al. (2024), who identify revealed comparative advantage as a factor determining gains in US market share, Fajgelbaum et al. (2024) estimate only a small role for pre-war specialization as a predictor of overall export expansions by third countries. Instead, they find that country-specific factors explain the bulk of the cross-country variation in export growth in targeted products.

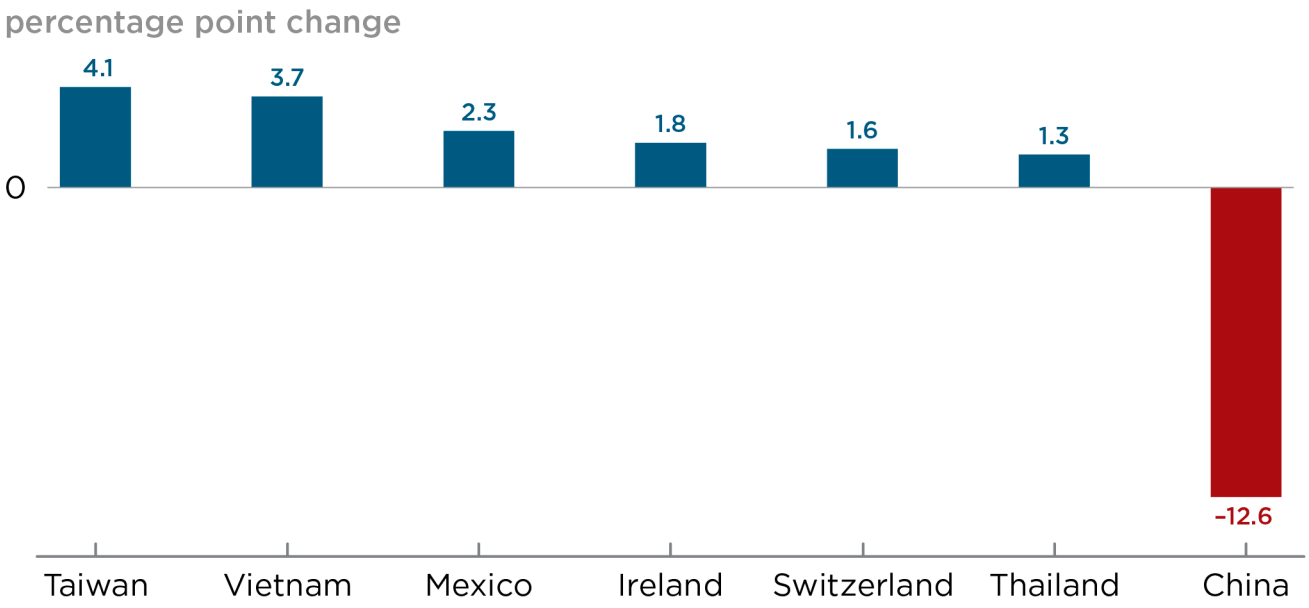
10 Alfaro and Chor (2023) uncover a correlation at the product (HS4) level between decreases in China's share of US imports over the period 2017–22 and gains in the import shares of Canada, Mexico, and major East and Southeast Asian partners.

EXPORTERS GAINING US MARKET SHARE INCREASED THEIR IMPORTS FROM CHINA

Only a handful of trade partners increased their share of aggregate US goods imports by more than 1 percentage point after the trade war. The top gainers in US market share between 2017 and 2025 are Taiwan (4.1 percentage points), Vietnam (3.7 points), and Mexico (2.3 points), as seen in figure 2. The surge in US imports from Taiwan is concentrated in the electronics sector and closely linked to increased US demand for semiconductors and other components of AI-related investments. The next two gainers, Vietnam and Mexico, are middle-income countries that have gradually increased their share of global manufactured exports over the past decade, and whose expanding presence in US markets extends beyond electronics.

Figure 2

Change in US goods import market share from 2017 to 2025, selected countries



Source: Authors' calculations based on US goods import data from the US Census Bureau. Import shares are defined as partner import value divided by total US imports in 2017 and 2025. Changes in market share are calculated as the difference between 2025 and 2017 shares. Countries with increases greater than 1 percentage point are shown.

Trade data provide *prima facie* evidence that some partners gaining US market share have become connector countries linking Chinese goods to US markets.[11] Figure 3 shows that all six gaining countries increased the share of their imports sourced from China, but the pattern varies considerably across them. Taiwan is the most distinctive case. Taiwanese firms operate extensive production networks that span China and combine Chinese and non-Chinese value added, while the surge in AI demand, especially for semiconductors produced by TSMC, has added a powerful force shaping trade patterns. The result is a complex Taiwan story that goes well beyond the scope of this piece and deserves separate treatment. For present purposes, the key point is that Taiwanese firms operating such China-linked production networks now have a strong incentive to shift the final stage of assembly outside China to avoid US tariffs. Most relevant for our analysis, China's share of imports rose by about 10 percentage points in Vietnam and by about 3 percentage points in Mexico.[12]

Previous researchers claim a causal relationship between connector country gains in the US market and intensified import flows from China. Utar, Zurita, and Torres (2025) provide econometric evidence that US tariff hikes on China increased Mexican exports to the United States and increased Mexican imports from Asia. Similarly for Vietnam, Wu (2025) finds that Vietnamese exports to the United States increased significantly in final goods subject to the US import tariffs on Chinese exports

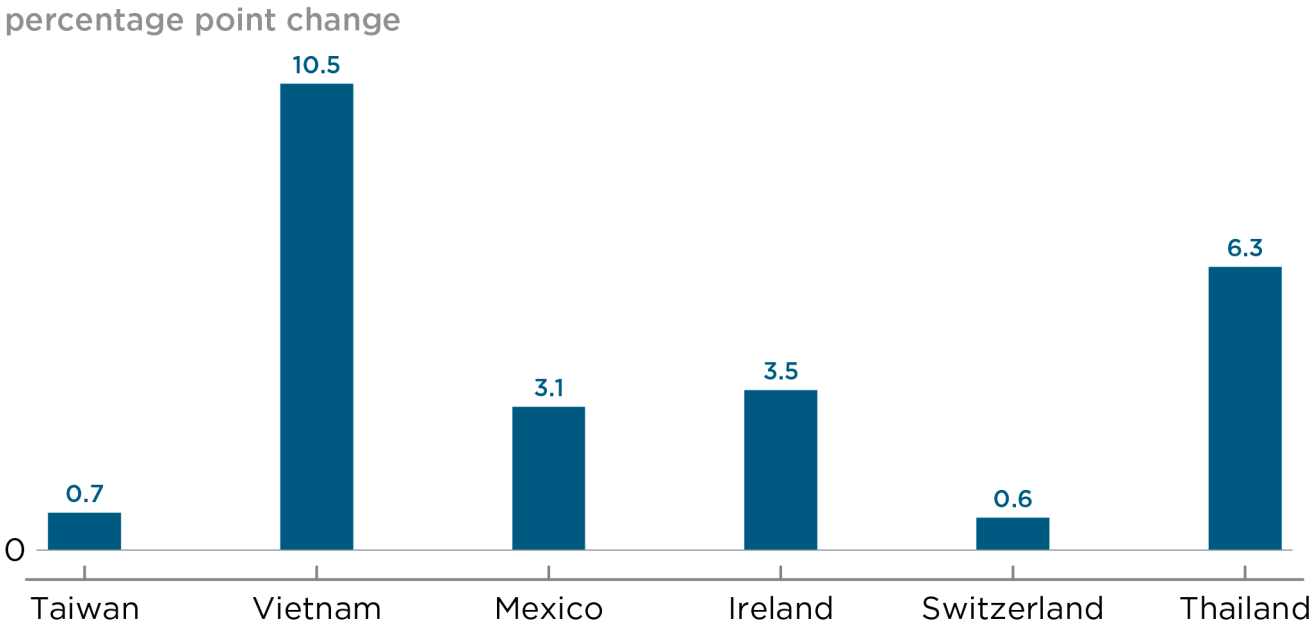
11 Connector countries are those experiencing simultaneous increases in imports from China and increases in exports to the United States, the European Union, or other markets. The term appears to have been popularized by Bloomberg, which used it to describe a set of countries benefitting from the supply chain reshuffling resulting from the US-China trade war. Bloomberg, These Five Countries Are Key Economic "Connectors" in a Fragmenting World, November 2, 2023.

12 The Biden administration launched the Indo-Pacific Economic Framework for Prosperity (IPEF) in 2022 to strengthen supply chains between the United States and the region and—not least—reduce its members' economic reliance on China. Dahlman and Lovely (2023) find that as of 2021, China was the top source of manufactured goods for all IPEF countries.

and that Vietnamese imports from China increased significantly in intermediates and capital goods subject to the same set of tariffs.

Figure 3

Change in share of goods imports from China from 2017 to 2024, selected countries



Source: Authors' calculations based on goods import data from ITC Trade Map; the change reflects percentage point increase.

Finding that US suppliers are increasing their reliance on Chinese imports does not prove that their exports to the United States contain more Chinese content. With growing economies of their own, these countries may be absorbing new Chinese content through domestic consumption. Nevertheless, previous analyses suggest that America's new suppliers indeed may be raising the Chinese content of their exports. Hoang and Lewis (2024) show that for many countries and regions the import share from China and the share of Chinese value-added in their exports follow similar trends over the 2012–20 period.

There are several routes by which Chinese content ends up in connector country exports to the United States. First, some Chinese firms have made outward foreign direct investments (FDI) tied to export-oriented manufacturing from connector countries. Foreign affiliates of Chinese firms import parts and components from

the mainland, further process them inside the host country, and sell a portion to overseas markets. Second, higher US tariffs and moribund growth at home have prompted China-based producers to intensify their exports of intermediate goods to connector countries, and some of these may be embedded into exports to the United States.

The co-movement of trade and FDI flows is evident in the data. Gopinath et al. (2024) establish a strong positive correlation between a country's gain in US import market share and its receipt of Chinese outward FDI. Alfaro and Chor (2023, 29) examine both Chinese records of the destination of its outward FDI and Vietnamese and Mexican records of their inward FDI sources, concluding that Chinese firms have been "increasingly active as a source of FDI into both Vietnam and Mexico, with the timing of this rise coinciding with the US imposition of discretionary tariffs on direct imports from China."[13]

Garred and Yuan (2025) examine changes in the role of connector countries through a Chinese lens. Drawing upon information from annual reports of Chinese listed companies, they find that Chinese firms with a given product mix opened more new manufacturing affiliates in countries that raised their US import share for that product mix, as compared to countries with no gain. Secondly, observing trade in intermediate parts alone, they find that the share of China's parts exports sent to third countries is positively correlated with that country's increase in its share of the US market for the downstream goods using those parts. While these exercises do not capture the input-output relationship specifically, they provide novel evidence that Chinese firms have responded to US tariffs by both direct investment in connector countries and by selling these countries more intermediate goods upstream to the production of goods they export to the United States.

13 Lopez and Vázquez (2023) examine surveys of industrial park operators to find that since the start of the US-China trade war in 2018 and the end of 2022, 830 new foreign firms located in Mexico. Looking ahead, these operators expect 20 percent of firms projected to locate in their industrial parks to be Chinese in origin.

In addition to the reallocation of supply chains, another mechanism may be driving Chinese exports to the United States through third countries. Transshipment (also known as rerouting) happens when goods from China pass through a third country and undergo only minimal processing before entering the United States under a different origin. It is a means of tariff evasion or circumvention but is not a reorganization of production. Measuring the extent of this illegal activity is challenging due to its clandestine nature. However, Iyoha et al. (2024) shed considerable light on its extent through detailed investigation of the import and export records of Vietnamese firms in the wake of the 2018–19 US-China trade war. They find that about 9 percent of the growth in Vietnamese exports to the United States was the result of transshipment.[14]

VALUE-ADDED IMPORTS AS A MEASURE OF US TRADE DEPENDENCE ON CHINA

While the research reviewed above strongly suggests that the supply chains linking the United States and China have reorganized since 2018, bilateral trade data alone cannot provide a quantitative measure of how much Chinese content continues to enter the US market.[15] To understand more fully how China's role in global production networks has adjusted to US tariffs, we need to measure both the Chinese content embodied in bilateral imports from China and the Chinese content that flows to the United States through

14 To the extent that the trade flows that we measure are the result of transshipment rather than production reorganization, our measure of Chinese content would be a lower bound.

15 These are genuine advantages in using trade data to analyze supply chain reorganization. Trade data are released with a short lag, are highly disaggregated, and do not rely on assumptions about the mix of imported and domestic intermediate inputs used in production. But trade data do not attempt to trace how receiving countries use imports and therefore cannot measure how much imported content is re-exported to the United States. Value-added methods were created precisely to fill this need.

exports from other partners.[16] Such a measurement requires tracing Chinese content through third countries in order to identify the growth of such flows, the countries through which they travel, and the sectors where they are most concentrated.

To provide such measurements, we need to calculate trade in value-added terms. Because supply chain adjustment has continued apace since 2022, for our analysis we rely on Multiregional Input-Output (MRIO) tables, which are hosted by the ADB and built on the World Input-Output Database (Timmer et al. 2015).

Methods for measuring trade in value-added were developed through a multi-organization collaboration led by the Organization for Economic Cooperation and Development (OECD) known as the Trade in Value-Added (TiVA) project.[17] Unfortunately, the TiVA database is currently updated only through 2022.[18] While we rely primarily on MRIO tables for our analysis, we compare estimates derived using these tables to equivalent estimates from TiVA with

16 Other researchers have noted that information on the Chinese value-added content of US imports is needed to conclusively determine the extent to which trade decoupling has occurred. Alfaro and Chor (2026), Garred and Yuan (2025), and Hoang and Lewis (2024) note that we cannot conclude that China's share of value added in connector countries increased after 2020 without data on the value-added content of US imports, which was not available at the time of their writing. It is this gap that the present paper seeks to fill.

17 Launched as an OECD-led initiative in the early 2010s in conjunction with the World Trade Organization, the TiVA project pioneered the application of accounting methodologies developed to measure the value that is added at different stages along global value chains (Johnson and Noguera 2012; Koopman, Wang, and Wei 2014; Borin and Mancini 2023).

18 Value-added indicators in the TiVA database are constructed from OECD Inter-Country Input-Output (ICIO) tables. While the published TiVA indicators currently extend only through 2022, projected ICIO tables are available for 2023 and 2024.

the available time series.[19] The two sources show consistently similar patterns through 2022, and numerical differences do not alter the substantive conclusions of our analysis.[20] The appendix, available on the PIIE website, provides details on the methods we use to calculate the indicators in this brief.

Chinese value added in US imports, which we measure, differs from the value of bilateral exports, as reported by the US Census, for several reasons. First, Chinese factories use imported intermediate goods, and the value of these productive factors

19 Every input-output framework relies on a standard convention: Each industry is assumed to use the same mix of imported and domestic intermediates across all its outputs and across all using downstream sectors, regardless of destination. Because of its extensive involvement in "processing trade," which entails assembling imported parts into final goods for exports, this convention was problematic for China (and other countries with large export processing zones). Koopman, Wang, and Wei (2012) addressed the problem of specialized inputs by splitting the Chinese IO table into processing and nonprocessing segments using highly disaggregated Chinese customs data. This distinction is now built into the extended ICIO tables used by TiVA for China and Mexico value-added trade but not embedded into MRIO tables. Lovely (2026) documents the fall in China's processing trade share over time, a trend that mitigates the problems addressed by Koopman, Wang, and Wei (2012). For Mexico, De Gortari (2019) argues that firms involved in export processing use specialized input mixes, drawing evidence from analysis of customs records. His analysis suggests that estimates of the US content of Mexican exports to the United States have wide upper and lower bounds.

20 We compare the broad trends in TiVA's built-in indicators with the same indicators constructed by the authors using the ADB MRIO tables. Specifically, these indicators are China's value-added exports to the United States, the share of China's value added reaching the United States through direct and indirect channels, the value-added and gross exports of Vietnam and ASEAN to the United States, and China's value added embodied in Vietnam's and Mexico's exports to the United States. We also use the projected 2023 and 2024 ICIO tables in current prices (the foundation for TiVA estimates) to compute China's share of total value added in US imports and find a decline of about 2 percentage points from 2017 to 2024, matching the decline computed using the MRIO tables. Details are provided in the appendix.

accrues to non-Chinese owners even though they are used in China. Thus, they are subtracted from the value of Chinese bilateral exports when value-added exports are calculated.

Second, Chinese intermediate goods flow to factories in third countries, and using the MRIO database we estimate and assign the value of these inputs to China. This procedure accounts for the fact that even if a final product is assembled and shipped to the United States from another country in a value chain, a portion of it was created in China.

Finally, Chinese value is created through its ownership of foreign affiliates located in third countries. The return to capital services, as well as any intermediate inputs sourced from China, are Chinese value added, some of which flows into American markets.

Our analysis finds that decoupling conclusions drawn from analysis of bilateral flows alone greatly overstate the extent to which US dependence has fallen. Our contribution is twofold. First, we construct and compare bilateral and value-added trade flows based on trade in value-added measures we calculate using ADB MRIO datasets, enabling a broader assessment of the US-China decoupling phenomenon. We find that Chinese value added embodied in total US imports is about 34 percent larger than China's bilateral exports to the United States in 2024 as measured by the US Bureau of Economic Analysis, and China's share of US value-added imports fell by only 2 percentage points between 2017 and 2024. Secondly, we identify the main countries, sectors, and forms in which this restructuring occurs.

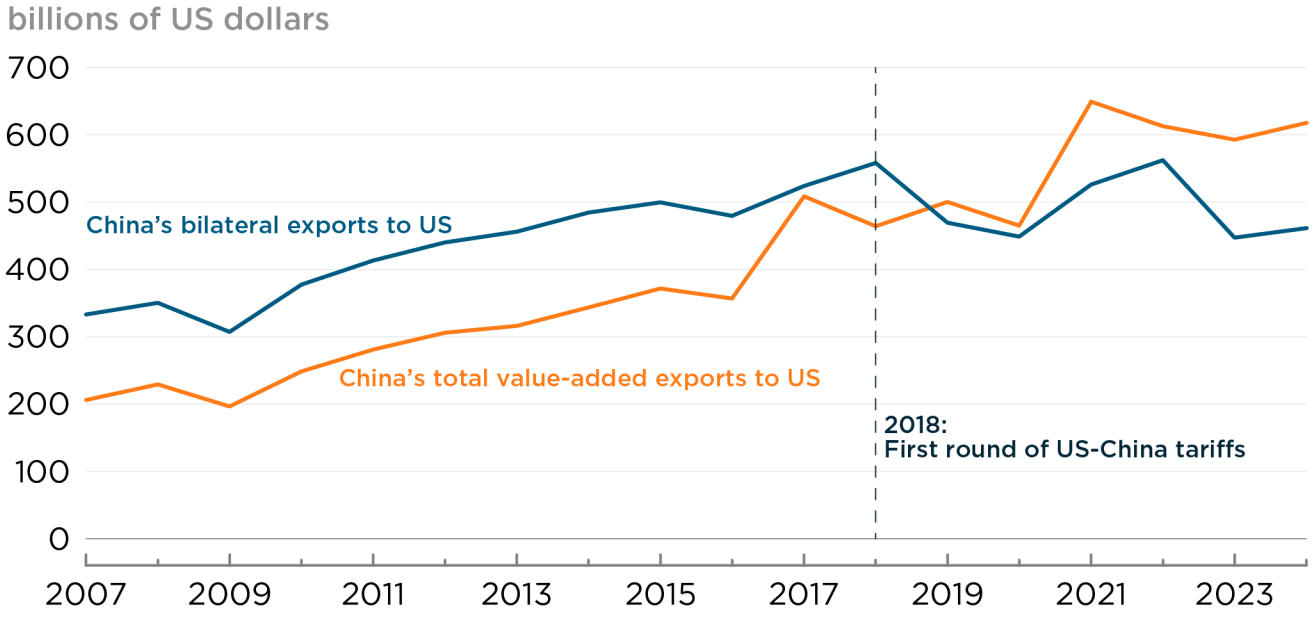
AMERICA'S INDIRECT EXPOSURE TO CHINESE EXPORTS HAS INCREASED

Figure 4 illustrates the results of our analysis. We find that in current dollars, Chinese value-added exports to the United States were about 30 to 40 percent below China's bilateral exports to the United States from 2007 through the mid-2010s, consistent with the large role of processing trade (Chinese processing of imported materials) in that period. After the 2018 trade war, however, the relationship reversed. From 2019 onward, Chinese value added embodied in total US imports exceeds the value of China's bilateral exports to the United States, with a widening gap. The implication

is clear: A growing share of Chinese value is reaching the US market through indirect channels. By 2024, the value-added measure was about 34 percent larger than the value of China's bilateral exports to the United States.

Figure 4

China's bilateral and value-added exports to the United States, 2007–24



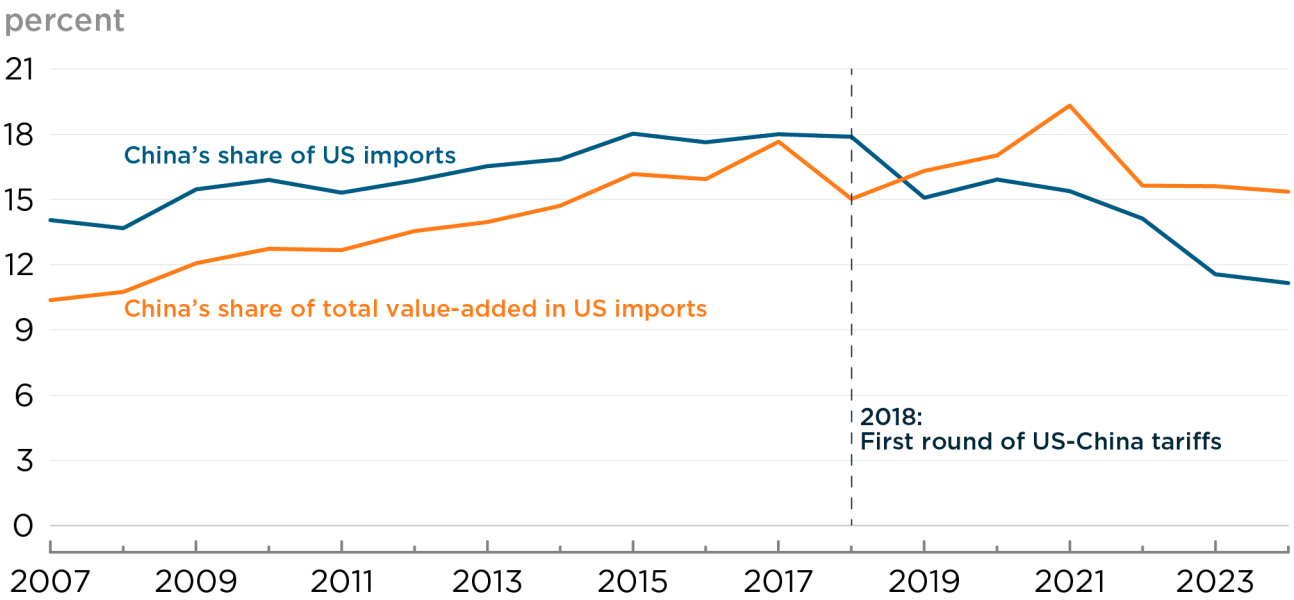
Source: Authors' calculations using ADB MRIO tables and Bureau of Economic Analysis data. China's total value-added exports include both goods and services. China's bilateral exports to the United States also include both goods and services, based on US import data from the Bureau of Economic Analysis.

Consistent with evidence that US bilateral imports from China have fallen while many of the countries gaining US market share have simultaneously increased their imports from China, China's share of total value added in US imports shows substantially less decoupling than China's share of total US imports. Figure 5 presents the two measures side by side. In the years just before the trade war, the two series had nearly converged: By 2017, China accounted for about 18 percent of total US imports, while Chinese value added accounted for an estimated 17.7 percent of the total value added embodied in US imports. After 2018, however, the two measures diverge sharply. China's share of total US imports

declines steadily, falling from about 18 percent before the trade war to roughly 11 percent in 2024. By contrast, Chinese value-added share rose further after 2018, peaking at just over 19 percent in 2021 and then easing back only modestly to 15.4 percent in 2024. In other words, while the bilateral import measure shows a drop of roughly 7 percentage points from its pre-trade-war level, the value-added measure indicates a decline of only 2.3 percentage points. The value-added data, therefore, suggest a much more limited degree of decoupling, indicating that Chinese content has found pathways around the tariffs. Tariffs put China at a disadvantage, but China's competitiveness allows its goods and services to travel through more costly routes involving further transformation in third countries.

Figure 5

China's share of total US imports, bilateral and value added, 2007–24

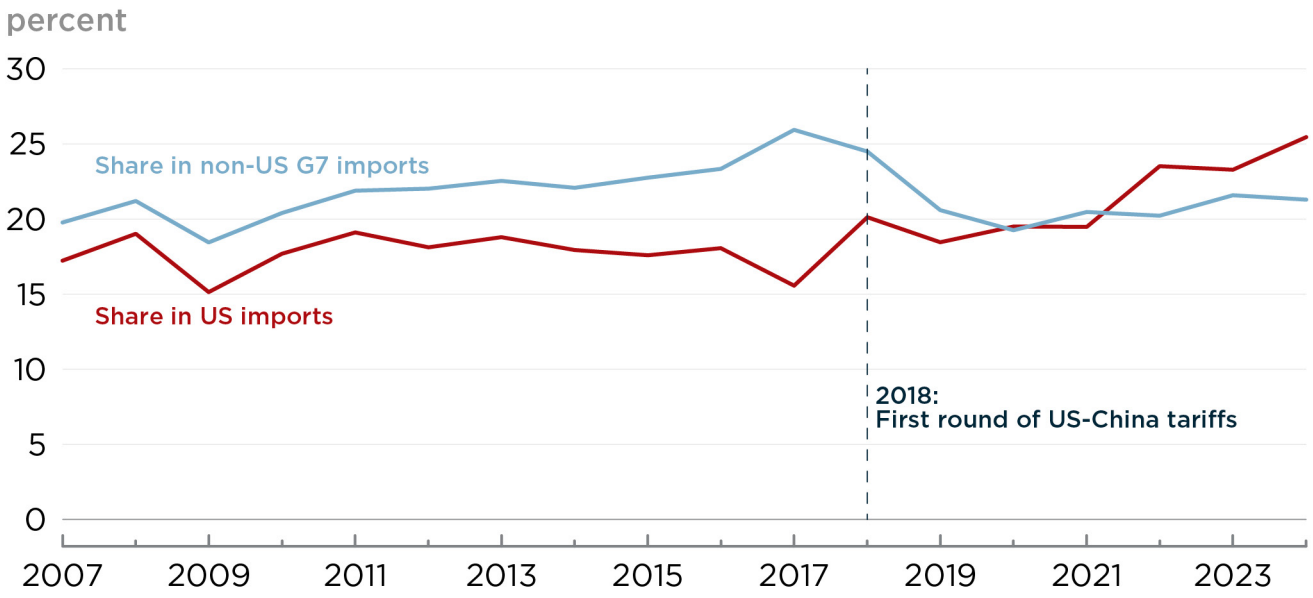


Source: Authors' calculations using ADB MRIO tables and Bureau of Economic Analysis data. China's share of total value added in US imports is calculated as value added originating in China divided by total value added embodied in US imports. China's share of total US imports is calculated as US bilateral imports from China divided by total US imports from the world, including goods and services trade, using data from the Bureau of Economic Analysis.

Figure 6 illustrates the post-2018 shift toward indirect channels in the way Chinese value added reaches the United States. Before the trade war, only 16 percent of the Chinese value added embodied in US imports arrived through indirect channels. After the first round of tariffs, that share rose steadily. By 2024, about one-quarter of the Chinese value added reaching the US market arrived through third countries. The same pattern does not appear in the rest of the G7. Chinese value added reaching those markets has no comparable rise in the indirect channel.

Figure 6

Share of China's value added delivered via third-country exports, in US and non-US G7 bilateral imports, 2007–24



Source: Authors' calculations using ADB MRIO tables. MRIO trade includes both goods and services.

The evidence suggests that US policy is not reshaping global value chains, but only the segments that serve its own market. This distinction matters for protecting against foreign chokepoints and US competitiveness. If Chinese value added continues to circulate in production networks serving Europe, Japan, and other major markets, then China is not being displaced from the global system. Instead, the United States is creating a separate, more constrained, sourcing structure for itself. The United States increasingly isolates its own market from production networks that much of the rest

of the world continues to use. Yet it may nonetheless remain dependent on Chinese content through third-country sources.

The divergence between US supply chains and those serving the rest of the G7 also has competitiveness and cost implications. If US-bound supply chains must avoid Chinese inputs that remain widely used elsewhere, American firms face higher sourcing costs than foreign competitors producing for non-US markets. Those costs do not stop at imports for domestic consumption; they also affect US exports. If firms in Europe or Asia can draw on lower cost or higher quality China-centered networks while US firms cannot, the result is a competitiveness gap in third markets where American exporters compete.

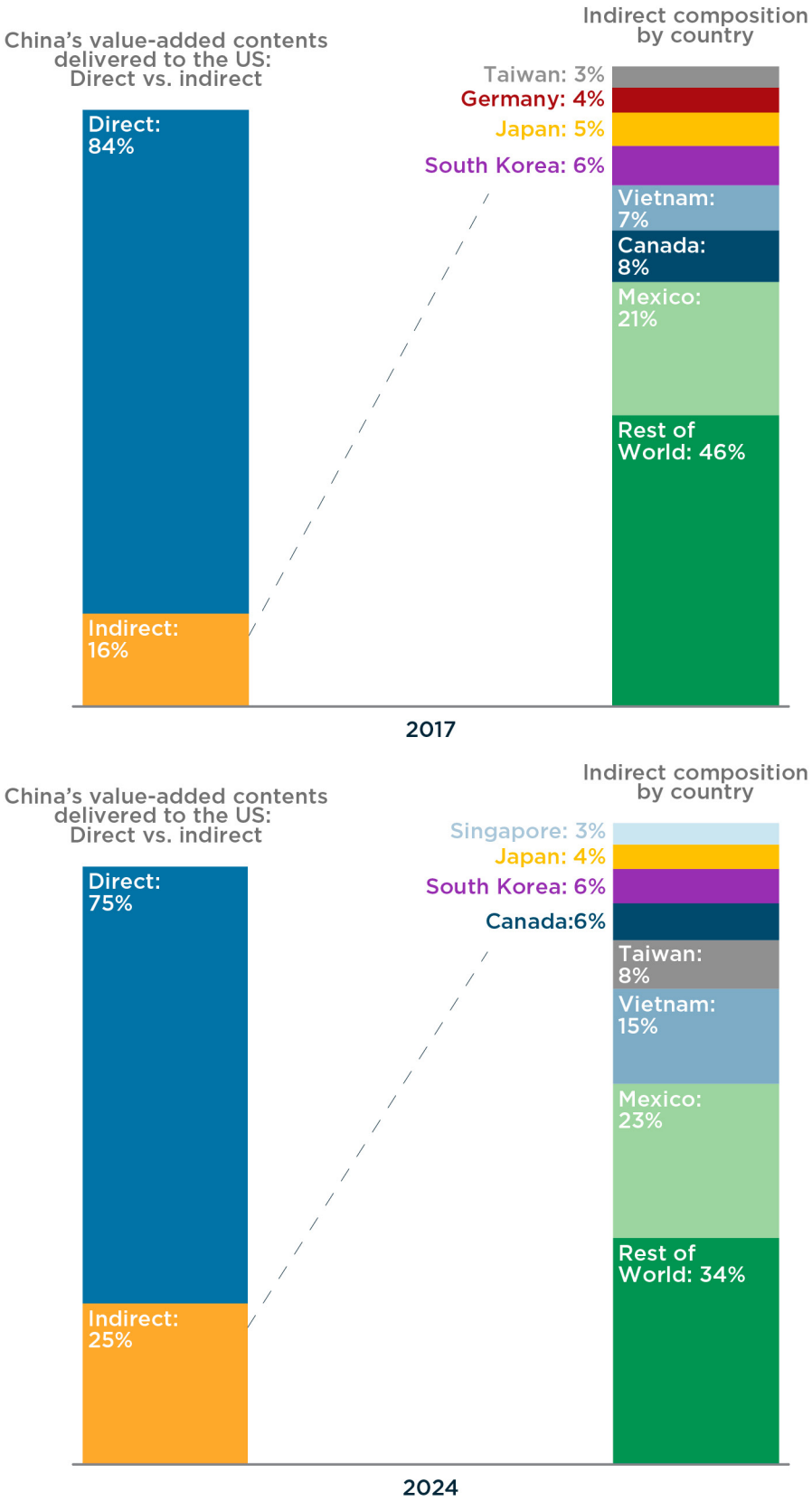
THROUGH WHICH THIRD COUNTRIES DOES CHINESE VALUE FLOW?

The indirect channel from China to the United States runs mainly through a small number of countries, especially Mexico and Vietnam. As seen in figure 7, from 2017 to 2024, the indirect share of Chinese value added had grown substantially, from 16 percent to 25 percent, and its delivery had become more clearly concentrated in identifiable third-country routes. Mexico remains the most important conduit, carrying about 23 percent of total indirect Chinese value added. Vietnam's role has expanded sharply, with its share rising from roughly 7 percent to 15 percent, while Taiwan also has become more prominent, accounting for about 8 percent of the indirect flow.

By 2018, Vietnam's bilateral exports to the United States exceeded Vietnam-origin value-added exports by a wide margin, and the two have diverged even further since then. At the same time, the Chinese value added embodied in those exports has also risen rapidly. This is exactly what one would expect if US-bound production were increasingly being assembled in Vietnam using Chinese inputs. A similar divergence between bilateral exports and value-added exports can be observed in the rest of ASEAN outside Vietnam, as these countries increase their presence in global value chains, but the trend is less pronounced (figure 8).

Figure 7

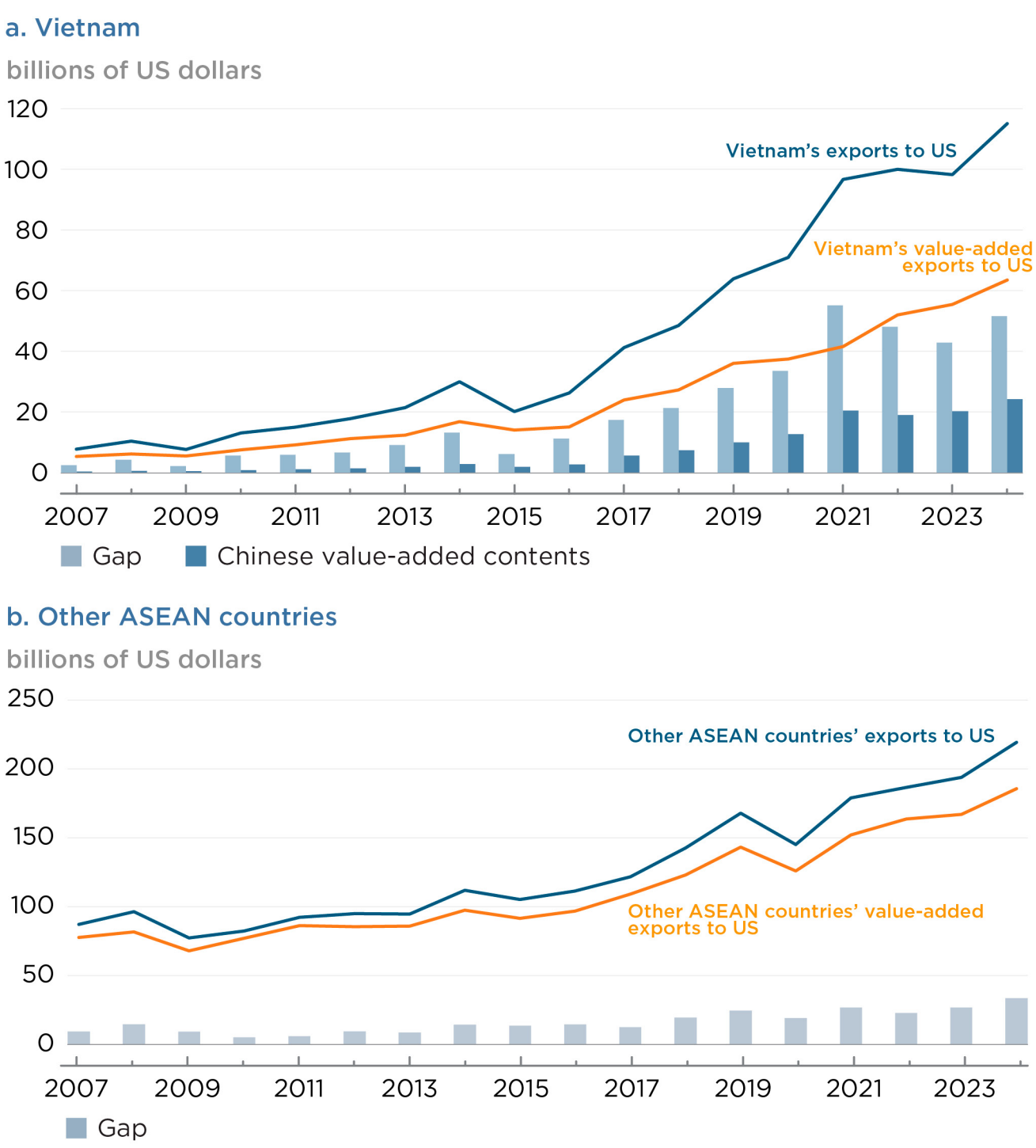
Growing indirect channels and the countries that carry them, 2017 vs. 2024



Source: Authors' calculations using ADB MRIO tables.

Figure 8

Vietnam and other ASEAN countries' gross and value-added exports to the United States, 2007–24



ASEAN = Association of Southeast Asian Nations

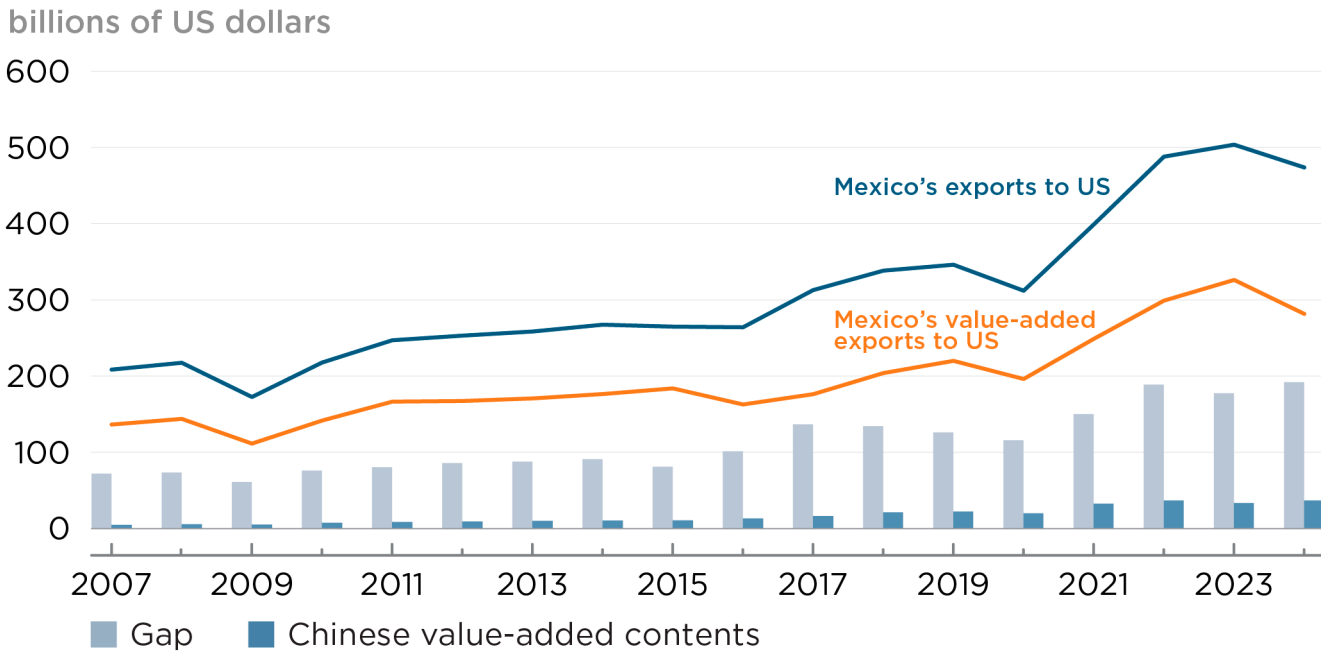
Note: "Exports" refer to gross exports calculated from MRIO flows, not bilateral exports recorded in US trade statistics. A detailed definition is provided in the appendix.

Source: Authors' calculations using ADB MRIO tables.

Although Mexico delivers the largest amount of indirect Chinese value added in absolute terms, consistent with its status as the top US import source, the divergence between its bilateral exports to the United States and its own value-added exports has widened less rapidly than in Vietnam (figure 9).

Figure 9

Mexico's gross and value-added exports to the United States, 2007–24



Note: "Exports" refer to gross exports calculated from MRIO flows, not bilateral exports recorded in US trade statistics. A detailed definition is provided in the appendix.

Source: Authors' calculations using ADB MRIO tables.

VIETNAM AND MEXICO PLAY DIFFERENT ROLES IN SUPPLY CHAIN ADJUSTMENT TO US TARIFFS

Vietnam and Mexico emerge as the two most important third-country channels through which Chinese value added reaches the United States. Both therefore matter for understanding how US-China trade tensions changed the geography of supply chains that serve the United States. At the same time, the two cases are not identical. Vietnam shows a sharper post-2017 increase

in the Chinese value-added content of its exports to the United States, while Mexico exhibits a more persistent role in absolute terms but with much less post-2017 growth. By the end of 2024, nine Vietnamese manufacturing sectors had Chinese value-added accounting for more than 10 percent of their exports to the United States, whereas in Mexico only one sector, electrical and optical equipment, reached clearly above 10 percent, with textiles close to the line.

Differences in the role of Mexico and Vietnam are evident from a sectoral disaggregation. First, figure 10 shows that the Chinese content in Mexican exports is generally less than 10 percent of total value added. Second, while electrical and optical equipment and textiles are major export sectors to the United States in both countries, Vietnamese exports within these broad sectors embed a higher share of Chinese value added than Mexican exports. In electrical and optical equipment, an estimated 28 percent of Vietnam's exports to the United States consisted of Chinese value added, compared with roughly 13 percent for Mexico. In textiles, the gap is similar: Around 21 percent of Vietnam's exports to the United States embodied Chinese value added, versus roughly 10 percent for Mexico. Third, Vietnam shows the clearest post-trade-war acceleration in Chinese value-added content. As figure 10 makes clear, the increase from 2017 to 2024 is generally larger in Vietnam than in Mexico across key sectors such as electrical and optical equipment, transport equipment, machinery, and chemicals.

It is also useful to ask where China's value-added share has been deepening most rapidly. To do so, we compute the compound annual growth rate (CAGR) of China's value-added share in 2017–22.[21] In Vietnam, Chinese value-added shares grew by 8 percent annually across a range of manufacturing sectors; these include

21 We use the OECD TiVA database for the CAGR analysis because it provides a more detailed manufacturing sector breakdown than the ADB MRIO. Although the TiVA data are currently available only through 2022, they capture a portion of the post-trade-war adjustment.

electrical equipment, computer and electronics, machinery, motor vehicles, and other transport equipment. In Mexico, the growth is more concentrated. The largest increases are clustered in transport-related sectors, with above 9 percent annual growth from a low base.[22] Machinery and electrical equipment also experienced 7 percent annual growth. This pattern suggests that the trade war reorganized Chinese participation largely in sectors organized around global production networks.

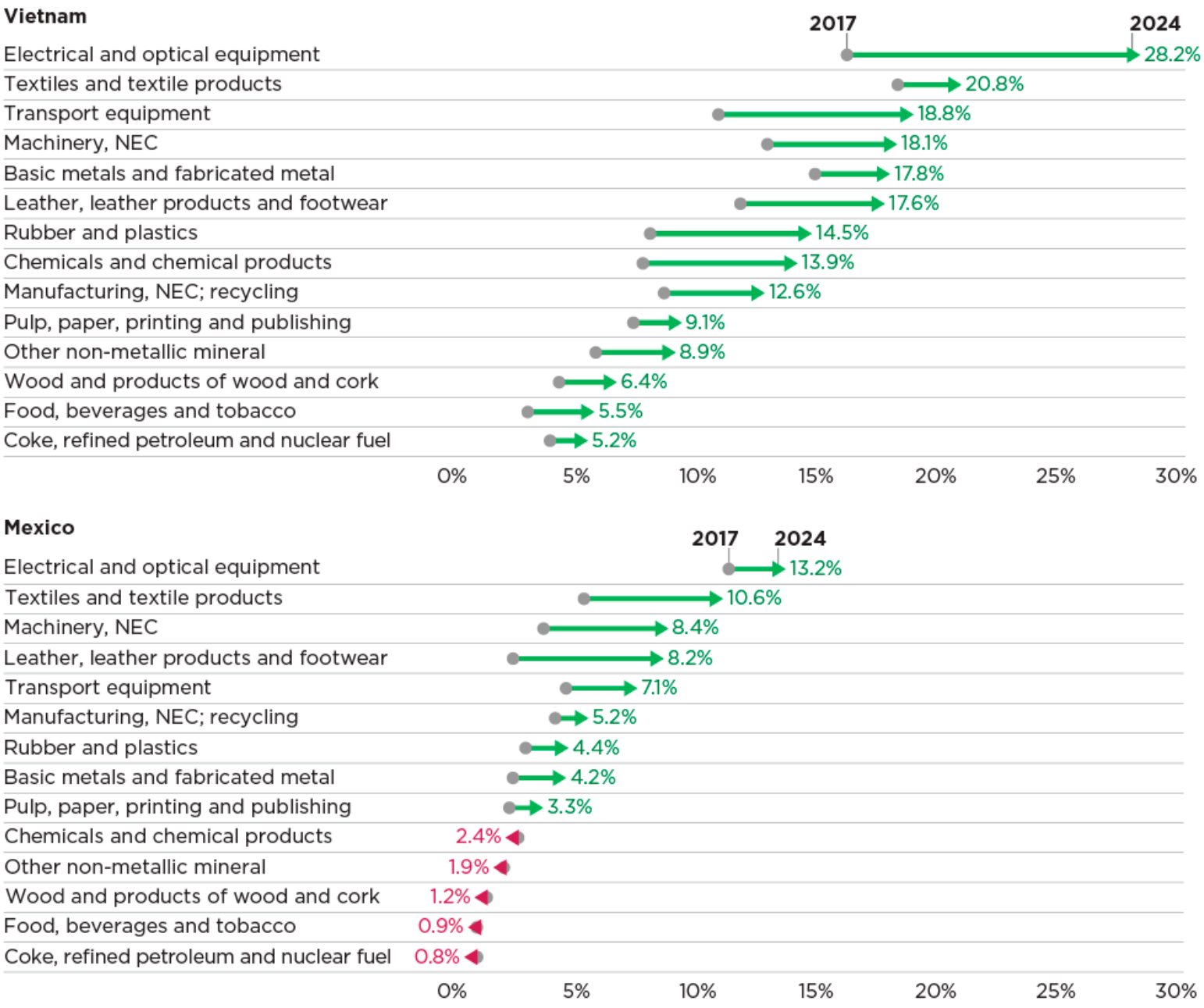
That interpretation is consistent with industry evidence that much of the shift in US electronics sourcing from China to Mexico and other Asian locations has involved the relocation of final assembly rather than the displacement of China from upstream production.[23] Key components and other inputs continue to be sourced from China. This is exactly the kind of pattern we would expect if Chinese firms and suppliers remained essential nodes of the production networks that serve the US market.

22 We use the projected 2023 and 2024 ICIO tables, together with the regular 2017–22 ICIO tables, to further examine the growth of Chinese value-added share for Mexico. Over 2017–24, the Chinese value-added share embodied in Mexico's vehicle exports to the United States grew by about 6–7 percent per year.

23 A Kearney reshoring analysis reports that much of the shift from China to Mexico in computer and electronics products is final assembly rather than relocation of the broader component ecosystem, with key subassemblies and inputs coming from China. China remains a major beneficiary of rising US demand for electronics. The same report also shows that laptops imported from Vietnam and Mexico remain less costly than full production in the United States or final assembly in the United States using imported parts. See Kearney, *2026 Reshoring Index: Why US Manufacturing Imports Hit a Four-Year High despite Record Investment and Tariffs*.

Figure 10

China's value added as a share of manufacturing export value, Vietnam and Mexico, 2017 vs. 2024, percent



NEC = not elsewhere classified

Source: Authors' calculations using ADB MRIO tables.

The rise of Chinese investment in Vietnam helps explain how this shift occurred. According to Vietnam's Ministry of Planning and Investment, 2019 marked a turning point in foreign direct investment from China into Vietnam. In its 2019 brief on foreign direct investment, the ministry noted that China appeared for the first time among the top investing countries in Vietnam and explicitly observed that "investment from China and Hong Kong tends to increase over the same period due to the impact of the US-China Trade War."[24] The change was not gradual. The brief reported that, relative to the same period in 2018, FDI from China increased by nearly 1.65 times, while FDI from Hong Kong rose by 2.4 times. By contrast, total FDI inflows increased by only 7.2 percent. China then remained on Vietnam's list of top foreign investors in 2020,[25] 2021,[26] and 2022.[27]

Sectoral examples help illustrate these broader patterns more concretely. In Vietnam, the pattern is most visible in industries linked to export assembly, and solar provides a particularly clear illustration of how these linkages deepened after 2018. As Panel A in figure 11 shows, Vietnam became markedly more important in solar trade after 2018:[28] its share of US solar imports rose sharply, while its share of world solar exports also increased. Panel B in figure 11 shows that the United States also became a much more important destination for Vietnam's solar exports. After 2018, the United States absorbed a far larger share of Vietnam's solar exports than before. The two panels suggest a dual shift: Vietnam rose as a global solar exporter, and at the same time became more deeply linked to US demand in this sector. One study that compiles solar-related Harmonized System (HS) codes and traces Vietnam's imports of solar inputs shows that China dominated Vietnam's

24 It is also widely understood that investment from Hong Kong usually means Chinese investment. Ministry of Planning and Investment of Vietnam, Brief on Foreign Direct Investment of 2019.

25 Ministry of Planning and Investment of Vietnam, Report on Foreign Direct Investment in the First 10 Months of 2020.

26 Ministry of Planning and Investment of Vietnam, Report on Foreign Direct Investment in 2021.

27 Ministry of Planning and Investment of Vietnam, Report on Foreign Direct Investment in 2022.

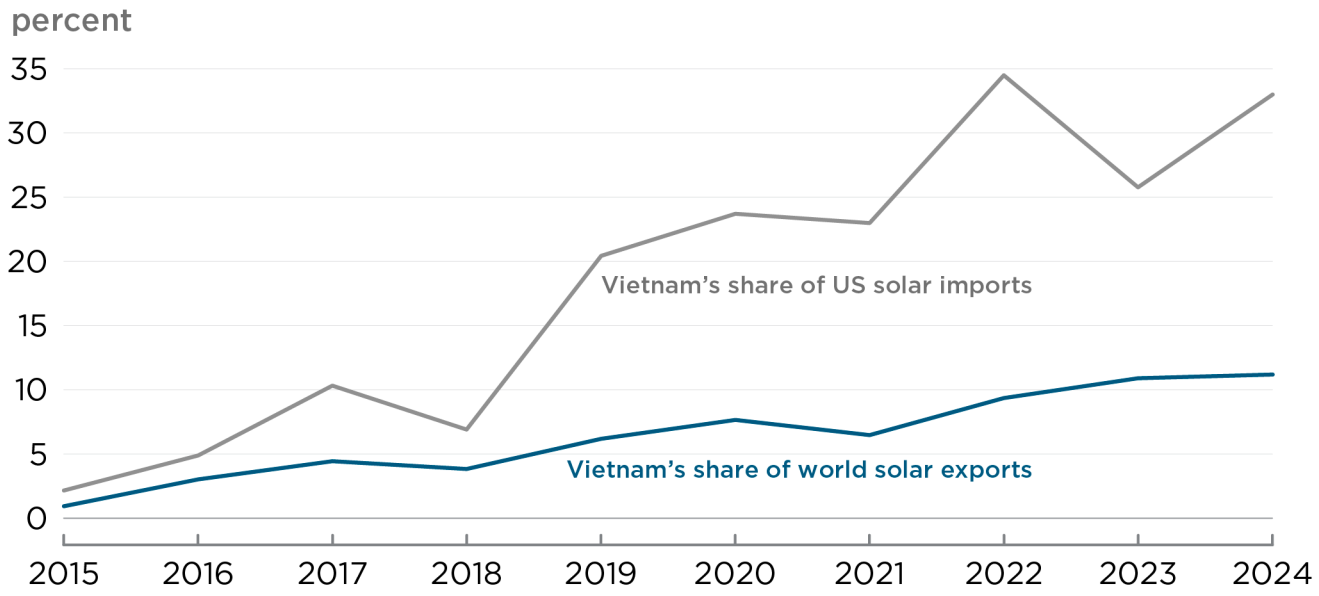
28 The HS codes used to define solar products are 854140, 854142, 854143.

supply of those inputs, and that the value of these imports nearly doubled between 2019 and 2022 (Ngov et al. 2025).

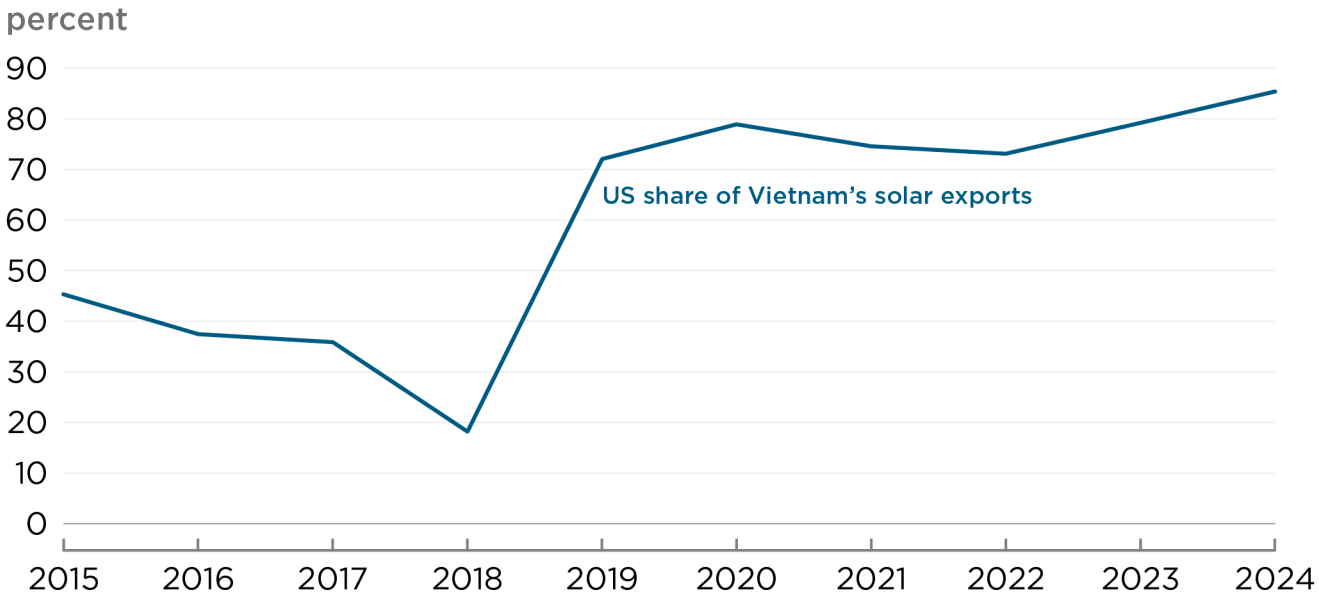
Figure 11

Vietnam's solar equipment exports, 2015–24

a. Vietnam's rising role in solar trade



b. Rising US importance for Vietnam's solar exports



Source: ITC Trade Map.

US trade authorities became concerned that Chinese production was being routed through Southeast Asia. In 2022, the US Department of Commerce investigated solar cells and modules from Vietnam, along with those from Malaysia, Thailand, and Cambodia, and preliminarily found evidence that some producers were circumventing US antidumping and countervailing duties on Chinese products.[29] The case alleged that Chinese components were shipped to Southeast Asia for minimal processing before entering the US market. A preliminary determination in December 2022 found circumvention in four of the eight cases under review,[30] and the final determination in 2023 revised that number to five.[31] Trade barriers did not shield US supply chains from Chinese value, but rather helped China deepen its forward linkages in Southeast Asia.

The Mexico pattern is also visible in trade and investment data. Electrical equipment and electronics was the largest category of Mexican imports from China throughout 2013–24, although its share declined from 43 percent to 35 percent. Meanwhile, transportation-related products rose from 3 percent to 11 percent of Mexico's total imports from China. Over the same period, China's share as a supplier of Mexico's transportation-related imports from all countries increased from 5 percent to 20 percent.[32] These gains

29 International Trade Administration. 2022. Crystalline Silicon Photovoltaic Cells, Whether or Not Assembled into Modules, from the People's Republic of China: Initiation of Circumvention Inquiry on the Antidumping Duty and Countervailing Duty Orders. 87 Federal Register 19071, April 1.

30 US Department of Commerce, Office of Public Affairs. 2022. Department of Commerce Issues Preliminary Determination of Circumvention Inquiries of Solar Cells and Modules Produced in China. Press release, December 2.

31 US Department of Commerce, Office of Public Affairs. 2023. Department of Commerce Issues Final Determination of Circumvention Inquiries of Solar Cells and Modules from China. Press release, August 18.

32 Trade data drawn from the Observatory of Economic Complexity (OEC), using 2-digit headings under HS12. It is based on CEPII's BACI dataset.

in market share reflect a larger role for Chinese inputs in Mexico's production in these sectors.

Coffin, Ford, and Petronzio (2024) argue that Mexico has become an attractive platform for Chinese firms seeking to serve the North American market, owing to geographic proximity, lower production and logistics costs, and preferential access under the United States-Mexico-Canada Agreement (USMCA). Their evidence points to rising Chinese investment and greater use of Chinese intermediates in Mexico. The electronics sector provides the clearer case: Major Chinese firms have established production and assembly operations in Mexico that continue to rely on key components sourced from China.[33] The automotive sector appears to be concentrated more in intermediate inputs than in final vehicle production. Auto parts suppliers accounted for roughly 45 percent of Chinese investment in Mexico by value since 2017, but with relatively limited establishment of Chinese final vehicle production in Mexico.[34] Although 14 new Chinese investments in Mexico were recorded in 2023, totaling $8.5 billion, all were in automotive parts.[35] This suggests that Chinese involvement in Mexico's automotive exports is more limited to upstream input accessories than electronics, which helps explain the comparatively low Chinese value-added share in those exports. Figure 10 is consistent with this interpretation, showing that Chinese value added accounts for only about 7 percent of Mexico's US-bound transport-sector exports, despite relatively quick growth in recent years.

33 See Coffin et al. (2024, 15), which provides examples of major Chinese electronics firms, including Hisense, Lenovo, and Xiaomi, undertaking substantial acquisition and establishment activities in Mexico.

34 See Brendan Kelly, China Expands Mexico Investment but Notably Lags U.S., Other G7 Economies, Federal Reserve Bank of Dallas, September 26, 2025.

35 See Coffin et al. (2024, 11), which draws on several proprietary sources on Chinese investment in Mexico. Given the historical gap between announced and implemented Chinese auto investment projects in Mexico, we rely on recorded investment figures rather than announced FDI.

Using firm-level data, Utar et al. (2025) find that the Mexican firms benefiting most from the 2018–19 US tariffs on China were those importing components for subsequent export, with the strongest gains concentrated in skill-intensive sectors such as computers and automotive production rather than in traditionally labor-intensive sectors such as textiles. Taken together, the firm-level and value-added evidence suggest that the main effect of the tariff shock was not to sever Mexico's production links with China, but to reinforce Mexico's role within global value chains in which Chinese intermediates continued to be embodied in its final-goods exports to the United States, especially in computers, electronics, and transport-related manufacturing.

Contributing to the rise in the value of Chinese content in third-country exports is the rising sophistication of Chinese intermediate inputs. As automotive manufacturing adopts more advanced production technologies, for example, Chinese value added may increasingly enter not only through basic auto parts but also through capital goods. Chinese upgrading can be seen in its growing sales of collaborative robots, or cobots, for Mexican car production. These robots, which incorporate sensors and AI-enabled functions to work more closely with human operators, are used primarily in the automotive sector, which accounts for 70 percent of cobot installations in Mexico. Mexico does not manufacture cobots domestically and instead relies on imports of industrial robots, a market in which China has become a top supplier with 30 percent market share.[36] Another report notes that China's robot exports tripled between 2020 and 2024, with exports in the first half of 2025 rising by 60 percent year over year.[37] Vietnam and Mexico are the top two destinations, where they are used in automotive and electronics production.

As the United States continues to pursue a changed economic relationship with China, it faces reorganized global supply chains characterized by deeper Chinese integration

36 International Trade Administration, US Department of Commerce, 2026, Mexico Advanced Manufacturing Cobots.

37 Joyce Z. K. Lim, As Global Supply Chains Shift, China's Exports of Factory Robots See a Sharp Rise, *The Straits Times* (Singapore), August 10, 2025.

into manufacturing networks outside the United States and in increasingly sophisticated products. Chinese participation in more technologically sophisticated production stages is harder to displace than Chinese participation in low-value parts production and final assembly. These changes point to a more durable reconfiguration of global value chains that is increasingly separated from bilateral trade with the United States.

IMPLICATIONS FOR TRADE POLICY

Our central finding is straightforward: US tariffs on China have changed the route through which Chinese-made content reaches the United States far more than they have reduced US dependence on China. Countries that are gaining a larger presence in American markets through trade diversion are deepening their use of Chinese goods, services, and capital, resulting in the substitution of indirect flows from China for bilateral trade flows. Supply chains serving the United States have reorganized, but US reliance on Chinese producers has fallen much less than bilateral trade data suggest.

These findings have five major implications for US efforts to enhance economic security. In drawing these implications, we rely on the definition of economic security provided in federal statutes (6 US Code § 474): "The term 'economic security' means the condition of having secure and resilient domestic production capacity, combined with reliable access to the global resources necessary to maintain an acceptable standard of living and to protect core national values." As noted by Fajgelbaum and Khandelwal (2026, 47) in their preliminary assessment of the effect of higher US tariffs on the reshoring of strategic sectors, "the tariff structure reveals no systematic pattern based on strategic sector concerns or geopolitical alignment."[38] Given their divorce from

38 Fajgelbaum and Khandelwal (2026) apply available empirical evidence to assess the main justifications for the US return to protectionism: lowering import prices, reducing trade deficits, raising government revenue, addressing distributional concerns, decoupling from China, realignment with allies, reshoring strategic sectors, and improving US access to foreign markets. They argue that so far tariffs have only been effective in raising revenue and decoupling from China. Our analysis of value-added trade flows is a complement to their assessment of decoupling based on bilateral trade flows.

strategic supply concerns, we focus our assessment on the ability of blanket tariffs to secure access to the global resources needed by US producers and consumers. Such security is promoted by reducing dependence on any one partner and by developing new sources for strategically important goods, thus removing potential supply-chain chokepoints.

1. Blanket tariffs have failed to promote strategic decoupling

Tariff-induced rearrangement of global supply chains has largely failed to promote US-China decoupling while spurring greater integration of partner economies with Chinese suppliers. A first implication of this finding is that blanket tariffs on China do not alleviate but rather obscure US dependence on Chinese suppliers by elongating supply chains. Given overwhelming evidence that US importers bear most of the tariff burden, their failure to substantially diversify US supply chains raises questions about the benefits these tariffs create for American taxpayers.[39] While many benefits have been claimed for the 2018–19 trade-war tariffs, which remain in effect, as well as the more recent "reciprocal" and fentanyl tariffs, reducing US dependence on China is an important, and typically uncontested, justification for subjecting Chinese imports to higher rates. Yet untargeted tariffs have proved ineffective in creating meaningful decoupling and may do harm by hiding dependencies.

This failure is consistent with specialization within global value chains. Tariffs were expected to work by raising the cost of sourcing from China and thereby inducing movements away from Chinese suppliers and toward alternatives. However, for those goods where China provides most or all of the global supply—exactly the dependencies that security concerns would seek to reduce—such adjustment cannot occur because no or few alternatives exist. At best, tariffs shift Chinese supplies from bilateral exports to indirect

39 Many products are exempted from US tariffs, notably those that the United States does not produce or does not produce in sufficient quantity to meet domestic demand. The burden of tariffs is well documented. Fajgelbaum and Khandelwal (2026) summarize the evidence from the 2018–19 trade war and estimate the effect of 2025 reciprocal tariff increases on US import prices.

exports that enter the United States through the production chains of third countries. Simply put, where dependence on China is deepest, tariffs are least likely to result in meaningful trade diversification.

2. ARTs and new Section 301 tariffs are likely to be counterproductive and may isolate the United States

The USTR recognizes that Chinese content has grown within the production networks of other US trading partners.[40] US trade policy is now responding to this realization in two ways, each of which may be counterproductive. First, the Trump administration has used recent negotiations with individual partners over its so-called reciprocal tariffs to compel alignment with US efforts to reduce its exposure to Chinese exports. As detailed in Lovely and Wan (2026), these Agreements on Reciprocal Trade (ARTs) go beyond enhancing US market access to include commitments on trade, technology, investment, and supply chains. Nine countries have signed ARTs that commit each, with varying intensity, to seven mechanisms by which the United States can limit China's role in their domestic economies. These agreements, then, create a pathway for forcing these countries to align with US decoupling efforts.

Second, the June 2026 Section 301 determination by the USTR concerning trade and forced labor provides another tool for reducing China's value-added trade.[41] The investigation found

40 The USTR's four-year review of the 2017 Section 301 case includes a summary of research (much of it reviewed in this brief) that increased Chinese content in third-country exports was likely given direct export and import patterns. The report concludes, "The literature demonstrates that sourcing of US imports has been significantly restructured since imposition of section 301 duties to reduce exposure to China-origin goods. This ongoing process is in its early stages, such that indirect trade linkages with China remain for the United States and countries from which US imports have recently increased" (USTR 2024, 78).

41 The official statement can be found on the USTR website, USTR Makes Findings and Proposes Action in 60 Section 301 Investigations Relating to Failures to Take Action on Trade in Forced Labor Goods.

that 60 economies have failed to impose or effectively enforce a prohibition on the importation of goods produced with forced labor, and that this failure restricts US commerce. Trump accepted these findings and levied new blanket import duties on the exports from these countries (with significant product exemptions). The investigation's focus on partners' imports signals their potential use as tools to enforce US preferences on Chinese involvement in supply chains.

These trade-related decoupling tools are counterproductive if they disrupt the very process by which alternative suppliers develop. As our analysis shows, reliance on Chinese value added varies widely across different industrial sectors. More disaggregated data surely would show substantial variation within the broad sectors we analyze as well. In some product categories, China continues to be the only supplier capable of delivering parts and components of sufficient quality and quantity for factories producing for the West. Chinese firms provide key inputs, know-how technologies, and production capabilities that are difficult to replace. That makes US efforts to remove China from global supply chains structurally difficult, because many third countries remain integrated into networks in which Chinese firms play a leading role. Evidence for the difficulty of replacing China comes from a recent study of trade diversion caused by the 2018–19 US tariffs on China. Koloskova and Nicita (2024) find that the decline in China's share of the United States market was less pronounced for products where China was the largest supplier. In other words, import diversification by tariffs alone is significantly more challenging when import sourcing is already concentrated, exactly the products for which alternative suppliers are most desired.

There is a second reason coercive tools may backfire: For countries capable of replacing China in supply chains, building domestic capabilities is a process of learning that occurs over time. China itself teaches us this lesson. Kee and Tang (2016) show that in the decade after its accession to the World Trade Organization (WTO), China's gradual substitution of domestic content for imported parts was induced by deepening engagement in global value chains and expanding the range of domestic materials available at lower prices. Evidence from China's renewable

energy equipment industry also suggests that access to imported intermediate inputs strengthened domestic linkages and gradually raised the sector's domestic value added (Kee, Taglioni, and Xie 2025). These studies suggest that new suppliers to the United States will need a period during which they continue to rely on imported Chinese intermediate inputs as they build their own capabilities. Policies that seek to strip Chinese content out too quickly may therefore undermine, rather than accelerate, the emergence of viable alternatives.

3. If the goal is genuine supply chain resilience, tariffs must be paired with capacity building

Targeted tariffs may have a role as part of the US economic security strategy, but only if they are paired with policies that help build alternative sources of supply. Federal agencies have reportedly mapped individual supply chains in search of potential chokepoints and other risks, and successive administrations have deployed state subsidies, export controls, federal procurement rules, and coordination with allies to address some of the economic security concerns identified in these mappings. Yet little of this intelligence seems to have filtered through to US tariff setting. Reforming US tariffs to enhance security would require a disciplined focus on where import duties can produce needed supply redundancies, not just tax Americans or move Chinese inputs from domestic factories to offshore factories. Our analysis shows that differential tariffs can tip supply chains in favor of alternative partners, even if tariffs by themselves are not enough to adequately reduce unwanted dependencies. Tariff preferences can provide incentives for creating alternative production sites for products now dominated by Chinese suppliers.[42] A constructive approach would combine targeted tariffs on China with trade and investment policies that support domestic capacity building in these alternative locations.

42 Tariffs that vary across trade partners violate US WTO treaty commitments to nondiscrimination. In response to such existential challenges to the global trading system, Mattoo, Ruta, and Staiger (2026) propose negotiation of a "geopolitical exemption" to most-favored-nation rules that would permit yet constrain members' use of discriminatory tariff schedules.

Although our analysis shows that trade diverted from China to third countries contains increased Chinese content, most of the productive factors embedded in these goods and services are not Chinese. As highlighted by a 2026 policy report from the Asian Development Bank, recent geopolitical disruptions to supply chains have created risks for developing country participation in global supply chains but have also created strategic opportunities. Some economies have been able to capture new investment flows as firms diversified supply chains across multiple production locations. Vietnam's electronics sector, for example, has become a major node in global production networks, hosting an expanding network of suppliers. Because our findings suggest that electronics is the sector where Chinese indirect content is the highest and, for Vietnam, has grown the fastest, it is a candidate for targeted US support. The policy implication for the United States is to help countries build the capacity needed to become stronger alternative suppliers over time, rather than to enact punitive measures to forcibly remove Chinese parts.

Infrastructure is one area for US support. New domestic investments that facilitate trade between exporters and domestic intermediate-good producers may help raise domestic value added in exports. As highlighted by the Asian Development Bank, "connectivity" in the form of transport infrastructure, logistics networks, energy systems, and digital connectivity is essential for intensifying countries' participation in global value chains. These networks link domestic suppliers to external customers, but they also can be designed to link domestic suppliers to domestic exporters. Useful evidence in support of this view comes from China's expansion of its high-speed rail network. Kee, Xie, and Xu (2025) find that high-speed rail connectivity significantly increased domestic value added in exports through stronger domestic supply-chain integration. The United States can encourage development of the "connectivity" that makes domestic manufacturing upgrading possible.

4. Enhancing economic security is a team sport; tariffs hinder cooperation

Perhaps the most ominous effect of unilateral tariffs is that these policy tools are largely reshaping the supply chains that serve the American market rather than global production networks more broadly. We show that rerouting Chinese content through third countries evident in post-trade-war US value-added imports is not evident in the G7 absent the United States. If other economies continue to operate within production networks that incorporate China while the United States reduces its participation in the same networks, the United States risks isolating itself rather than successfully remaking that system. Such an outcome would raise costs for American consumers and firms while leaving foreign competitors less constrained and still reliant on China.

The obvious antidote to growing isolation is cooperation with friends and allies to shape more secure supply chains for critical goods and services. Removing broad tariffs on exports from these partners would reduce commercial tensions, enhance efforts to build new sources of supply, and bolster the infrastructure needed to reliably get these supplies onto the market. The growing divergence in sourcing we identify likely reflects US unilateral policymaking more than a lack of desire among US allies to strategically reduce dependence on Chinese exports.

5. US trade policymaking should be returned to the US Congress

Reforming US tariff schedules to enhance economic security must acknowledge that blanket tariffs, to the extent they lead to supply chain adjustments, are unlikely to reduce dependencies while unnecessarily raising costs for American importers and disadvantaging American exporters.[43] While Trump's "reciprocal tariffs" of April 2, 2025, framed a tiered tariff schedule that

43 The negative impact of import tariffs on US exports is documented by Handley, Kamal, and Monarch (2025). They estimate that the reduction in US exports in 2019 due to the 2018–19 trade war tariffs was equivalent to an ad valorem foreign tariff on US exports of 2 percent to 4 percent.

handicapped China relative to potentially alternative suppliers, recent bilateral negotiations and US court rulings have leveled these duties on China versus other partners.[44] The result is that the 2018–19 trade war tariffs remain the most important tax "wedge" between sourcing from China and an alternative location, but these tariffs were not designed as strategic tools to enhance economic security. One question for congressional investigation, therefore, is how existing tariffs can be reformed to favor the development of alternative suppliers where there is a compelling economic security rationale. Much more disaggregated sourcing data than presented in this brief will be needed to identify where tariffs can play this role.

The "reciprocal tariffs" (or their replacements) on US partners create a zero-sum environment that deters cooperative action to reduce China's dominance of strategic sectors. Ongoing Section 301 investigations, as well as the ARTs forced on US trade partners under the threat of denied market access, create an adversarial relationship with America's partners and inadvertently deepen their linkages to Chinese trade and investment. While some policy areas are more open to executive discretion than others, and national security is clearly one of them, the US Constitution is clear on which branch regulates international trade. The US Congress can refocus American trade policy in ways that reflect the difficult realities of reorienting supply chains and move toward genuine enhancements to US prosperity and security.

44 "Reciprocal tariffs" were discriminatory tariffs. Most imports from Mexico and Canada meeting USMCA requirements would remain duty free. Advanced economy partners, including top partners in Europe, Japan, and South Korea, were assigned 10 percent tariff rates on most of their exports to the United States. Developing-country partners, including most Latin American and ASEAN countries, were assigned rates between 15 and 20 percent. Especially high rates were reserved for China, India, and Brazil, for idiosyncratic reasons.

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