

PART IV

EXPOSURE TO CHINA'S ECONOMIC DISTORTIONS AND COERCION

CHAPTER 8: CHINA SHOCK 2.0

Executive Summary

China's economic model continues to generate a major imbalance between weak domestic demand and excess supply of manufactured goods. China uses its excess capacity to manufacture goods like steel and automobiles at a scale it cannot consume on its own, leading to extreme price wars between producers. Rather than attempt to rebalance its economy, China is exporting its economic distortions in the form of low-priced goods, thereby threatening the world with a second "Shock." This China Shock 2.0 is already upending manufacturing sectors in both developing and developed countries, up and down the value chain, as China's flood of exports is no longer limited to low-value-added goods like furniture and clothing. While these industries are more at risk than before, China has also begun to produce higher-value-added goods at scale, the result of years of technology theft, government subsidies, and aggressive industrial policies.

The glut of Chinese exports is deepening global market dependence on China and exacerbating supply chain vulnerabilities. Regions like Southeast Asia that once benefited from global trade integration are now at risk of deindustrialization as their exports are undercut by Chinese goods. Germany, South Korea, and Japan are also at risk as their basket of exports increasingly resembles China's. Beyond merely carving out a larger share of global profits for Chinese corporations, China's market dominance is translating into control over chokepoints in key global supply chains for goods like pharmaceuticals and electronics. China's investment in manufacturing facilities abroad undercuts efforts by the United States and its allies and partners to diversify production to other emerging markets.

Responses to this new Shock have been fragmented, relying on outdated tools that no longer match the reality of today's global trading system. Additionally, incentives to push back on these export practices are not always aligned with the desire to continue selling commodities to China or benefiting from Chinese outbound foreign direct investment (FDI). At risk are not just today's factories and jobs in manufacturing: as China floods global markets with its goods, it will gain a more dominant share of key

markets, gutting foreign competitors and propelling them into a downward spiral of deindustrialization (the focus of this chapter). This in turn will lead to greater control over critical supply chain chokepoints (the focus of the next chapter). Beijing has already shown its willingness to weaponize its control of the critical minerals sector; a new China Shock will further strengthen China's leverage over supply chains and ability to employ economic coercion to advance its interests.

Key Findings

- The world is facing the threat of a China Shock 2.0, whereby overproduction in key industries across China's highly subsidized manufacturing sector floods outward, causing major harm to industries in other countries. China Shock 2.0 is a manifestation of General Secretary of the Chinese Communist Party (CCP) Xi Jinping's economic plan—massive state subsidies and other distortions to boost production, reliance on foreign markets to absorb the excess supply, and minimal attention to addressing continued, structurally weak domestic demand.
- China's export of excess production is undercutting global competitors and winning market share across the value chain, from commodities to intermediate inputs to finished goods. China's economic model increasingly limits other emerging market countries to the lowest-value-added stages of manufacturing.
- Emerging markets have traditionally been welcoming to Chinese FDI in manufacturing, viewing it as an opportunity to facilitate labor upskilling and the development of local industry. However, Chinese FDI poses potential problems for host countries as well. Chinese officials are increasingly reluctant to allow domestic firms to transfer technology abroad, lessening benefits to host countries. In addition, Chinese FDI may deepen reliance on Chinese inputs and open the host country to concerns that it serves as a base for Chinese transshipment or tariff evasion.
- In emerging markets, China's surging exports have already led to job losses and factory closures. Emerging market countries have begun to wake up to the threat, employing various tools to push back against China's unfair trade practices and preserve local industry and jobs, with varying degrees of success. International trade agreements have proven less durable protection; in many cases they merely constrain the policy responses of China's trading partners, facilitating the harms from China Shock 2.0, even though China's economic model is inconsistent with the foundational assumptions of those trade agreements.
- China's surging exports of higher-end goods are taking market share from producers in other countries, particularly those in developed countries, including the United States.

While emerging markets are imperiled by other aspects of China Shock 2.0, they have little incentive to implement barriers to Chinese exports in those industries that do not compete with local manufacturing. Over time, the long-term harm to U.S. and other non-Chinese producers may be significant. Revenue from foreign markets has helped sustain U.S. economic strength and technological leadership by providing opportunities to scale. Losing this revenue will make it harder to invest in next generation technology.

Introduction

A foundational precept of globalized fair trade is exchange of goods based on a country's comparative advantages. China has turned this concept on its head by trying to produce and export everything from low- to high-end goods, using government support, subsidies, and numerous other nonmarket distortions to undercut global competitors that might otherwise hold the advantage. The first China Shock, after China's entry into the WTO, resulted in major job losses for U.S. manufacturing industries over the following decade, and labor markets in many communities in the United States still have not recovered. The world is now experiencing a second China Shock, as China's massive state support for industry leads to overproduction that is then exported throughout the world at unprecedented scale. The United States is less directly threatened by China's exports this time, partially from years of de-risking efforts and the implementation of protective tariffs in strategic industries but also because the U.S. manufacturing sector has been shrinking for decades. However, many other countries are facing job losses and bankruptcies from this new wave of exports. Over time, China's growing dominance in key sectors may exacerbate deindustrialization in emerging markets, enabling China to dominate global supply chains and eroding the long-term international competitiveness of non-Chinese companies. By undercutting alternative producers, China Shock 2.0 may increase the dependence of other countries, creating more opportunities for Chinese economic coercion against allies and partners in the future.*

China Shock 2.0: Impacts and Origins

The China Shock that occurred around the turn of the 21st century was ignited by a unique set of events: China's integration into the global trading system, including the normalization of trade relations with China and its entry into the WTO. In the aftermath, as explored by researchers David Autor, David Dorn, and Gordon Hanson in a series of papers beginning in 2013, the flood of exports from China in goods like toys and furniture contributed to manufacturing job losses in specific geographic labor markets in the United States. The Shock also affected a specific cross-section of society, primarily individuals without college degrees working in manufacturing. While

*This chapter draws on the Commission's June 2025 hearing on "Dominance by Design: China Shock 2.0 and the Supply Chain Chokepoints Eroding U.S. Security," consultations with experts, and open source research and analysis.

macroeconomists continue to debate the overall impact of Chinese exports on certain aspects of U.S. manufacturing, average incomes, and the U.S. economy as a whole, the China Shock data indicate how certain regions and industrial sectors could be vulnerable to sudden disruptions.¹ U.S. manufacturing job losses decelerated after 2007, but contrary to the predictions of most trade theorists, a decade after the beginning of the Shock, many affected individuals in these labor markets were either still unemployed or underemployed, and these areas showed both large reductions in average wages and substantial increases in government transfer payments to citizens.²

By 2008, the initial Shock had largely run its course, as China's share of total global exports leveled off and the composition of its exports stabilized.³ China's trade surplus as a share of gross domestic product (GDP) peaked in 2007 at 8.5 percent and then declined to a low of 0.6 percent in 2018 before rising again in more recent years.⁴ While most affected areas in the United States never fully recovered, the impacts more broadly appeared to be contained. Prevailing economic theory anticipated that the benefits would exceed the drawbacks based on arguments that China's growth helped expand its middle class consumers and lift other emerging markets through their participation in global value chains while also expanding purchasing power in developed markets by lowering prices for consumer goods. Many economists are now reevaluating the costs and benefits of free trade and globalization in the face of long-term evidence of harms associated with how these principles have played out in the real world.⁵

Now, the world is in the midst of a second China Shock. This time, the cause is an acute and accelerating supply-demand mismatch in China's domestic economy, reflected by an economic strategy that has failed to deal effectively with structurally weak domestic demand and instead prioritized growth driven by ever-rising production. Foreign countries are left to absorb the excess supply as Chinese firms seek out less saturated markets. Because China's economy and export sectors are now so large and dominant in so many critical supply chains, China Shock 2.0 is set to have a major impact on a wide range of developed and developing economies alike.

China Shock 2.0 Is a Culmination of China's Massive Market Distortions, Failure to Rebalance Its Economy, and Effort to Have Global Markets Absorb Its Excesses

China's Push to Control Production Leads to Overcapacity and Oversupply in Manufacturing

At its core, China Shock 2.0 is driven by China's massive market distortions in favor of manufacturing and exports, an effort to both drive growth domestically as well as secure greater control over global production. Over the last decade, China's industrial policies have aimed to move China up the value chain, reduce reliance on foreign technology, and seize leadership in emerging sectors. These policies include the ten-year "Made in China 2025" plan to upgrade Chinese manufacturing, produce more of the world's high-technology goods, and reduce reliance on imports.⁶ The plan has helped China accelerate its share of manufacturing value-added at the expense of the rest of the world.⁷ (For more on China's industrial policies, see

Chapter 6, “Interlocking Innovation Flywheels: China’s Manufacturing and Innovation Engine.”) China’s focus is not just on advanced manufacturing, however, as Beijing aims to dominate global production for both traditional industries and cutting-edge goods.⁸ While Made in China 2025 has received the most global attention, China has introduced thousands of industrial policies over the years, many overlapping, most at the provincial or city level.⁹ These local policies often target the same industries, leading to tremendous redundancy and significant overcapacity as localities vie to become the nation’s leader in producing goods targeted by the central government.¹⁰ In recent years, Chinese officials have built on the foundation of Made in China 2025 and begun emphasizing a concept called “New Quality Productive Forces,” introduced by Xi Jinping in September 2023. The goals of New Quality Productive Forces are similar to Made in China 2025 but applied across more of China’s industrial base—to “foster and build up advanced manufacturing clusters” and “promote integrated and clustered development of strategic emerging industries” in a push to advance China’s move into higher-value-added products.*¹¹

Collectively, China’s various industrial policy programs are significantly larger, more sustained, and more distortive than other countries. A Kiel Institute study found that China’s various subsidies for its domestic industries are three to nine times greater than Organisation for Economic Co-operation and Development (OECD) countries’ subsidies; a Rhodium Group study found firm-level impacts from China’s industrial policies to be more than six times greater than the OECD average.¹² China’s distortive industrial policies in pursuit of manufacturing dominance have led to widespread, structural excess capacity. Overcapacity occurs when an industry’s production capacity—the supply its factories are capable of producing—exceeds what customers are willing to buy at profitable prices. There is no singular measure of overcapacity, but the phenomenon is evident when firms or whole industries over sustained periods of time experience low capacity utilization rates, near-zero or negative profits, high inventories from unsold goods, or some combination of these indicators.¹³ Overcapacity is not a China-only phenomenon; it can occur in the United States and other market economies as an organic part of the business cycle, typically leading to downsizing, firm exits, and bankruptcies, which help reduce production capacity to meet demand.¹⁴ Yet, because of these adjustments in market economies, overcapacity generally does not lead to oversupply (excess production) over extended periods.† In China, however, rampant and persistent overcapacity is a structural outcome of its

*The official list of “future industries” published by China’s Ministry of Industry and Information Technology in January 2024 spans several broad fields such as manufacturing, information, materials, energy, space, and health but also mentions specific items such as humanoid robots, nanomanufacturing, quantum computing, nuclear fusion, hydrogen energy, exploration of the Moon and Mars, deep-sea mining, and genetic technologies.

China’s Ministry of Industry and Information Technology, *MIIT and Seven Other Departments’ Opinions on the Implementation of Promoting Innovation and the Development of Future Industries* (工业和信息化部等七部门关于推动未来产业创新发展的实施意见), January 29, 2024.

†Overcapacity relates to the total capacity a firm or industry is capable of producing; oversupply relates to the actual levels of production. Overcapacity does not necessarily lead to oversupply if firms with excess capacity are not actually using it to produce goods—e.g., they are in the process of downsizing or do not produce goods at a loss.

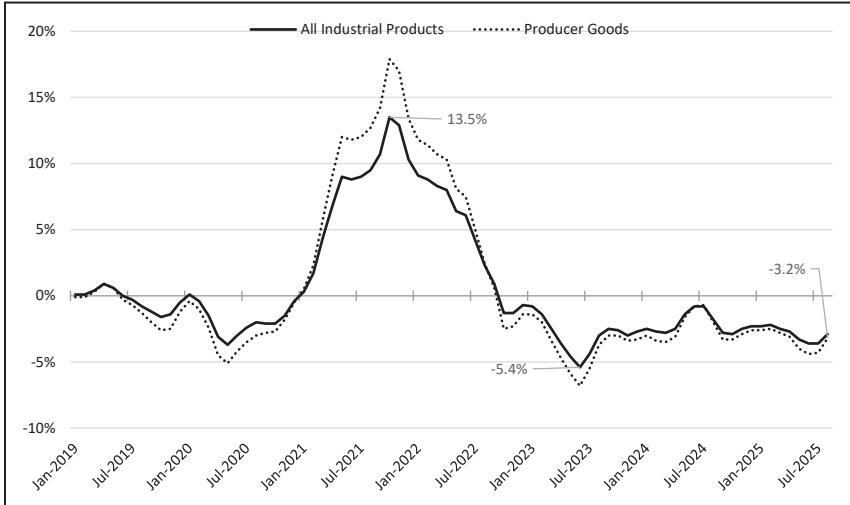
system, as CCP policies typically prevent markets from forcing loss-making firms to reduce underutilized capacity or reallocate resources to more productive endeavors, and even encourage additional entrants to already saturated industries.¹⁵ Those same structural factors mean overcapacity in China routinely leads to oversupply.

For years, China's production capacity expansion in various manufacturing sectors has outpaced projected demand growth, in spite of clear "warning signs" of existing overcapacity—such as high rates of loss-making firms and declining capacity utilization rates—as highlighted by then-Undersecretary of the U.S. Department of the Treasury for International Affairs Jay Shambaugh in 2024.¹⁶ An Economist Intelligence Unit report found that Chinese sectors experiencing the highest levels of overcapacity in 2024 included cement, food and beverage, automotive, steel, and construction machinery.¹⁷ In 2024, China had the capacity to manufacture twice as many internal combustion engine cars as its domestic demand.¹⁸ A similar phenomenon has led to massive excess production in China of steel, low-end semiconductor components, solar panels and inputs, and electric vehicles (EVs).¹⁹ (For more on China's overcapacity in new energy industries, including batteries, EVs, and solar panels, see Chapter 10, "Power Surge: China's Electrification Drive and Push for Global Energy Dominance.")

The overcapacity problem in Beijing's favored industries, including electrical equipment and "new energy" automobiles, has accelerated since the COVID-19 pandemic.²⁰ At the same time, excess capacity has grown in traditional industries like steel, chemicals, and cement.²¹ According to official statistics, capacity utilization rates in China's manufacturing industries have fallen even as production has expanded. All but two of China's 13 manufacturing sectors—ferrous metals and chemical fibers—experienced declining capacity utilization from 2019 through the latest data.²² Moreover, Chinese data likely overstate capacity utilization, as the National Bureau of Statistics reports figures for enterprises with at least 20 million renminbi (RMB) in operating revenue (called "enterprises above a certain scale"), potentially excluding firms with low revenue resulting from idle capacity.²³ Official data claimed that capacity utilization in Chinese automaking decreased from 78.5 percent to 77.2 percent between Q4 2019 and Q4 2024.²⁴ Unit data compiled by Shanghai-based Gasgoo Automotive Research Institute show Chinese carmakers' utilization rates at only 46.4 percent in 2019, increasing slightly to 49.5 percent in 2024.²⁵ Many of these industries have continued to report climbing inventory levels since 2023, indicating that Chinese manufacturers are continuing to produce goods even as they struggle to sell them.²⁶

China's interference with market forces that would have spurred a reduction in capacity has led to severe price wars among manufacturers and a growing proportion of unprofitable firms. China's deflationary pressures are worsening, with the producer price index turning negative in October 2022 and falling 3.2 percent year-over-year in August 2025 (see Figure 1).²⁷

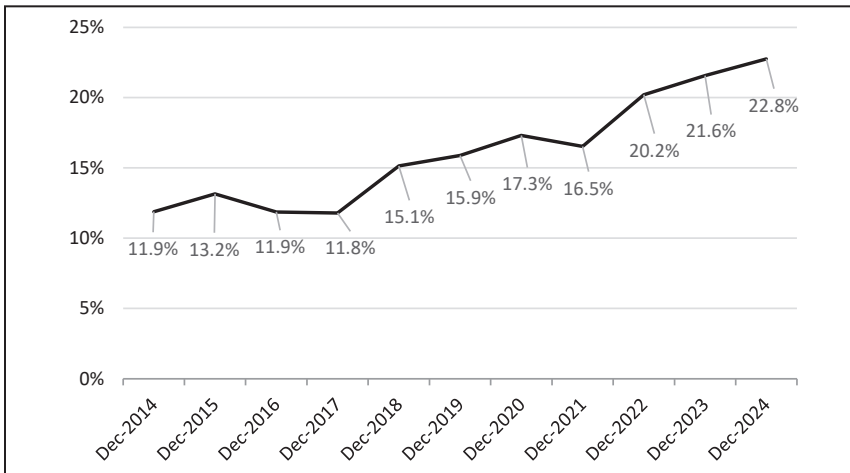
Figure 1: China Producer Prices, Year-Over-Year Percent Change, January 2019–August 2025



Source: China National Bureau of Statistics, “*Producer Prices: All Industry Products, Producer Goods*,” via Haver Analytics.

As prices decline, firms have cut costs in an attempt to preserve shrinking margins, leading to a downward spiral as deflationary pressures intensify.²⁸ Falling prices can also exacerbate excess supply, as firms are incentivized to grow output as a survival mechanism.²⁹ The scale of market distortions is reflected in the growing share of loss-making firms in China, which nearly doubled from 12 percent in 2014 to over 22 percent in 2024 (see Figure 2).

Figure 2: Share of Chinese Industrial Entities Operating at a Loss, December 2014–December 2024



Source: China's National Bureau of Statistics, “*China: Number of Enterprises, China: Number of Loss-Making Enterprises*,” via Haver Analytics.

China's Failure to Rebalance Exacerbates Problem

Had China rebalanced its economy according to market principles, domestic consumption would have been able to absorb at least some of its excess supply—or else that oversupply would have been short-lived. But despite many years of China claiming to rebalance its economy away from investment in favor of consumption, little progress has materialized beyond the rhetoric. In its 14th Five-Year Plan for 2021–2025, China set a goal to hold the manufacturing share of GDP constant—given that China's economy was growing, this meant its manufacturing sector also had to grow.³⁰ No parallel effort was devoted to structurally boosting consumption's share of GDP.³¹ The Chinese government has paid lip service to the idea: “Dual circulation,” a strategy introduced in 2020, was announced with the two distinct prongs of boosting domestic consumption to reduce reliance on external demand while also facilitating greater supply chain diversification and investment in higher-value-added products.³² Once again, the first prong focused on consumption failed to materialize—weak domestic demand continues to pull down China's consumption share of GDP.³³ Household consumption's contribution to GDP growth slowed to below 4 percentage points for 2024 and came in below 3 percentage points in each of the first two quarters of 2025.³⁴ In March 2025, the general offices of the CCP Central Committee and China's State Council published an action plan listing 30 measures to boost consumption, but many of the proposals were repeated from last year's plan, underscoring how officials have failed to reverse prolonged weakness in consumer confidence and high savings rates.³⁵ (For more on China's repeated failure to rebalance its economy in favor of consumption and structural impediments to doing so, see Chapter 1, “U.S.-China Economic and Trade Relations (Year in Review).”) These concurrent trends, policies, and policy failures have left China with far more production capacity than it (or, in some cases the entire world) needs, producing far more output than its domestic market can consume as other pillars of economic growth falter, setting the stage for the second China Shock.

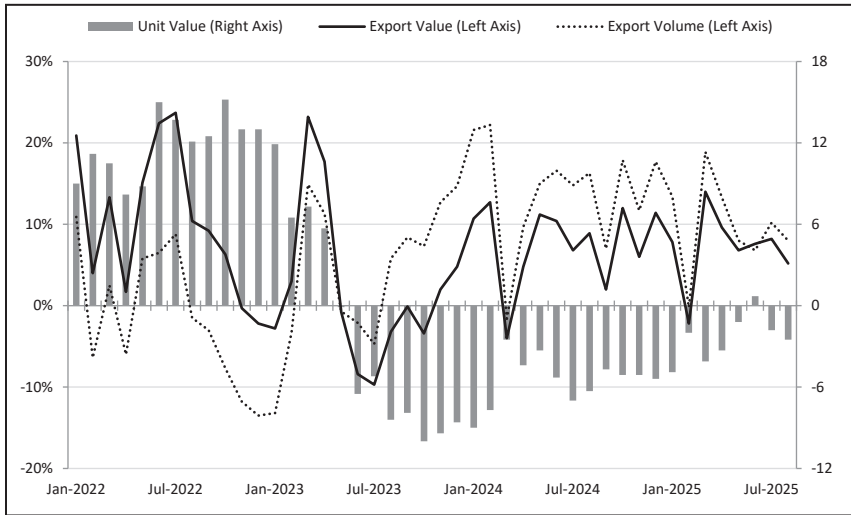
China Relies on Its Trading Partners to Absorb the Economic Costs of Its Imbalances

China Shock 2.0 is driven by the inherent distortions of China's current economic model and exacerbated in recent years by its economic challenges. Rather than reduce production and accept slower growth, China has instead sought to maintain and even expand output by relying on global markets to keep its manufacturers afloat and growing. For example, as China's property market challenges have played out, domestic excavator sales fell by half, while exports nearly tripled.³⁶ China's construction slowdown contributed to a huge reduction in domestic demand for steel; even as China's steel output flattened from 2020 to 2024, its exports by volume nearly doubled, crowding out European and other producers in global export markets.³⁷ In other words, China is relying on global markets to absorb the economic costs of its massive economic imbalances.

As deflationary pressures hit China's exports, export volume growth has surpassed export value growth, sending growth in unit

value into negative territory for the majority of the last two years (see Figure 3).³⁸ Export prices for goods like steel and solar panels, which have been under pressure for years from overcapacity, have fallen the most.³⁹ However, in goods like EVs and lithium-ion batteries, prices have risen since 2020 as Chinese exports, honed by fierce competition at home, became competitive products abroad.⁴⁰

Figure 3: China's Exports by Unit Value, Value, and Volume, Year-Over-Year Percent Change, January 2022–August 2025



Source: China's National Bureau of Statistics, "Exports: Value, Exports: Volume, Exports: Unit Value Index," via Haver Analytics.

Over the past year, China's leadership has publicly acknowledged deflationary pressure resulting from rampant overcapacity in certain sectors, but so far it still has not demonstrated willingness to endure the domestic economic pain required to confront its overcapacity challenge. In July 2025, Party ideology magazine *Qiushi* backed a position to "comprehensively remediate 'involution-style' competition."⁴¹ The National Development and Reform Commission (NDRC), China's economic planning agency, describes "involution-style competition" as setting prices below product costs to seize market share, leading to market distortions.⁴² Other state media, including the *People's Daily*, have acknowledged the issue publicly, and officials—including those at the NDRC—have begun testing measures to rein in excess capacity.⁴³ These include requiring capacity cuts in key industries and discouraging local officials from expanding production in loss-making industries.⁴⁴

And yet, China's prior experience indicates that any attempts to address overcapacity will likely encounter major obstacles. In 2016, Chinese leaders launched a wave of restructurings, ostensi-

*The anthropological concept "involution" (内卷, *neijuan*) became a Chinese internet slang term to describe cut-throat competition in staying ahead of others and gained popularity in characterizing price wars in overcapacity sectors. Official media and even policy documents now use "involution-style competition" to describe firms focusing on cutting costs and lowering prices rather than innovating and improving their products.

bly to reduce overcapacity in industries like steel.⁴⁵ However, local officials maintained procurement incentives that favored their own steelmakers while barring neighboring provinces' products; some regions directly subverted instructions to reduce capacity by disguising new capacity as a "replacement" for outdated mills.⁴⁶ Just as the 2016 efforts were undermined by local officials' attempts to preserve underperforming local companies and employment, a new round of capacity cuts would likely face similar challenges absent a change in incentive structures within the CCP.⁴⁷ Reducing capacity in advanced manufacturing may face even more obstacles, as these industries tend to be led by ostensibly private firms, which can be more resistant to official directives than state-owned enterprises (SOEs).⁴⁸ With China's economic outlook and local finances much shakier now compared to a decade ago, local leaders will be even more cautious in their attempts to downsize unproductive firms and lay off workers.⁴⁹

Central policymakers continue to contradict their own calls for reducing excess capacity by launching policies that will spur even more lending to saturated manufacturing sectors. In August 2025, the NDRC, People's Bank of China, Ministry of Finance, Ministry of Industry and Information Technology, and three other high-level agencies released guidance calling on the finance industry to support advanced manufacturing.⁵⁰ The document contains two cursory mentions of avoiding involution, in one provision instructing financial institutions to limit "involution-style competition."⁵¹ The overarching guidance of the document likely undermines attempts to curb excess capacity though, as the policy could exacerbate incentives to support government-favored industries.⁵² (For more on the Chinese government's attempts to address involution, see Chapter 1, "U.S.-China Economic and Trade Relations (Year in Review).")

China Shock 2.0 Threatens More Trade Partners across a Wider Swath of Products

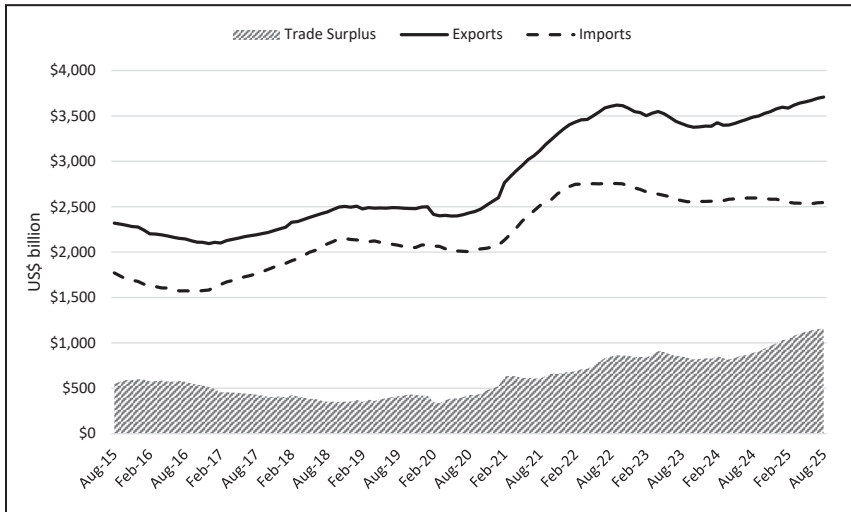
China Shock 2.0 will have a much more widespread impact on the global economy than the first Shock due to a variety of factors: the size of China's economy and export machine, its deep integration into global supply chains, the growing imbalances caused by its economic model, and the increasing range and sophistication of products it exports.

China's economy and exports are much larger than at the time of the first China Shock. At the end of 2001, when China joined the WTO, China's GDP was about 4 percent of the world total.⁵³ In 2024, China's share of global GDP stood at 17 percent.⁵⁴ China's exports have grown to comprise a massive global footprint. Between 2001 and 2023, China's exports grew from 4 percent of the global total to 15 percent.*⁵⁵ In manufacturing, China's exports are even more significant, accounting for over 20 percent of the global total.⁵⁶ This means not only that the scale of its exports in absolute terms is multiple times the size of the first China Shock but also that the

*Based on data available through October 9 on UN Comtrade's Trade Data database, China's exports were 17 percent of the 2024 global total. United Nations Statistics Division, "UN Comtrade Database."

comparative economic size of the “rest of the world” capable of absorbing China’s exports has shrunk.

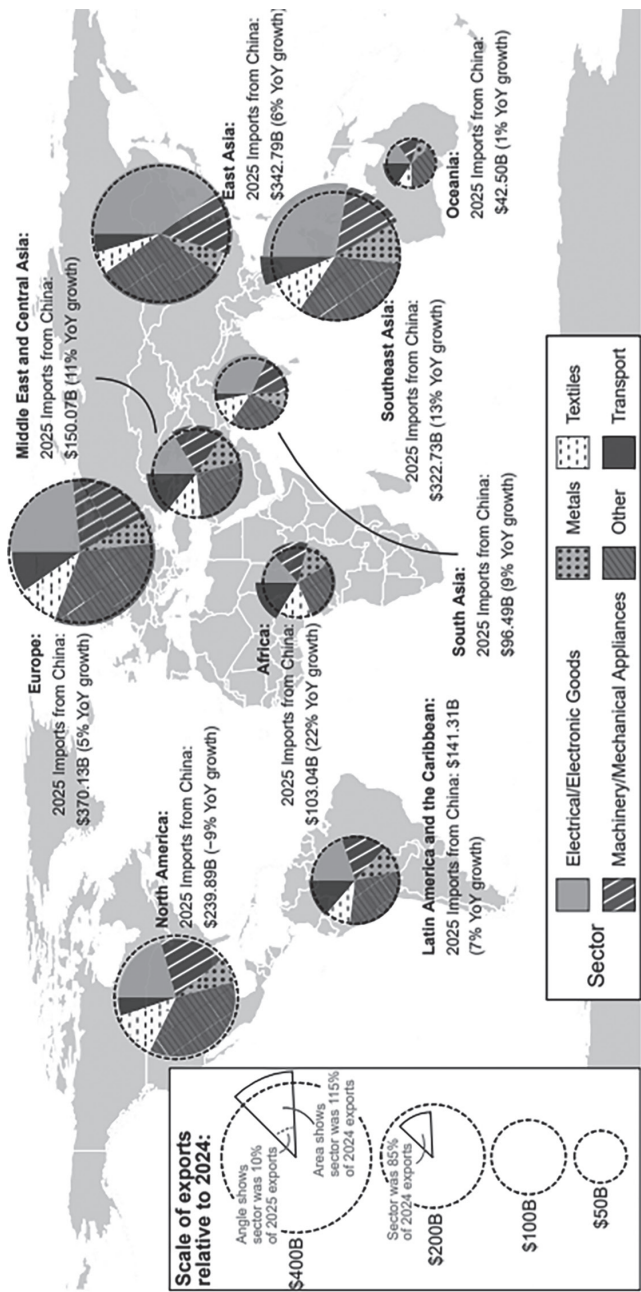
Figure 4: China’s Trade with the World (Rolling 12-Month Total, Seasonally Adjusted), August 2015–August 2025



Source: China’s General Administration of Customs, via Haver Analytics.

China’s trade is also more diversified in terms of trading partners than during the first China Shock, as it has become deeply integrated into global supply chains after years of offshoring and globalization. In 2001, China’s top ten trade partners made up 70 percent of its international trade, but that number has since fallen to just below 50 percent.⁵⁷ China is now a major trade partner to the majority of the world’s countries and in 2024 was the largest trade partner for 87 countries.⁵⁸ By comparison, in 2001 China was the number one trade partner of only three other countries, and just 40 countries counted China within their top five trade partners.⁵⁹ In addition to an expansion in total volume, China’s trade has become increasingly imbalanced, with its trade surplus soaring to a record \$1 trillion in 2024; it is on track to hit \$1.3 trillion for 2025 if current trade trends continue (see Figure 4).⁶⁰ The proportion of traded products where China had a trade surplus grew from 68 percent in 2019 to 74 percent in 2024.⁶¹

Figure 5: Year-Over-Year (YoY) Change in Mainland China's Exports by Region and Sector, 2025 H1 vs. 2024 H1



Note: The map charts the scale of China's 2025 exports around the world by sector, displaying how China's sector-level exports changed relative to the first half of 2024. Because the chart relies on the most up-to-date information from China's customs authority, China's exports to Hong Kong are reflected as exports to East Asia. Hong Kong's trade with third countries is not shown in this graphic. In addition, the chart does not reflect transshipment or Chinese content incorporated into exports from third countries. See Appendix for more detail on the breakdown of Hong Kong's exports.

Source: China's General Customs Administration, *Custom Statistics*, July 28, 2025.*

*The Electrical/Electronics Goods category is defined as products under Harmonized System (HS) chapter 85; Machinery/Mechanical Appliances as ch. 84; Metals as ch. 72-83; Textiles as ch. 50-67; and Transport as ch. 86-89.

Chinese Manufacturers Access Protected Markets via Transshipment

Direct exports from China to North America have fallen in 2025 as the United States levied new tariffs on China (see Figure 5), but transshipment of products through third countries to evade duties likely obscures true levels of U.S. imports from China. The exact scope of transshipment is difficult to quantify, but experience in 2018–2021 indicates it is significant. As U.S. imports of Chinese goods subject to Section 301 tariffs* dropped 13 percent from 2018 to 2021, according to modeling by the U.S. International Trade Commission, imports of these same products from Vietnam and Mexico increased.⁶² Much of the trade reallocation reflected sourcing from local suppliers or relocation of production, often limited to final assembly of mostly Chinese inputs. However, billions of dollars' worth of this trade also constituted Chinese products rerouted and relabeled to obscure their origin. One Harvard Business School study used transaction-level data to estimate that 8.8 percent of the \$52.8 billion increase in Vietnamese exports to the United States from 2018 to 2021 owed to rerouting Chinese goods, including rebranding Chinese products as made in Vietnam.⁶³

A similar dynamic is likely playing out in 2025, but transshipment is difficult to measure—particularly in near real-time—due to delayed and incomplete customs data, methodological challenges, and inaccurate information inherent in purposeful evasion. While China's growing exports may initially appear to be directed to emerging markets, at least some of these goods are almost certainly bound for the United States.

During the Commission's trips to Southeast Asia, some officials downplayed transshipment risks, viewing the issue as primarily a problem for U.S. enforcement. Yet transshipment directed at the United States hurts emerging markets as well. First, emerging markets can become unwilling partners in circumvention and evasion, risking enforcement scrutiny across a wide range of their imports. To address transshipment, Customs must bring greater scrutiny to imports from risky sources, potentially slowing and complicating unrelated trade from those countries. Second, a reputation as a transshipment hub threatens opportunities from shifting supply chains. As developed economies have begun to promote de-risking from China, companies may avoid supply chains routed through emerging markets that are seen as risky due to facilitation of Chinese transshipment or tariff evasion.

*The 7.5 to 25 percent tariffs in response to the Section 301 investigation into China's forced tech transfer and intellectual property theft were introduced in four tranches between July 2018 and September 2019, ultimately targeting \$370 billion in exports based on value by product category in 2017. This value does not encompass additional tariffs imposed on Chinese steel and aluminum exports to the United States as part of the Section 232 investigation concluded in January 2018. Karen M. Sutter, "U.S.-China Tariff Actions Since 2018: An Overview," *Congressional Research Service* IF12990, July 10, 2025; U.S. International Trade Commission, *Economic Impact of Section 232 and 301 Tariffs on U.S. Industries*, March 2023, 37, 52, 62–68.

China now competes in a much larger variety of sectors as well. China continues to be a major exporter of lower-value manufactured products, while at the same time it has moved up the value chain in many sectors.⁶⁴ Over this time period, China became a net exporter of passenger vehicles and auto parts, which are viewed as cornerstones of manufacturing ecosystems.⁶⁵ As discussed extensively in Chapter 6, “Interlocking Innovation Flywheels: China’s Manufacturing and Innovation Engine” and Chapter 10, “Power Surge: China’s Electrification Drive and Push for Global Energy Dominance,” China is globally competitive in many advanced technology products, including batteries, high-speed rail, robotics, and consumer electronics. As a result, China’s trading partners have become more reliant on China for a wider variety of products. A 2023 study found China is the world’s dominant exporter (defined as products for which China’s share of exports represents over half the global total) of over 600 different product categories—a figure six times as large as the next-largest country.⁶⁶

China Shock 2.0 Will Hurt Both Developed and Emerging Economies

For Developed Economies, the New Wave of Chinese Exports Represents a Direct Challenge in Areas of Advanced Technology

The second China Shock will be felt again by advanced economies. As discussed above, in the last decade, China’s growth in manufacturing has focused on moving up the value chain, and many of its exports are now challenging those from advanced economies for market share. (For an evaluation of Chinese industrial policies and their impact on value-added manufacturing, see Chapter 6, “Interlocking Innovation Flywheels: China’s Manufacturing and Innovation Engine.”) Adam Wolfe, emerging markets economist at Absolute Strategy Research, uses an export similarity index to measure where China competes by exporting the same goods as other countries.⁶⁷ The index shows that Chinese exports have the greatest overlap with advanced manufacturing economies, with Germany being the most similar.⁶⁸ Considering only the goods where China’s exports are growing the fastest reveals growing vulnerabilities to competition in South Korea and Japan’s export baskets.⁶⁹ While advanced economies often have greater export diversity by total number of products, a few firms and sectors at the technological frontier tend to dominate these exports by volume, making them vulnerable to export shocks if a new entrant challenges their market share.⁷⁰ At the same time, China is importing fewer of the specialized goods that advanced manufacturers export as it pursues self-reliance, eliminating opportunities for Europe and other developed economies to benefit from China’s move up to high-end manufacturing.⁷¹

Falling prices have contributed to Chinese products’ growing market share and harmed competitors from developed countries. Chinese export prices shrank by 16 percent between 2022 and 2024, the byproduct of rising excess supply pumped into the system.⁷² For producers in developed countries taking a hit in their market

share, the harms are reflected in lower revenues, tighter profit margins, and reduced capacity for R&D that would otherwise help them maintain an edge in future generations of technology.⁷³ While far from an exhaustive list, the following products illustrate these dynamics:

- *China's automobile exports have eroded market share of European, Japanese, and U.S. car manufacturers:* Since 2020, car exports from Germany, Japan, and the United States have fallen as a share of the global total, while China's share has climbed from less than 2 percent to nearly 10 percent in 2025.⁷⁴ As noted above, China has significant excess capacity in both electric and internal combustion engine (ICE) vehicles.⁷⁵ Its domestic production of EVs has skyrocketed over the past few years, while the number of EVs produced in China by foreign manufacturers has remained virtually stagnant.⁷⁶ Forecasts project that China's share of the global market for all types of passenger vehicles will grow from 21 percent in 2024 to 30 percent by 2030.⁷⁷ More than 70 percent of the growth in China's exports of automobiles has been due to excess production of ICE vehicles.⁷⁸ China's share of global passenger vehicle exports—excluding fully electric vehicles—rose from 1.4 percent in 2020 to 5.3 percent in 2023, during which time it has transitioned from being a net importer of vehicles to a major net exporter to developed and emerging markets alike.⁷⁹
- *Chinese makers of organic light-emitting diode (OLED) screens from domestic producers are overtaking their more advanced competitors:* China has eroded South Korean manufacturers' share of the OLED market from 90 percent five years ago to less than 60 percent.⁸⁰ In spite of their increasing market share, many Chinese producers in the industry are not profitable and continue to rely on government subsidies to survive.⁸¹ Just as China's ramp-up of EV production led to a flood of exports in ICE vehicles, so too could the rise of OLED screens impact the liquid crystal display global market, where China already has a majority share and its competitors are struggling.⁸²
- *China's machinery exports have expanded, supported by deep supply chains for machinery parts also made in China:* China's exports of machinery and machinery parts grew 11 percent in 2024.⁸³ Weak domestic demand due to a years-long property market slump have made it likely that the machinery sector will see additional pressure from China's overcapacity.⁸⁴ China's largest construction machinery producers earn an almost equal share of revenues abroad compared to domestic sales, a sharp change from the peak of the property bubble.⁸⁵ Developed markets, including the UK and the EU, have imposed tariffs and antidumping duties on Chinese exports of construction machinery to protect their domestic producers.⁸⁶ These exports are increasingly winning market share in Southeast Asia; in India, a Japanese and Indian joint venture called on officials to protect local manufacturing from China's growing share of the market.⁸⁷

China Shock 2.0 Already Hurting Emerging Markets

China Shock 2.0 will cost jobs and hurt local industry in emerging markets, threatening their ability to move up the value chain. Crucially, China's policies had the effect of reducing opportunities for emerging economies to export to China. By producing greater quantities of components domestically, China's imports of manufactured goods from emerging markets like Malaysia and Thailand have fallen, and its total manufacturing trade surplus has increased \$870 billion between 2019 and 2024.*⁸⁸ At the same time, China's total imports of industrial supplies have stagnated since 2021, and imports of manufactured goods such as capital goods and transportation equipment have declined.⁸⁹ Meanwhile, China's exports of intermediate inputs grew 49 percent from 2019 to 2024, outstripping total growth in exports.⁹⁰ As a result of China's policies, emerging markets have seen previously valuable pipelines of opportunities to export intermediate goods to China dramatically curtailed. Replicating a methodology employed by analysts Camille Boullenois and Charles Austin Jordan to analyze the impact of China's missing demand, China's exports of manufactured goods grew 45 percent from 2019 to 2024, compared with only 14 percent growth in its imports of the same categories of goods.⁹¹ Had imports increased as much as exports, China would have generated additional demand for \$415 billion of these goods in 2024, equivalent to 14 percent of all other developing countries' total manufacturing exports in 2024.†⁹² Yet now, rather than providing additional opportunities for emerging markets to contribute inputs to China commensurate with its overall growth, China competes with them both within their own economies and abroad.⁹³

The deluge of exports from China increasingly poses a challenge for producers in emerging markets as well. China is the leading trade partner for many countries in ASEAN and the Middle East, the largest trade partner for South America, and the second-largest trade partner for Latin America as a whole.⁹⁴ Trade ties with China in the first two decades of this century were sometimes seen by emerging markets as an opportunity to embark on a path to industrialization through integration into global supply chains. However, these trade ties are increasingly a liability rather than an asset for producers in emerging markets. As the United States and other developed economies continue their de-risking efforts and enact barriers to respond to China's nonmarket economic policies, China's exporters have sought new markets, especially in countries participating in the Belt and Road Initiative.⁹⁵ Exports from China to Southeast Asia and Latin America in 2024 grew 9 percent and 12

*China's falling imports represent another key difference with China's period of rapid growth in the early 2000s. During that time, China imported growing quantities of intermediate inputs from emerging and developed markets alike to fuel its domestic manufacturing. Excluding the years of the global financial crisis, China's imports grew steadily almost every year until 2015. Since then, as China's growth engine slowed, imports have seen inconsistent growth and basically flattened in recent years. China General Administration of Customs, "China: Merchandise Imports," via Haver Analytics.

†The list of emerging and developing economies is sourced from the International Monetary Fund. To determine the total 2024 manufacturing exports from this group of countries, World Bank Group data on manufacturing exports as a percentage of total merchandise (most recent available) are multiplied by total merchandise exports (2024) for each country and summed. Only countries for which data are available since 2019 are included. "Groups and Aggregates Information," *International Monetary Fund*, April 2023.

percent, respectively, and they continued to surge 15 percent and 6 percent, respectively, through August 2025.⁹⁶ In 2025, China's exports to Africa are on track to exceed \$200 billion for the first time after growing 28 percent through September to \$163 billion compared to the same period in 2024.⁹⁷ One survey of Chinese firms involved in international trade found that 75 percent intended to expand into emerging markets to make up for lost sales to the United States.⁹⁸ Emerging markets may welcome the lower prices afforded by China's exports of high-end goods compared with exports from developed markets.⁹⁹ However, China is exporting more intermediate and finished goods that compete with local production as well, threatening emerging markets' ability to move up the value chain and eroding existing manufacturing industries in those countries.¹⁰⁰ In just one example, Brazil's chemical industry recorded a 17-year low in output in 2023 as cheap Chinese imports undercut local producers, a trend that has worsened through the beginning of 2025, leading to at least one factory closure already and sparking fears of wide job losses.^{*101} This pattern is repeating itself across emerging markets, as discussed more fully in the Southeast Asia case study in this chapter.

Chinese FDI in Emerging Markets Brings Fewer Benefits

Chinese firms have ramped up a strategy of using FDI to boost exports and avoid targeted trade restrictions. In 2024, Chinese investment in overseas markets increased for the first time since 2017, driven by capital-intensive projects and the buildout of supply chains in Asia, the Middle East, Africa, and other emerging manufacturing hubs—shifting some of their production to those markets.¹⁰² Some emerging markets have thus generally welcomed inbound investment from China as a means of enhancing local capacity for manufacturing, assembly, and packaging.¹⁰³

Although host country governments have traditionally embraced inbound Chinese investment as a potential growth driver, the presence of Chinese firms sometimes fails to transfer significant benefits to local communities in areas like upskilling and technology transfer. Chinese firms typically prioritize vertical integration and rely on inputs made by other Chinese suppliers.¹⁰⁴ In some cases, this tendency means in-country suppliers have been cut off from the opportunity to supply the new firms.¹⁰⁵ According to analysis by the Carnegie Endowment for International Peace of the Suez Economic and Trade Cooperation Zone (SETCZone), a Chinese-built industrial park in Egypt:

The performance of the SETCZone is thus heavily influenced by Chinese control and asymmetrical power relations, which shape the type of development the zone fosters. The absence of an active role by domestic [actors]... leav[es] the host economy unable to fully leverage the advantages of foreign investment. As a result, the strategies adopted by firms

*China's ability to manufacture cheap petrochemicals stems partly from its purchases of Russian oil above the price cap recognized by many international countries but below global prices. Laurence Norman and Georgi Kantchev, "Under Trump Pressure, EU Proposes Going After Chinese Companies Buying Russia Oil," *Wall Street Journal*, September 19, 2025; Volodymyr Dubrovskiy and James Nixey, "Tightening the Oil-price Cap to Increase the Pressure on Russia," *Chatham House*, September 4, 2025.

*operating in these zones do not offer opportunities for technology transfer, industrial upgrading, and diversification, foreclosing the opportunity for the development of a competitive industrial sector in the host economy.*¹⁰⁶

Communities in emerging markets centered around Chinese-invested factories have voiced concerns that Chinese firms bring in skilled labor and managers from China rather than hiring local workers.¹⁰⁷

Chinese officials have also recently begun pressuring Chinese firms not to transfer technology as part of their FDI; for example, leading Chinese EV and battery manufacturers were warned to avoid transferring technology to local partners in their overseas investments in a bid to maintain China's edge.¹⁰⁸ This guidance included encouragements to continue producing key components domestically and instead focus on assembly in overseas facilities.¹⁰⁹ Additionally, Chinese officials have made it more difficult for equipment and employees in sectors China views as economically important to transfer to production hubs abroad. For example, China has actively sought to inhibit efforts by Taiwan phone producer Foxconn to expand production in India. In July 2025, a large number of skilled Chinese workers were directed to return to China from India, likely dampening the potential for skill spillovers to local workers.¹¹⁰ Denied the opportunity to move into higher-value-added manufacturing, countries may become stuck in low-value assembly and packaging.

Chinese dominance in trade and investment exposes the world to risks beyond the immediate impacts of slower growth and lower employment in emerging markets. Foreign companies have long faced an unfair playing field in China's domestic market, but as long as the distortions were contained, so too was the impact to the rest of the world. As China moves entire production processes and supply chains abroad, it exports these distortions and expands the scope of its toolkit for leverage and coercion. The dominance of state-owned firms creates an environment where Chinese companies may employ monopolistic practices, including collusion with other firms, mergers and consolidation, pricing power, or restrictions on purchasing to pressure their local suppliers.¹¹¹ China has already used its market power to undercut local competitors in emerging markets.¹¹² By continuing to prioritize domestic producers, whether out of a desire to retain control over supply chains or to reduce reliance on foreign key components, Chinese firms present a challenge for other emerging economies to move up the value chain.¹¹³

Emerging Markets Struggle to Respond to Influx of Chinese Goods

As the threat from China Shock 2.0 increases, some emerging markets have employed tariff and non-tariff barriers to protect local industries, with varying degrees of success. Many emerging markets have employed targeted bans with protections for specific industries, such as restrictions on low-value e-commerce imports, local content requirements on vehicles, and investment incentives to encourage local production. (For examples on emerging market responses, see the Southeast Asia case study below.) Many emerging economies have turned to WTO-permitted trade

remedy cases against Chinese exports as well.¹¹⁴ Yet, price distortions in China's domestic market have made it difficult to determine dumping margins, and due to excess supply-driven price cutting within China, Chinese exports may not fit the traditional definition of dumping because they may be priced higher in international markets than they are domestically.¹¹⁵ While U.S. law allows the use of surrogate country data for the purposes of calculating margins when handling cases related to nonmarket economies, not all countries' laws may have such provisions.*¹¹⁶ As a result, these remedies may not be able to address the full scope of China's market distortions.¹¹⁷ Further, many WTO-permitted remedies are only available after harm has been done, by which time it can be too late for harmed industries to recover. Dispute settlement at the WTO is also problematic—it often takes years between the time when consultations are requested and a final decision is made and even longer to authorize retaliation.¹¹⁸

Ironically, the market distortions from China Shock 2.0 are often enabled by international trade agreements intended to promote market-based competition. China is a party to a number of international trade agreements, including the WTO, "free trade" agreements with various countries and ASEAN, and the Regional Comprehensive Economic Partnership involving 14 other Asia Pacific countries. Each of these involve rules requiring China's trading partners to keep their markets open to China's exports and constrain policy responses to China's market distortions.

To date, there has been little in the way of a coordinated response to China's trade practices. China can use its size to play trade and investment partners off of one another; if one country imposes limits on Chinese trade and investment that are too stringent, Chinese companies can set up shop somewhere else. For example, when the EU voted to impose tariffs on imports of Chinese EVs, Germany abstained from voting out of fear of retaliatory measures.¹¹⁹ These fears are validated by reports that China directed its car manufacturers to suspend large investments in countries that supported the tariffs.¹²⁰ China has used the promise of deeper trade and investment ties to induce countries in the Pacific Islands to switch diplomatic recognition from Taiwan to Beijing.¹²¹ (For more on China's trade and investment ties to the Pacific Islands, see Chapter 5, "Small Islands, Big Stakes: China's Playbook in the Pacific Islands.") For regions like Latin America and Southeast Asia, reliance on commodities exports to China can make it more difficult to reach a consensus with emerging manufacturers who are trying to protect their markets from Chinese imports.¹²² These tensions are apparent even within individual countries, as Indonesia refrained from implementing 200 percent tariffs on Chinese textile imports in 2024 in part to protect its own nickel exports to China.¹²³

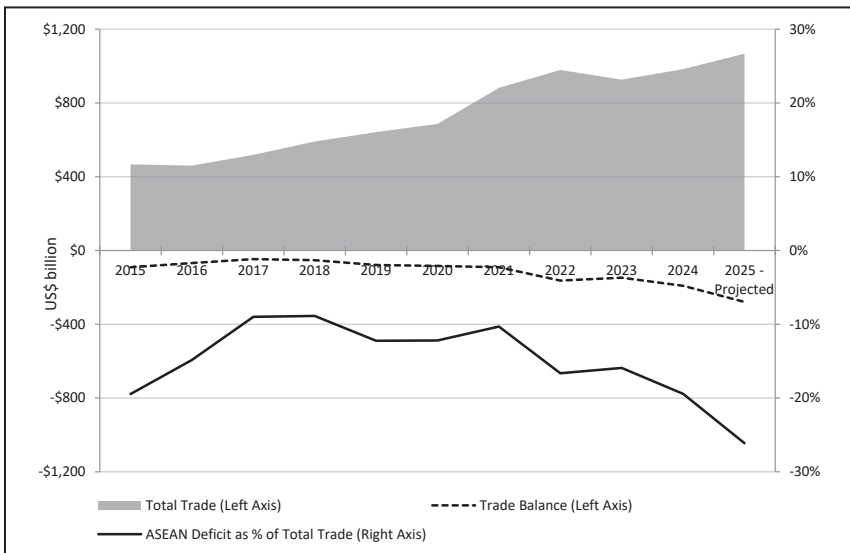
*Article 15 of China's protocol of accession to the WTO included a provision specifically allowing WTO members to use surrogate data in calculating antidumping margins against China in certain circumstances. While part of Article 15 expired in 2016, the use of the surrogate country methodology in antidumping was a practice under the General Agreement on Tariffs and Trade and the WTO preceding China's accession; there is no prohibition on countries continuing to employ this methodology in appropriate circumstances. André J. Washington, "Not So Fast, China: Non-Market Economy Status Is Not Necessary for the 'Surrogate Country' Method," *Chicago Journal of International Law* 19, No. 1, Article 8 (2018).

Southeast Asia Case Study

Southeast Asian economies are especially at risk from China Shock 2.0 both as connectors between China and the rest of the global trading system and as vibrant consumer markets. A wave of low-cost exports from China is undermining existing manufacturing in ASEAN countries as China seeks to offload excess supply onto global markets. Local companies and employment have already been adversely impacted by imports from China. Chinese imports have also spread deflation to the region. Meanwhile, China's FDI into ASEAN often provides scant benefits for recipients, as Chinese multinationals move low-margin assembly with limited tech transfer to China's neighbors in Southeast Asia.

As China has doubled down on export-led growth policies, its trade surplus with Southeast Asia has grown significantly. While trade between ASEAN countries and China is bidirectional, ASEAN as a whole tends to import more from China and export more to the United States. In 2022, China and the United States were tied for the two largest export markets for ASEAN countries, with a 14.8 percent share each.¹²⁴ At the same time, exports from Southeast Asian countries to China are slowing and, in some cases, even falling in absolute terms as China's domestic economic growth has slowed. As a result, Southeast Asian countries are experiencing widening trade deficits with China—increasing by 30 percent in 2024 to \$191 billion.¹²⁵ ASEAN's annual trade deficit as a percentage of total trade with China has grown from 10 percent in 2021 to 19 percent in 2024.¹²⁶ In the first eight months of 2025, it has reached 27 percent.¹²⁷

Figure 6: ASEAN's Growing Trade Deficit with China, 2015–2025 (Projected)



Note: The 2025 full-year projection is calculated as the product of 2024 total trade and year-over-year growth in year-to-date total trade through August 2025.

Source: China General Administration of Customs, "China: Imports from ASEAN, China: Exports to ASEAN," via Haver Analytics.

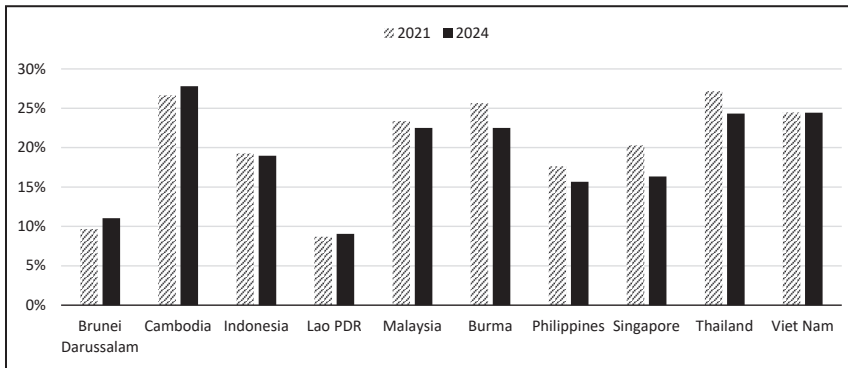
Growing competition from Chinese exports is hurting local companies and employment. While many Chinese exports to ASEAN are intermediate goods incorporated into other products that are themselves exported, exports of low-cost finished goods from China to Southeast Asia have surged in recent years, driven in part by the growing presence of Chinese e-commerce firms.*¹²⁸ These imported goods, from textiles to cosmetics to electronics and machinery, compete directly with goods made by domestic ASEAN producers and have already started causing significant job losses and dislocation in the region. In Indonesia, dozens of textiles and garment firms have shuttered, and an Indonesian industry association estimates that 250,000 Indonesians in the sector lost their jobs in 2023 and 2024; another 280,000 jobs in the sector are estimated to be at risk in 2025.¹²⁹ These losses pose a significant challenge to Indonesia's aim of having textiles comprise one of five key industries that generate 60 percent of Indonesia's GDP going forward.¹³⁰ Of the other four industries targeted for growth by Indonesia's government, at least three—autos, electronics, and chemicals—are also under threat from Chinese exports.¹³¹ Thailand faces similar concerns as Chinese imports undercut local producers, including in small household appliances, furniture, electronics, garments, autos, and steel, contributing to the closure of over 4,000 Thai factories in 2023 and 2024.¹³² Since May 2024 in just one Philippine city's export-focused economic zone, over 4,500 garment workers have lost their jobs along with dozens of employees in the fashion, semiconductor, and renewable energy sectors due to downsizing or closed factories.¹³³

China's export surge has had significant macroeconomic effects as well. China's oversupply-driven price cuts have spread deflationary pressure in the ASEAN region. In May 2025, Reuters reported that Thailand is already experiencing deflation alongside China and "Malaysia and Singapore may get there rapidly."¹³⁴ Imported deflation can have numerous negative consequences, including downward pressure on revenue and profits for domestic competitors, reduced consumption, delayed investments, reduced wages, and even layoffs.¹³⁵

China Shock 2.0 also threatens the manufacturing sector in ASEAN economies. China's domestic overcapacity and exports of goods like petrochemicals, construction and electrical machinery, semiconductors, and medical devices to Southeast Asia may also begin to challenge higher-value-added manufacturing industries.¹³⁶ Research from investment bank Nomura found that countries that experienced large increases in share of manufactured imports from China have also experienced the sharpest slowdowns in domestic manufacturing.¹³⁷ There is strong evidence that ASEAN has encountered this phenomenon: from 2021 to 2024, as Chinese imports to the region have increased, every ASEAN country except for Brunei, Cambodia, and Laos experienced a decline in manufacturing share of GDP (see Figure 7).

*Chinese e-commerce platforms TikTok Shop, Temu, and Alibaba-owned Lazada are undergoing fierce competition for market share in the region. Similar to the United States, many of the goods sold on these platforms in Southeast Asia are made in China and shipped directly from factories in China to consumers around the globe. Fan Feifei, "E-Commerce Firms Accelerate Push into Southeast Asia," *China Daily*, April 18, 2025.

Figure 7: ASEAN Countries Manufacturing, Value Added (% of GDP), 2021–2024



Note: From 2021 to 2024, manufacturing value-added share of GDP fell or remained flat for ASEAN's major manufacturing economies. During this time, China's exports to the region increased 21 percent to \$588 billion.

Source: World Bank, "Manufacturing, Value Added (% of GDP)"; United States Statistics Division, "UN Comtrade Database."

A growing number of China's exports to Southeast Asia are finished goods, which do not create assembly or production jobs in Southeast Asia.¹³⁸ Indonesia, Malaysia, the Philippines, Thailand, and Singapore, with their large potential consumer markets, have been the main recipients of this flood of imports.¹³⁹

- *Autos:* In Indonesia, where domestic car manufacturing output fell 18.6 percent from a peak of almost 1.5 million vehicles in 2022 to 1.2 million vehicles in 2024, the value of vehicle imports from China rose 73 percent from \$1.5 billion in the first half of 2024 to \$2.6 billion in the first half of 2025.¹⁴⁰ The value of China's exports of vehicles to Malaysia has grown from \$1.5 billion annually in 2019 to \$3.5 billion in 2024.¹⁴¹ Chinese vehicle exports to Thailand follow a similar trend despite tariff and non-tariff barriers in place to protect domestic manufacturing.¹⁴² Chinese car imports have even eroded market share from Japan, traditionally the dominant player in the region.¹⁴³
- *Construction machinery and electrical equipment:* China's construction equipment industry, which was hard hit by the domestic property sector slowdown, exported a record number of machines in 2022.¹⁴⁴ In 2023, exports of construction equipment exceeded domestic sales.¹⁴⁵ Exports of forklift trucks to Indonesia, Malaysia, Thailand, and Vietnam have spiked in recent years; exports to Vietnam grew nearly 70 percent from 2023 to 2024.¹⁴⁶ These exports to Southeast Asia will compete directly with U.S. and Japanese manufacturers while threatening domestic electrical machinery industries in Thailand and Malaysia.¹⁴⁷
- *Solar panels:* Chinese exports of solar panels to Indonesia, Malaysia, Thailand, and Vietnam grew 46 percent from 2022 to 2023.¹⁴⁸ Astonishingly, China's total solar cell production capacity in 2023 was more than double the global market demand.¹⁴⁹ China's exports of solar cells compete directly with domestic

producers for market share. One investigation of Malaysian solar cell producers found that Chinese products had undercut domestic producers who then sought other international markets for their own goods, highlighting how China's excess capacity in one country can trigger distortions around the world.¹⁵⁰

Even where Chinese inputs help Southeast Asian exports, China has been reaping more of the benefits. As noted above, manufacturing as a percentage of GDP has stagnated or declined in much of Southeast Asia. At the same time, Southeast Asian countries' global value-added share of manufacturing exports has stagnated relative to GDP, with the notable exception of Vietnam.¹⁵¹ China has been capturing more of that value-added. Data through 2021 show Chinese value-added in Southeast Asia's exports has been increasing; in other words, more of the value of Southeast Asia's growing exports flows back to China rather than supporting local economies.¹⁵² Although more recent data are not available, the trend has almost certainly accelerated as suppliers to U.S. manufacturers have increased their own dependence on Chinese suppliers.¹⁵³

China's export of excess production has led to pushback from Southeast Asian trading partners who are concerned about preventing job losses and harm to their economies. Southeast Asia's manufacturing powerhouses have imposed a variety of measures to protect their economies from China's export surge, including antidumping duties, WTO disputes, and various non-tariff measures (see Table 1). Others, like Cambodia and Laos, have not imposed restrictions on Chinese imports. Cambodia, in particular, continues to import raw materials like fabric—used to produce garments for export—from China.¹⁵⁴

Table 1: Recent Trade Protection Measures Imposed by ASEAN's Manufacturing Hubs

	Antidumping Actions against China	Non-Tariff Measures
Indonesia	• Iron and steel products • Nylon film • Ceramic tile • Textiles (under investigation)	• Temu ban • Prohibitions on social media e-commerce transactions • Minimum \$100 transaction value on online marketplace imported goods • Restrictions on number of individual goods carried by passengers • Import approval requirements on electronic goods • Limited ports of entry for commodity imports (under consideration) • Lowered de minimis import value from \$75 to \$3
Malaysia	• Iron and steel products • Polyethylene terephthalate (plastic) • Strengthened antidumping legislation	• Price floor on imported EVs • 10 percent sales tax on imported e-commerce goods

Table 1: Recent Trade Protection Measures Imposed by ASEAN's Manufacturing Hubs—Continued

	Antidumping Actions against China	Non-Tariff Measures
Thailand	• Steel products • Citric acid (under investigation) • High-carbon wire rods (under investigation) • Aluminum (under investigation)	• 7 percent value-added tax on de minimis imports
Vietnam	• Steel products	• Temporary suspension of Temu and Shein • De minimis revoked

Source: See below.¹⁵⁵ Adapted from Brendan Kelly and Shay Wester, “ASEAN Caught between China’s Export Surge and Global De-Risking,” *Asia Society Policy Institute*, February 17, 2025.

ASEAN countries face challenges in fashioning effective responses to China’s market distortions. In particular, ASEAN countries are members of numerous trade agreements with China, including the WTO, the China-ASEAN Free Trade Agreement, and the Regional Comprehensive Economic Partnership, each of which includes rules that, if followed, constrain the range of permissible responses. It is ironic that China’s basic economic model is inconsistent with the assumptions underlying the WTO and economic theories of free trade, yet the constraints in those agreements operate to enable China’s market-distorting practices.

Chinese Manufacturing Moves to Southeast Asia

Chinese companies’ global trend of greenfield manufacturing investment holds true in Southeast Asia. Annual Chinese investment into ASEAN countries has more than doubled from \$9.2 billion in 2019 to \$19.3 billion in 2024, with over one-third of Chinese investment into ASEAN poured into manufacturing (\$6.7 billion out of \$19.3 billion total).^{* 156} ASEAN is also the top destination for Chinese manufacturing FDI by number of announced transactions.¹⁵⁷

Chinese Producers Use FDI to Improve Access to Southeast Asia’s Markets

Chinese companies have invested in production in Southeast Asia as a way to sell directly into markets that have high tariff and non-tariff barriers, competing directly with domestic firms and sometimes dominating local industries. Although almost all ASEAN countries have lowered average tariffs to below 5 percent, ASEAN countries have a significant number of non-tariff measures that impede imports.¹⁵⁸ Thailand, the Philippines, Indonesia, and Malaysia together had over 6,000 recorded non-tar-

^{*}For perspective, China’s \$6.7 billion is only a fraction of the total investment in manufacturing that flows into ASEAN from all countries each year (\$43.8 billion in 2024). Total U.S. investment in ASEAN was also double China’s investment in 2024. However, these numbers are subject to debate. Different databases report different transaction volumes, and the picture is further obfuscated by a vast amount of investment being routed through regional financial hubs Hong Kong and Singapore. Armand Meyer and Agatha Kratz, “China’s Manufacturing FDI in ASEAN Grew Rapidly, but Faces Tariff Headwinds,” *Rhodium Group*, April 24, 2025; ASEAN Stats, “Flows of Inward Foreign Direct Investment to ASEAN by Source Country and Industry.”

iff measures as of 2019.¹⁵⁹ In response, Chinese manufacturers have established production bases in the region across technology industries, consumer goods, and commodities. Malaysia, which places high tariffs on imported automobiles, has attracted a joint venture investment by a Chinese EV company. BYD is pursuing a similar strategy in Indonesia, which provides tax breaks for exporters that invest in domestic EV production.¹⁶⁰ Chinese EVs now account for 90 percent of Indonesia's EV market, although Japanese car makers are still dominant in traditional ICE vehicles.¹⁶¹ A similar story is playing out in the steel sector. The global steel industry faces massive overcapacity from existing Chinese production, and Indonesia, Malaysia, Vietnam, and Thailand have all imposed tariffs on steel exports from China (see Figure 8 above).¹⁶² However, China already has a foothold in Southeast Asia's steel markets, with investments and factories in Vietnam, Malaysia, and Indonesia and plans to expand production in Thailand.¹⁶³

Chinese EV assembly in ASEAN countries demonstrates limits to local benefits from Chinese investment. China's BYD and Great Wall Motor have recently started producing EVs in Thailand to access the country's domestic market without tariffs.¹⁶⁴ However, Chinese technology transfer restrictions on EV production limit the value-added production that occurs within Thailand. Reporting by Bloomberg also indicated that Chinese officials have sought to prevent the transfer out of China of technology needed to manufacture consumer electronics, EVs, and solar manufacturing and have prevented factory equipment sales to Southeast Asian countries, including Vietnam, Malaysia, and Thailand.¹⁶⁵ At the same time, BYD and Great Wall Motor's launch of Thai operations has coincided with a threefold increase in Chinese-invested auto parts suppliers in Thailand, sparking concerns from local auto parts manufacturers, an established market segment that initially developed to support Japanese multinationals as early as the 1960s.¹⁶⁶

China's Dominance in Indonesia's Nickel Processing Industry

The case of the nickel industry in Indonesia demonstrates how China has come to dominate certain overseas processing sectors. In 2014, Indonesia implemented an export ban on unprocessed minerals to diversify its economy away from dependence on the export of raw materials and ensure that it developed a domestic nickel processing capacity, with a long-term goal of moving up the global value-added chain.¹⁶⁷ The timing coincided with the launch of the Belt and Road Initiative, and Indonesia's government welcomed investment from Chinese companies in industrial parks across the country despite occasional pushback from local constituents over illegal workers and working conditions.¹⁶⁸ Even with a temporary relaxation in the restrictions from 2017 to 2020, the ban harmed the U.S. steel industry by contributing to rising

China's Dominance in Indonesia's Nickel Processing Industry—*Continued*

global prices for nickel.*¹⁶⁹ At the same time, rising Chinese investment in Indonesia's steel industry gave China a workaround for the ban while creating oversupply that was primarily exported abroad.¹⁷⁰ China now dominates the country's processing industry, leading to significant market power over the upstream Indonesian mining operators.¹⁷¹ While China channeled its nickel output into steel production, the explosion in EV demand is now driving rising global demand for nickel and thus an expansion in Chinese investment in Indonesia.¹⁷² Chinese firms control around 75 percent of Indonesia's nickel refining capacity, with major implications for control over downstream producers of batteries.¹⁷³ Investment in battery production in the country is also overwhelmingly led by Chinese and South Korean firms.¹⁷⁴ In conversations with the Commission, Indonesian officials indicated they have had limited success so far in encouraging the development of domestic battery champions despite requiring all foreign investors to partner with the state-owned Indonesian Battery Corporation.

Transshipment and Tariff Evasion Risks in Southeast Asia from Chinese FDI

Chinese investment in manufacturing in Southeast Asia provides a pathway for Chinese companies to continue shipping their goods to the United States, bypassing tariffs imposed on direct imports from China. When the first Trump Administration imposed tariffs on \$370 billion worth of Chinese exports to the United States in 2018, there were several high-profile examples of Chinese companies using outposts in ASEAN countries for simple transshipment (i.e., shipping goods through a third country and falsely labeling them as having originated in that country) as a means of evading the tariffs. After the 2018 tariffs, direct shipments from China to the United States were replaced by shipments through connector countries to hide the origin of the goods. Declining volumes of direct exports from China to the United States hide the fact that upstream supply chains are still reliant on China for many of these goods.¹⁷⁵ The same product categories that experienced an increase in shipments from China to Vietnam also experienced a similar increase by quantity in shipments from Vietnam to the United States.¹⁷⁶ Vietnam Customs identified that Chinese producers were using it as a pathway for transshipment of textiles, seafood, agricultural products, steel, iron, and aluminum.¹⁷⁷ The U.S. Department of Commerce has found

*The EU filed a case with the WTO challenging Indonesia's nickel export ban and domestic processing requirement in November 2019, a case the United States joined. The WTO ruled in favor of the EU, although Indonesia has appealed the decision. Sekarsari Sugihartono, "Indonesia's Trade Dispute on Nickel Ore in the WTO: Current Progress and Developments," *Modern Diplomacy*, October 28, 2024; David Guberman, Samantha Schreiber, and Anna Perry, "Export Restrictions on Minerals and Metals: Indonesia's Export Ban of Nickel," *U.S. International Trade Commission*, February 2024, 13; "Indonesia-Measures Relating to Raw Materials," *World Trade Organization*, December 8, 2022.

numerous cases of transshipment through ASEAN countries.*¹⁷⁸ However, since 2020, estimates of illegal transshipment volumes from Vietnam have fallen, though data are difficult to collect given the illicit nature of the activity.¹⁷⁹

Rules of Origin and Scope in International Trade

Trade agreements play a key role in setting percentages of value added necessary before a good can be assigned a country of origin via “rules of origin” (ROOs). Specific ROOs vary by product and agreement.¹⁸⁰ Country of origin—the country of manufacture, production, or growth of a product—is central to international trade rules as it defines the rate of tariff applied to a good when it crosses international borders.¹⁸¹ Many traded goods like automobiles, electronics, and other consumer goods are not made from start to finish within the borders of a single country; if further work or material added in another country constitutes a “substantial transformation” to the product, then the country where this work was performed may become the country of origin for purposes of calculating tariff rates.[†]¹⁸² However, ROOs are often set at a low enough threshold that not even a majority of the content needs to come from work done in the country of origin. For example, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) sets the threshold of content from CPTPP members for many products at only 35 percent—meaning 65 percent of content can come from China and the product could still receive preferential treatment under that agreement.¹⁸³

Separate from an import ROO is the concept of “scope” in trade remedy cases, such as antidumping duties. Scope refers to the detailed description of the goods under investigation and determines how broadly remedies can be applied.¹⁸⁴ Antidumping and countervailing duty investigations undergo procedures to define the technical and physical characteristics of the products under review.¹⁸⁵ However, many disputes still arise over whether or not certain products fall under resulting trade remedies. Inherent tension exists between ensuring U.S. industry is afforded sufficiently broad protection while still providing enough specificity to minimize harm to non-injurious trade.¹⁸⁶ Exporters who wish to circumvent definitions of scope can try to do so in numerous ways, including by packaging the product with other goods that are not subject to an order or by making minor modifications that bring the product out of technical scope but do not fundamentally change it.¹⁸⁷ Scope disputes were so prevalent that in 2021, the Commerce Department revised its existing regulations to sepa-

*In the case of the Malaysian cabinet makers, the original Chinese supplier had indeed set up a factory to manufacture some cabinets in Malaysia, but at the same time the company was still allegedly shipping completed cabinets to Malaysia for transshipment to the United States. Inti Pacheco, “The Not-So-Secret Way around U.S. Tariffs,” *Wall Street Journal*, December 22, 2024.

†The U.S. International Trade Administration (ITA) defines substantial transformation as undergoing “a fundamental change in form, appearance, nature, or character” that “adds to the good’s value at an amount or percentage that is significant, compared to the value which the good (or its components or materials) had when exported from the country where it was first made or grown.” The ITA expressly states that repackaging and similar minor processes usually do not cause a substantial transformation. International Trade Administration, *Determining Origin: Substantial Transformation*, accessed August 4, 2025.

**Rules of Origin and Scope in International Trade—
*Continued***

rate circumvention and scope inquiries.¹⁸⁸ Imports from China are often involved in scope disputes—for example, as of July 2025, 13 of 15 final scope rulings by Commerce involved Chinese imports.¹⁸⁹

Chinese battery, medical device, and semiconductor manufacturers have all explored or are moving assembly and production to Malaysia in recent years as part of efforts to avoid the impact of U.S. tariffs.¹⁹⁰ Or, in the case of antidumping and countervailing duties, which have different rules establishing what products are in scope, Chinese production in ASEAN countries may seek to make minimal changes necessary to evade the scope of the trade remedy duties. While not all, or even a significant portion, of Chinese-linked production in ASEAN countries may engage in such forms of duty evasion, the extensive history of these efforts from Chinese companies means that exports from ASEAN host countries will likely be subject to additional scrutiny from enforcement authorities.¹⁹¹

The case of imported solar cells and modules provides an example of Chinese companies moving production abroad in an attempt to avoid unfavorable tariff rates. In January 2018, the Office of the U.S. Trade Representative imposed safeguard tariffs on Chinese solar cells; the tariffs were extended in February 2022.¹⁹² Chinese firms began shifting manufacturing to Southeast Asia, in particular Malaysia, Cambodia, Thailand, and Vietnam, in an attempt to avoid the tariffs.¹⁹³ At that time, manufacturing exports in Cambodia were expanding rapidly without a concurrent increase in solar imports, indicating that this was primarily not a case of relabeling and illegal transshipment.¹⁹⁴ In May 2024, however, the U.S. International Trade Administration (ITA) opened an antidumping and countervailing duty investigation into imported solar cells and modules from Cambodia, Malaysia, Thailand, and Vietnam.¹⁹⁵ Many of the companies listed in the ITA's preliminary affirmative determination in October 2024 were subsidiaries of Chinese solar companies operating in Southeast Asia.¹⁹⁶ Prior to additional tariffs imposed by the Trump Administration in April 2025, Chinese-owned solar manufacturers had already begun to set up plants in Indonesia and Laos to maintain access to U.S. markets.¹⁹⁷

Economic Coercion and Market Distortions in Southeast Asia from Chinese FDI

Chinese exports to Southeast Asia are already eroding the economic strength of Southeast Asian economies, leaving important U.S. allies and partners at risk of Chinese coercion and influence. China has weaponized Southeast Asia's trade dependencies in the past, for example, when it suspended certain agricultural imports from the Philippines in an attempt to pressure the country over competing maritime claims in the South China Sea.¹⁹⁸ China has also targeted Vietnam over South China Sea disputes and singled out individual companies in Thailand and Malaysia over content it viewed as subverting its territorial integrity.¹⁹⁹ As China makes up

a larger portion of investment and intermediate inputs for Southeast Asian manufacturing, its ability to threaten employment and output in key economic sectors for these countries will grow.

Implications for the United States

The original China Shock provides an important lesson for how policymakers can fail to recognize and adapt to unfair and market-distortive trade, especially when the benefits—such as lower costs for consumers—are immediate, while the drawbacks are longer term. **As China's economy has grown and moved up the value chain, a broader swath of global manufacturing is now vulnerable to China's massive export machine, including critical manufacturing industries in the United States.** U.S. exports of advanced technology products currently represent almost one-fourth of its total exports, and yet as China targets the production of higher-value-added goods, the two nations are increasingly in direct competition for export markets.*²⁰⁰

China Shock 2.0 may result in Chinese producers taking over market share in countries all over the world, including in emerging markets with rapid population growth. Chinese incumbency could be difficult for U.S. and other producers to overcome.²⁰¹ Lack of access to these market opportunities for U.S. companies can substantially erode profitability over time and constrain future investments in next-generation manufacturing equipment and R&D.²⁰²

China Shock 2.0 also threatens to complicate de-risking efforts, as China's market share gained from export dominance can be quickly turned into leverage over supply chains. As China's exports grow and Chinese companies expand their overseas presence via FDI, Chinese products and components may become embedded, if not dominant, in critical supply chains, including those with serious implications for defense and national security (see Chapter 9, "Chained to China: Beijing's Weaponization of Supply Chains"). The growing presence of Chinese companies in overseas markets also may make it more difficult for the United States to prevent illegal transshipment and tariff evasion.

China Shock 2.0 may further strengthen China's capacity for economic coercion. As discussed in "Chapter 9, Chained to China: Beijing's Weaponization of Supply Chains," China has a plan and demonstrated capacity to use control of supply chains to serve its interests. As China grows its manufacturing exports, it simultaneously grows the extent to which other countries depend on it for key inputs needed for their own economic growth and national defense needs. Further, the market distortions from China's export surge may put non-Chinese manufacturers that are subject to market constraints out of business, further narrowing the scope of alter-

*To illustrate the importance of exports across U.S. technology sectors, U.S. semiconductor exports totaled \$57 billion in 2024. Foreign customers accounted for 46 percent of Boeing's revenue in 2024. The U.S. pharmaceutical industry exports around 25 percent of its output. The U.S. automobile industry exported 1.5 million cars, about 15 percent of output in 2024. U.S. International Trade Administration, "New Vehicle Trade Data Visualization," accessed October 6, 2025; Erick Burgueno Salas, "Vehicle Production in North America from 1990 to 2024," *Statista*, August 8, 2025; "State of the U.S. Semiconductor Industry," *Semiconductor Industry Association*, 2025; "Form 10-K," *Boeing*, December 31, 2024, 10; Maggie Fick, "Exclusive: US Pharma Tariffs Would Raise US Drug Costs by \$51 Billion Annually, Report Finds," *Reuters*, April 25, 2025.

native suppliers to China and strengthening China's role in global manufacturing.

China was perhaps the biggest beneficiary of the multilateral rules-based trading system over the past two decades, despite boasting an economic model that was often fundamentally at odds with that system. **In many ways, China Shock 2.0 is enabled by the limitations of that system—many countries are constrained in how they can respond to the deluge of China's excess production despite the growing threat of damage to their labor markets and home industries.** As China's export tidal wave begins to impact the entire world, there is a need for like-minded countries, including both developed and emerging markets, to better coordinate a response to China's market distortions and ensure a more balanced and fair global trading system moving forward.

Recommendations

The Commission recommends:

- Congress enact legislation to:
 - Establish a rebuttable “presumption of denial” with respect to foreign investment in U.S. companies that could support the acquisition by China or other foreign adversaries of the capabilities necessary to attain self-sufficiency in critical technologies or otherwise impair the economic or national security of the United States, including:
 - Investments in technology areas prioritized in China's or other foreign adversaries' industrial policies, such as Made in China 2025, and successor initiatives;
 - Investments in U.S. firms that have received funding from the U.S. Departments of Defense, Commerce, and Energy, or other U.S. government funding for projects critical to national security and competitiveness; and
 - Other investments that may provide privileged access to expertise, business networks, and production methods critical to maintaining U.S. economic and technological competitiveness.
 - Require the review of greenfield investments in the United States by Chinese-controlled entities to assess any potential harm to U.S. national and economic security. And, consistent with the previous provision, establish a rebuttable presumption of denial with respect to such greenfield investments if their operations would meet any of the criteria enumerated in that provision; and
 - Direct the Administration to engage with allies and partners to adopt similar measures through bilateral or multilateral engagement or agreements.

The Commission has consistently provided Congress recommendations regarding the improvement of and expansion to the Committee on Foreign Investment in the United States (CFIUS), including a recommendation in 2023 and a slate of recommendations in 2017, many of which were adopted under

the Foreign Investment Risk Review Modernization Act of 2018 (FIRRMA). The Commission continues to raise concerns that the current structure of foreign investment screening is insufficient to protect the United States and U.S.-developed intellectual property and that the United States needs stronger efforts to coordinate with allies and partners to guard against these emerging threats.

- Congress develop legislation to provide for cooperation on and mutual recognition of unfair trade practices.
 - The procedures could provide for a voluntary, expedited mechanism to support coordinated application of trade remedies against unfair trade practices, including but not limited to antidumping (AD) and countervailing duty (CVD) orders.
 - Under this procedure, the United States and partner countries could recognize that an AD/CVD finding is a finding of an unfair foreign trade practice. The United States could then request a third-party country take action within its own market to ensure a coordinated response to the unfair trade practice, and partner countries could request similar action by the United States.

The United States and its allies and partners have multiple procedures to protect their domestic markets from unfair trade practices. Nonetheless, these procedures are lacking when the exports of domestic firms are harmed by unfair trade practices in third countries. That is, existing authorities enable the U.S. government to protect U.S. manufacturers from products dumped in their home market, but not when those same products are dumped in a third country's market. The concept of addressing unfair trade practices in third-country markets, alongside home markets, is recognized in international trade law but, in general, has been unutilized, harming U.S. firms and the firms of U.S. allies and partners.*

- To address the harmful consequences of the Second China Shock—the massive outpouring of subsidized, underpriced Chinese manufactured goods now flooding the world economy and threatening to undermine the prospects for industrialization and future prosperity of developing countries while denying potential markets to U.S. exporters—Congress should:
 - Direct the U.S. Department of State, in conjunction with other agencies, to prepare a report detailing the impact of China's recent export surge on the developing world, proposing U.S. and allied policies to counteract its negative effects as part of a larger strategy for blunting the growth of China's global influence, and identifying ways in which the U.S. government may employ existing statutory authorities to work with foreign countries to respond collectively to the Second China Shock; and

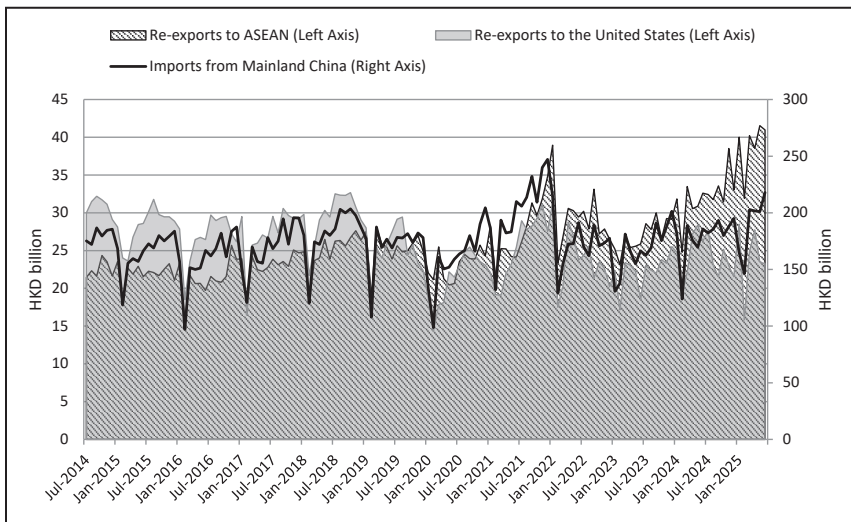
*Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994, April 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, art. 14, 1868 U.N.T.S. 201; Third-Country Dumping, 19 U.S.C. §1677k (1994); *Regulations Amending the Special Import Measures Regulations*, SOR/2023-26, *Canada Gazette*, Part II, 157, no. 5 (March 1, 2023): 396.

- Direct the Departments of State, the Treasury, and Commerce and the U.S. Trade Representative to establish an international forum to coordinate a multilateral response to the Shock, taking into consideration issues of reciprocal market access and ensuring fair treatment for U.S. exporters in third countries.

Appendix

Hong Kong, as a global trade hub, re-exports the vast majority of its imports from mainland China. As imports from mainland China have climbed over the first half of 2025, Hong Kong's re-exports have shifted away from the United States toward ASEAN. The figure below displays Hong Kong's monthly trade value. A decrease in shipments to the United States has occurred commensurate with an increase in shipments to ASEAN, reflecting Hong Kong's role in global trade re-routing. These trends indicate that some of the growth in China's exports to Hong Kong reflects efforts to transship goods through Southeast Asia to their ultimate destination in the United States in order to avoid tariffs.

Figure 8: Hong Kong Exports Mimic China in Reorienting toward ASEAN, July 2014–June 2025 (HKD billions)



Source: Hong Kong Census and Statistics Department, "Imports, Re-Exports," via Haver Analytics.

ENDNOTES FOR CHAPTER 8

1. Gordon Hanson, "Can Trade Work for Workers?" *Foreign Affairs*, April 20, 2021.
2. David Autor et al., "Places Versus People: The Ins and Outs of Labor Market Adjustment to Globalization," NBER Working Paper No. 33424, June 2025, 75; David Autor, Gordon Hanson, and David Dorn, "The China Shock: Learning from Labor Market Adjustment to Large Change in Trade," NBER Working Paper No. 21906, January 2016, 31; David Autor, Gordon Hanson, and David Dorn, "The China Syndrome: Local Labor Market Effects of Import Competition in the United States," 2013, [i], 2143, 2149.
3. Adam Wolfe, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Dominance by Design: China Shock 2.0 and the Supply Chain Chokepoints Eroding U.S. Security*, June 5, 2025, 1–2.
4. China National Bureau of Statistics, "China: Gross Domestic Product, China: GDP: Net Exports," via Haver Analytics.
5. Angus Deaton, "Rethinking My Economics," *International Monetary Fund*, March 2024; "Gordon Hanson: We Were Too Optimistic about Free Trade and Globalization. It's Time to Fix That," *Harvard Kennedy School*, March 15, 2023; Paul Krugman, "What Economists (Including Me) Got Wrong about Globalization," *Bloomberg*, October 10, 2019.
6. "An Initiative So Feared That China Has Stopped Saying Its Name," *Economist*, January 16, 2025.
7. "An Initiative So Feared That China Has Stopped Saying Its Name," *Economist*, January 16, 2025; Richard Baldwin, "China Is the World's Sole Manufacturing Superpower: A Line Sketch of the Rise," *Centre for Economic Policy Research*, January 17, 2024.
8. Jacob Gunter et al., "Beyond Overcapacity: Chinese-Style Modernization and the Clash of Economic Models," *Mercator Institute for China Studies*, April 1, 2025.
9. "Mapping Two Decades of China's Industrial Policies," *Stanford Center on China's Economy and Institutions*, July 1, 2025.
10. "Mapping Two Decades of China's Industrial Policies," *Stanford Center on China's Economy and Institutions*, July 1, 2025; Zongyuan Zoe Liu, "China's Real Economic Crisis," *Foreign Affairs*, August 6, 2024.
11. "China Releases Full Text of Government Work Report," *Xinhua*, March 13, 2024, 16–17; "习近平在黑龙江考察时强调 牢牢把握在国家发展大局中的战略定位 奋力开创黑龙江高质量发展新局面" [Xi Jinping Urges Heilongjiang to Firmly Grasp Strategic Position in China's Overall Development, Strive to Open New Ground for High-Quality Development], *Xinhua*, September 8, 2023.
12. Camille Boullenois, Malcolm Black, and Daniel H. Rosen, "Was Made in China 2025 Successful?" *Rhodium Group and U.S. Chamber of Commerce*, May 5, 2025, 17, 20; Kate Logan, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China's Domestic Energy Challenges and Its Growing Influence over International Energy Markets*, April 24, 2025, 7; Camille Boullenois, Agatha Kratz and Daniel H. Rosen, "Far From Normal: An Augmented Assessment of China's State Support," *Rhodium Group*, March 17, 2025; "China's Massive Subsidies for Green Technologies," *Kiel Institute for the World Economy*, April 10, 2024.
13. Mingcan Wang, "Deepening Supply Side Reform and Resolving Overcapacity," *World Scientific Research Journal* 6, No. 4 (2020), 8; Guangjun Shen and Binkai Chen, "Zombie Firms and Over-Capacity in Chinese Manufacturing," *China Economic Review* 44 (July 2017), 327–342.
14. Camille Boullenois, Agatha Kratz, and Daniel Rosen, "Overcapacity at the Gate," *Rhodium Group*, March 26, 2024, 1.
15. Jacob Gunter et al., "Beyond Overcapacity: Chinese-Style Modernization and the Clash of Economic Models," *Mercator Institute for China Studies*, April 1, 2025; U.S. Department of the Treasury, *Remarks by Under Secretary for International Affairs Jay Shambaugh on Chinese Overcapacity and the Global Economy*, July 10, 2024; Camille Boullenois, Agatha Kratz, and Daniel Rosen, "Overcapacity at the Gate," *Rhodium Group*, March 26, 2024, 6.
16. U.S. Department of the Treasury, *Remarks by Under Secretary for International Affairs Jay Shambaugh on Chinese Overcapacity and the Global Economy*, July 10, 2024.
17. Tom Hancock, "China Industrial Overcapacity Has Peaked, EIU Report Says," *Bloomberg*, April 15, 2024.
18. Keith Bradsher, "It Is Desolate: China's Glut of Unused Car Factories," *New York Times*, April 23, 2024.
19. Jacob Gunter et al., "Beyond Overcapacity: Chinese-Style Modernization and the Clash of Economic Models," *Mercator Institute for China Studies*, April 1, 2025.

20. Nathaniel Taplin, “Why China’s Overcapacity Problem Is About to Get Even Worse, in Seven Charts,” *Wall Street Journal*, June 4, 2024.

21. Allen Feng and Logan Wright, “China’s Reflation Bet: Supply Controls,” *Rhodium Group*, March 24, 2025.

22. China National Bureau of Statistics, “China: Capacity Utilization,” via Haver Analytics.

23. China National Bureau of Statistics, “什么是“规模以上工业企业”? 如何认定? “限额以上”和“规模以上”有何区别?” [What is “Enterprises Above a Certain Size? How to Distinguish? What’s the Difference between “Above the Limit” and “Above a Certain Size?”], February 18, 2021.

24. China National Bureau of Statistics, “China: Capacity Utilization,” via Haver Analytics.

25. “Massive Overcapacity Threatens to Prolong China’s Car Price War,” *Bloomberg*, June 19, 2025; Xiang Xiusu, “汽车产能过剩“柳暗花明”? | 请回答2024” [Is There a Silver Lining to Auto Overcapacity: Reply 2024], *Gasgoo Automotive Research Institute*, February 27, 2024.

26. Camille Boullenois, Agatha Kratz, and Daniel Rosen, “Overcapacity at the Gate,” *Rhodium Group*, March 26, 2024, 2; China National Bureau of Statistics, “Inventory by Industry—Manufacture of Electrical Machinery and Equipment, Manufacture of Computer and Communication Equipment, Manufacture of Textile, Manufacture of Automobiles,” via Haver Analytics.

27. “China’s Battle with Deflation Isn’t Just a Demand Problem,” *Financial Times*, July 27, 2025.

28. Hannah Miao, “China’s Firms Are Bleeding Cash—and Vulnerable to Trump’s Trade War,” *Wall Street Journal*, February 6, 2025.

29. “What Xi Jinping Gets Wrong about China’s Economy,” *Economist*, May 9, 2024.

30. “Manufacturing Makes a Comeback in the 14th Five-Year Plan,” *Economist*, March 17, 2021.

31. Adam Wolfe, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Dominance by Design: China Shock 2.0 and the Supply Chain Chokepoints Eroding U.S. Security*, June 5, 2025, 3.

32. Kevin Yao, “What We Know about China’s ‘Dual Circulation’ Economic Strategy,” *Reuters*, September 15, 2020; Jude Blanchette and Andrew Polk, “Dual Circulation and China’s New Hedged Integration Strategy,” *Center for Strategic and International Studies*, August 24, 2020.

33. Kevin Yao, “Calls Grow for China’s Household Sector to Be Bigger Economic Driver,” *Reuters*, July 7, 2025.

34. China National Bureau of Statistics, “Contribution to Real GDP Y/Y Growth and Their Shares,” via Haver Analytics.

35. “Can Anything Get China’s Shoppers to Spend?” *Economist*, March 17, 2025; China’s State Council, 提振消费专项行动方案 [Special Action Plan to Boost Consumption], March 16, 2025; China’s State Council, 国务院关于促进服务消费高质量发展的意见 [Opinions of the State Council on Promoting High-Quality Development of Service Consumption], August 3, 2024.

36. Adam Wolfe, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Dominance by Design: China Shock 2.0 and the Supply Chain Chokepoints Eroding U.S. Security*, June 5, 2025, 4.

37. Patricia Cohen, “The World Has Too Much Steel, but No One Wants to Stop Making It,” *New York Times*, July 25, 2025; “OECD Steel Outlook 2025,” *OECD*, May 27, 2025, 14–15.

38. Nathaniel Taplin, “China’s Overcapacity Is Already Backfiring,” *Wall Street Journal*, April 16, 2024.

39. Nathaniel Taplin, “Why China’s Overcapacity Problem Is About to Get Even Worse, in Seven Charts,” *Wall Street Journal*, June 4, 2024.

40. Nathaniel Taplin, “Why China’s Overcapacity Problem Is About to Get Even Worse, in Seven Charts,” *Wall Street Journal*, June 4, 2024; Camille Boullenois, Agatha Kratz, and Daniel Rosen, “Overcapacity at the Gate,” *Rhodium Group*, March 26, 2024, 8–9.

41. “深刻认识和综合整治‘内卷式’竞争” [Deeply Recognize and Comprehensively Remedy “Involution-Style” Competition], *Qiushi*, July 1, 2025.

42. China’s National Development and Reform Commission, 综合整治‘内卷式’竞争 [Comprehensively Rectifying “Involutionary-Style” Competition], July 14, 2025.

43. “China to Name and Shame Firms Blamed for Destructive Price Wars,” *Bloomberg*, August 1, 2025; Chen Shi, “正确认识和防止‘内卷式’恶性竞争” [Correctly Understanding and Preventing “Involutionary” Vicious Competition], *People’s Daily*, October 17, 2024.

44. Kevin Yao and Ellen Zhang, "China's Leaders Vow Support for Economy, Crack-down on Disorderly Competition," *Reuters*, July 30, 2025; Daisuke Wakabayashi, "China's Problem with Competition: There's Too Much of It," *New York Times*, July 22, 2025.
45. "China Meets 2016 Target for Steel Capacity Cuts—State Planner," *Reuters*, November 10, 2016.
46. Jacob Gunter et al., "Beyond Overcapacity: Chinese-Style Modernization and the Clash of Economic Models," *Mercator Institute for China Studies*, April 1, 2025; Zhuang Jian, "时隔四年, 工信部再度叫停国内钢铁产能置换" [Four Years Later, the Ministry of Industry and Information Technology Stops Replacement of Domestic Steel Production Capacity Again], *Jiemian News*, August 23, 2024.
47. "OECD Steel Outlook 2025," *Organisation for Economic Co-operation and Development*, May 27, 2025, 28.
48. "Beijing Pivots to Rein In Excess Capacity amid Squeezed Industrial Profit," *Wall Street Journal*, July 26, 2025.
49. "Xi Signals China May Finally Tackle Deflationary Price Wars," *Bloomberg*, July 11, 2025.
50. "Beijing Pushed Financial Sector to Double Down on Manufacturing," *Trivium China*, August 6, 2025.
51. People's Bank of China, 关于金融支持新型工业化的指导意见 [Guiding Opinion on Financial Support for New Industrialization], August 5, 2025.
52. People's Bank of China, 关于金融支持新型工业化的指导意见 [Guiding Opinion on Financial Support for New Industrialization], August 5, 2025.
53. World Bank Group, "GDP (current US\$)-2024."
54. World Bank Group, "GDP (current US\$)-2024."
55. U.S. Trade Representative, *Background Information on China's Accession to the World Trade Organization*, December 11, 2001; United Nations Statistics Division, "UN Comtrade Database"; World Bank Group, "GDP (current US\$)—China, 2001, 2024."
56. Richard Baldwin, "China Is the World's Sole Manufacturing Superpower: A Line Sketch of the Rise," *Centre for Economic Policy Research*, January 17, 2024.
57. "United Nations Statistics Division, "UN Comtrade Database."
58. "United Nations Statistics Division, "UN Comtrade Database."
59. "United Nations Statistics Division, "UN Comtrade Database."
60. China National Bureau of Statistics, "Merchandise Trade Balance," via Haver Analytics.
61. "United Nations Statistics Division, "UN Comtrade Database."
62. U.S. International Trade Commission, *Economic Impact of Section 232 and 301 Tariffs on U.S. Industries*, March 2023, 23, 149; Office of the U.S. Trade Representative, *Four-Year Review of Actions Taken in the Section 301 Investigation: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, May 14, 2024, 54–55, 80.
63. Ebehi Iyoha et al., "Exports in Disguise? Trade Rerouting during the US–China Trade War," Harvard Business School Working Paper 24-072, 4, 31.
64. Camille Boullenois and Charles Austin Jordan, "How China's Overcapacity Holds Back Emerging Economies," *Rhodium Group*, June 18, 2024; Francois de Soyres and Dylan Moore, "Assessing China's Efforts to Increase Self-Reliance," *Centre for Economic Policy Research*, January 4, 2024.
65. Agatha Kratz, Lauren Piper, and Juliana Bouchaud, "China and the Future of Global Supply Chains," *Rhodium Group*, February 4, 2025.
66. Sebastien Jean et al., "Dominance on World Markets: The China Conundrum," *CEPII*, December 2023.
67. Adam Wolfe, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Dominance by Design: China Shock 2.0 and the Supply Chain Chokepoints Eroding U.S. Security*, June 5, 2025, 6–8.
68. Adam Wolfe, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Dominance by Design: China Shock 2.0 and the Supply Chain Chokepoints Eroding U.S. Security*, June 5, 2025, 6–8.
69. Adam Wolfe, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Dominance by Design: China Shock 2.0 and the Supply Chain Chokepoints Eroding U.S. Security*, June 5, 2025, 6–8.
70. Sebastian Stumpner et al., "Large Firms React More Strongly to Macro Shocks, and It Matters," *Centre for Economic Policy Research*, July 27, 2022; Phi Minh Hong, "The Importance of Export Diversification for Developing ASEAN Economies," *Iseas Yusof Ishak Institute*, 2021; Cecile Gaubert and Oleg Itskhoki, "Granular Comparative Advantage," *National Bureau of Economic Research*, July 2018, 33.

71. Francois de Soyres et al., "From Partner to Rival: The Sectoral Evolution of China's Trade," *Center for Economic Policy Research*, April 8, 2025.

72. Adam Wolfe, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Dominance by Design: China Shock 2.0 and the Supply Chain Chokepoints Eroding U.S. Security*, June 5, 2025, 2.

73. David Autor et al., "Foreign Competition and Domestic Innovation: Evidence from U.S. Patents," *National Bureau of Economic Research*, December 2017, 32–33.

74. United Nations Statistics Division, "UN Comtrade Database."

75. "China Will Make Almost a Third of the World's Cars by 2030," *Bloomberg*, July 17, 2025; "Massive Overcapacity Threatens to Prolong China's Car Price War," *Bloomberg*, June 18, 2025; JS Tan, "Explaining Overcapacity in China's EV Sector," *Value Added*, May 1, 2025; Brad Setser, "Will China Take Over the Global Auto Industry?" *Council on Foreign Relations*, December 8, 2024.

76. "Global EV Outlook 2025," *International Energy Agency*, July 2025, 32.

77. "China Will Make Almost a Third of the World's Cars by 2030," *Bloomberg*, July 17, 2025; "What Are the Global EV Market's Most Successful Brands?" *Autovista24*, February 17, 2025; Florian Zandt, "Tesla and BYD Claim a Third of the Global BEV Market," *Statista*, January 14, 2025.

78. Adam Wolfe, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Dominance by Design: China Shock 2.0 and the Supply Chain Chokepoints Eroding U.S. Security*, June 5, 2025, 3.

79. United Nations Statistics Division, "UN Comtrade Database."; Brad Setser, "Will China Take Over the Global Auto Industry?" *Council on Foreign Relations*, December 8, 2024.

80. Cheng Ting-fang and Lauly Li, "China's Foldable Phones Herald Conquest of OLED Screen Market," *Nikkei Asia*, September 20, 2024.

81. Cheng Ting-fang and Lauly Li, "China's Foldable Phones Herald Conquest of OLED Screen Market," *Nikkei Asia*, September 20, 2024.

82. Cheng Ting-fang and Lauly Li, "China's Foldable Phones Herald Conquest of OLED Screen Market," *Nikkei Asia*, September 20, 2024.

83. United Nations Statistics Division, "UN Comtrade Database."

84. Jacob Gunter, "Beyond Overcapacity: Chinese-Style Modernization and the Clash of Economic Models," *Mercator Institute for China Studies*, April 1, 2025.

85. David Fickling, "Chinese EV Trucks Will Build the Cities of the Future," *Bloomberg*, May 25, 2025.

86. David Fickling, "Chinese EV Trucks Will Build the Cities of the Future," *Bloomberg*, May 25, 2025; UK Department of Business and Trade, "Trade Remedies Notice 2025/10: Definitive Anti-Dumping Duty on Certain Excavators Originating from China," May 13, 2025.

87. Yujie Xie, "Heavy Equipment Maker Sany Eyes Doubling of Overseas Revenue after Hong Kong IPO," *South China Morning Post*, May 11, 2025; "Unfair Practices: Import of Chinese Construction Equipment Hurts Indian Manufacturing Sector," *Telegraph India*, October 24, 2024; Fang Zuwang and Kelsey Cheng, "Exports Prop Up Profits of Chinese Excavator-Makers amid Domestic Sales Slump," *Caixin Global*, August 31, 2024; Tom Hancock, "China's Relentless Export Machine Moves up the Value Chain," *Financial Times*, September 23, 2018.

88. Jeremy Mark, "China's Sputtering Engine of Growth Leads Its Imports to Downshift," *Atlantic Council*, October 2, 2024; Camille Boullenois and Charles Austin Jordan, "How China's Overcapacity Holds Back Emerging Economies," *Rhodium Group*, June 18, 2024; China General Administration of Customs, "Imports and Exports of Goods by Standard International Trade Classification-Manufactures," via Haver Analytics.

89. United Nations Statistics Division, "UN Comtrade Database."

90. United Nations Statistics Division, "UN Comtrade Database."

91. Camille Boullenois and Charles Austin Jordan, "How China's Overcapacity Holds Back Emerging Economies," *Rhodium Group*, June 18, 2024; China General Administration of Customs, "Imports and Exports of Goods by Standard International Trade Classification-Manufactures," via Haver Analytics.

92. China General Administration of Customs, "Imports and Exports of Goods by Standard International Trade Classification-Manufactures," via Haver Analytics; World Bank Group, "Manufactures Exports (% of Merchandise Exports)"; World Bank Group, "Merchandise Exports (Current US\$)."

93. Camille Boullenois and Charles Austin Jordan, "How China's Overcapacity Holds Back Emerging Economies," *Rhodium Group*, June 18, 2024.

94. U.S.-China Economic and Security Review Commission, Chapter 5, "China and the Middle East," *2024 Annual Report to Congress*, November 2024, 334; Diana Roy,

"China's Growing Influence in Latin America," *Council on Foreign Relations*, June 6, 2025; See also, "Chapter 4, 'Crossroads of Competition: China and Southeast Asia'."

95. Joe Leahy, "China's Belt and Road Investment and Construction Activity Hits Record," *Financial Times*, July 16, 2025; Joe Leahy et al., "How China's Record Trade Surplus Helped Spark Trump's Tariff War," *Financial Times*, April 9, 2025.

96. China's General Administration of Customs, "China: Exports to ASEAN, Latin America," via Haver Analytics.

97. China's General Administration of Customs, "China: Exports to Africa," via Haver Analytics; "China Pours Exports into Africa Faster than Anywhere Else," *Bloomberg*, August 27, 2025.

98. "Three-Quarters of China's Exporters Are Turning to Emerging Markets amid Big US Tariffs, Trade Body Finds," *Yicai*, April 29, 2025.

99. Camille Boullenois and Charles Austin Jordan, "How China's Overcapacity Holds Back Emerging Economies," *Rhodium Group*, June 18, 2024.

100. Camille Boullenois and Charles Austin Jordan, "How China's Overcapacity Holds Back Emerging Economies," *Rhodium Group*, June 18, 2024.

101. Stella Fontes, "Chemical Sector Fears Wave of Plant Closures in Brazil," *Valor International*, July 4, 2025; Jonathan Lopez, "Brazil's Chemicals Production in Free Fall' as Idle Capacity Hits 40%," *Independent Commodity Intelligence Services*, April 16, 2025; Jason Douglas and Dave Sebastian, "China Shock 2.0 Sparks Global Backlash against Flood of Cheap Goods," *Wall Street Journal*, April 5, 2024.

102. Thilo Hanemann, Armand Meyer, and Danielle Goh, "China's Global Investment in 2024: Battery Bonanza Ends but Completed Investment Rebounds," *China Cross-Border Monitor*, February 18, 2025.

103. "Why Chinese Companies Are Flocking to Mexico," *Economist*, November 23, 2023; Peter Goodman, "Why Chinese Companies Are Investing Billions in Mexico," *New York Times*, June 20, 2023; Tham Siew Yean and Siwage Dharma Negara, "Chinese Investments in Industrial Parks: Indonesia and Malaysia Compared," *ISEAS Yusof Ishak Institute*, September 2020, 4–5, 7–8; Tilman Altenburg, "Migration of Chinese Manufacturing Jobs to Africa: Myth or Reality?" *Brookings Institute*, March 5, 2019.

104. Agatha Kratz, Lauren Piper, and Juliana Bouchaud, "China and the Future of Global Supply Chain," *Rhodium Group*, February 4, 2025; Romain Zissler, "Progress in Diversifying the Global Solar PV Supply Chain," *Renewable Energy Institute*, December 2024, 11–12; Karen Sutter, "China's View of Its Economic Sphere of Influence, Economic Security, and Trading Networks," *National Bureau of Asian Research*, September 9, 2024; Mrugank Bhusari, "Why the Next Trade War with China May Look Very Different from the Last One," *Atlantic Council*, August 22, 2024; Alicia Herrero and Trinh Nguyen, "Supply Chain Transformation: The World Is More Linked to China while China Becomes More Vertically Integrated," *Natixis*, October 9, 2019.

105. Agatha Kratz et al., "Chinese Investment Rebounds despite Growing Frictions," *Rhodium Group*, May 2025, 17; Safa Joudeh, "Understanding Chinese Industrial Zone Practices from an Egyptian Perspective," *Carnegie Endowment for International Peace*, February 6, 2025.

106. Safa Joudeh, "Understanding Chinese Industrial Zone Practices from an Egyptian Perspective," *Carnegie Endowment for International Peace*, February 6, 2025.

107. Yuan Gao et al., "US-China Tech War Fuels Asia Boomtowns Built on AI, Chips," *Bloomberg*, December 6, 2024.

108. Daniel Ren, Yoko Kubota, and Yang Jie, "China Adds Export Controls to Protect EV Battery Technology," *Wall Street Journal*, July 15, 2025.

109. Henry Storey, "Learning from China to Compete with China," *Hinrich Foundation*, July 8, 2025.

110. Sankalp Phartiyal, Debby Wu, and Mark Gurman, "Foxconn Pulls Chinese Staff from India in Hurdle for Apple," *Bloomberg*, July 3, 2025; Sankalp Phartiyal, Shruti Srivastava, and Debby Wu, "China Moves to Stall Apple, BYD Production Shifts in Asia," *Bloomberg*, January 17, 2025.

111. Camille Boullenois and Charles Austin Jordan, "How China's Overcapacity Holds Back Emerging Economies," *Rhodium Group*, June 18, 2024.

112. Jon Emont, "Global Trade Raised Living Standards for Millions. New Barriers Are Reversing the Trend," *Wall Street Journal*, July 30, 2025.

113. Safa Joudeh, "Understanding Chinese Industrial Zone Practices from an Egyptian Perspective," *Carnegie Endowment*, February 6, 2025; "China Urges EV Makers to Buy Local Chips as US Clash Deepens," *Bloomberg*, March 15, 2024.

114. Adam Wolfe, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Dominance by Design: China Shock 2.0 and the Supply Chain Chokepoints Eroding U.S. Security*, June 5, 2025.

115. "Technical Information on Anti-Dumping," *World Trade Organization*, accessed July 21, 2025; Adam Wolfe, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Dominance by Design: China Shock 2.0 and the Supply Chain Chokepoints Eroding U.S. Security*, June 5, 2025, 4–5; Adam Williams, "What a Dump! The Current State of Antidumping Duty Calculations in Non-Market Economy Cases," *Emory International Law Review* 32, No. 3 (2018): 441.

116. International Trade Administration, *Antidumping Margin Calculation Programs*, July 11, 2025.

117. Petros Mavroidis and Andre Sapir, "China in the WTO Twenty Years On: How to Mend a Broken Relationship?" *Columbia Law School*, 2023; Jeffrey Schott and Euijin Jung, "In US-China Trade Disputes, the WTO Usually Sides with the United States," *Peterson Institute for International Economics*, March 12, 2019.

118. "Disputes by Member," *World Trade Organization*, accessed August 18, 2025; James Bacchus and Simon Lester, "Trade Justice Delayed Is Trade Justice Denied: How to Make WTO Dispute Settlement Faster and More Effective," *Cato Institute*, November 20, 2019.

119. Alan Beattie, "A Divided EU Presents China with Easy Targets," *Financial Times*, October 7, 2024.

120. "Exclusive: China Tells Carmakers to Pause Investment in EU Countries Backing EV Tariffs, Sources Say," *Reuters*, October 30, 2024.

121. William Piekos, "Investigating China's Economic Coercion: The Reach and Role of Chinese Corporate Entities," *Atlantic Council*, November 6, 2023.

122. Jon Emont, "Global Trade Raised Living Standards for Millions. New Barriers Are Reversing the Trend," *Wall Street Journal*, July 30, 2025; John Polga-Hecimovich, "Latin America Caught between the U.S. and China," *GIS*, May 20, 2025.

123. Jon Emont, "Global Trade Raised Living Standards for Millions. New Barriers Are Reversing the Trend," *Wall Street Journal*, July 30, 2025.

124. ASEAN Secretariat, "ASEAN Statistical Highlights 2023," September 2023, 4.

125. China General Administration of Customs, "China: Imports from ASEAN, China: Exports to ASEAN," via Haver Analytics.

126. China General Administration of Customs, "China: Imports from ASEAN, China: Exports to ASEAN," via Haver Analytics.

127. China General Administration of Customs, "China: Imports from ASEAN, China: Exports to ASEAN," via Haver Analytics.

128. Amy Sood, "Can Southeast Asia Shield Industries from a Surge in China's Exports, amid Trump Tariffs?" *South China Morning Post*, April 18, 2025.

129. Alexandra Stevenson and Hasya Nindita, "Before Trump, Indonesia Had Another Trade Headache: China," *New York Times*, July 18, 2025; Alexandra Stevenson, "China Is Unleashing a New Export Shock on the World," *New York Times*, June 18, 2025; "Indonesia's Textile Industry Faces Crisis amid Factory Closures and Layoffs," *Textile Insights*, March 13, 2025; Brendan Kelly and Shay Wester, "ASEAN Caught between China's Exports Surge and Global De-Risking," *Asia Society Policy Institute*, February 17, 2025.

130. Joseph Rachman, "Indonesia Seeks to Stick Competing Interests to Boost Textile Sector," *Nikkei Asia*, May 13, 2025; "Textiles," *Business Indonesia*. <https://business-indonesia.org/textiles>.

131. Jacob Gunter et al., "Beyond Overcapacity: Chinese-Style Modernization and the Clash of Economic Models," *Mercator Institute for China Studies*, April 1, 2025; Brad W. Setser, "Will China Take Over the Global Auto Industry?" *Council on Foreign Relations*, December 8, 2024; Daniel G. Marsh, "Overcapacity in China Creates a Headwind for Global Chemical Producers," *S&P Global*, May 7, 2024; "Widodo Launches Roadmap for Industry 4.0: Making Indonesia 4.0," *Indonesia Investments*, April 6, 2018.

132. "Thailand's Electronics Sector Hit by Cheap Chinese Imports," *Nation Thailand*, May 11, 2025; Brendan Kelly and Shay Wester, "ASEAN Caught between China's Exports Surge and Global De-Risking," *Asia Society Policy Institute*, February 17, 2025; Tommy Walker, "Thailand Joins Other Asia Nations in Battle against Cheap Chinese Imports," *Voice of America*, December 18, 2024.

133. Denise Mae Codis, "Philippines: 126 Workers in Mactan Economic Zones Dismissed after Two Companies Shut & Another Reduces Operations, amid Reduction in Demand," *Business & Human Rights Resource Centre*, April 13, 2025.

134. Manishi Raychaudhuri, "ASEAN Countries Face Their Own 'China Shock'," *Reuters*, May 16, 2025.

135. Manishi Raychaudhuri, "ASEAN Countries Face Their Own 'China Shock'," *Reuters*, May 16, 2025.

136. Brendan Kelly and Shay Wester, "ASEAN Caught between China's Exports Surge and Global De-Risking," *Asia Society Policy Institute*, February 17, 2025.

137. Rob Subbaraman and Yiru Chen, "China's Trade Diversion Could Swamp Other Emerging Markets," *Nomura*, April 2025.
138. Brendan Kelly and Shay Wester, "ASEAN Caught between China's Exports Surge and Global De-Risking," *Asia Society Policy Institute*, February 17, 2025.
139. "Reasons for Investing," *Invest in ASEAN*. <https://web.archive.org/web/20250624080851/https://investasean.asean.org/reasons-for-investing/view/671/newsid/741/robust-market.html>.
140. Indonesia GKND, "Indonesia: Motor Vehicle Production," via Haver Analytics; China General Administration of Customs, "China: Exports to Indonesia: Vehicles Other than Rail," via Haver Analytics.
141. China General Administration of Customs, "China: Exports to Malaysia: Vehicles Other than Rail," via Haver Analytics.
142. China General Administration of Customs, "China: Exports to Thailand: Vehicles Other than Rail," via Haver Analytics; Hiroshi Kotani and Jun Suzuki, "South-east Asia Seeks Ways to Protect Car Industry," *Nikkei Asia*, October 23, 2018.
143. Yasufumi Saito, Jin Wu, and Nicholas Takahashi, "Chinese Carmakers Are Trouncing Once-Unbeatable Japanese Rivals," *Bloomberg*, November 26, 2024.
144. Chris Sleight, "Trendlines: Prolonged Trough for China May Be Felt Far and Wide," *Power Progress*, June 23, 2024.
145. Chris Sleight, "Trendlines: Prolonged Trough for China May Be Felt Far and Wide," *Power Progress*, June 23, 2024.
146. China General Administration of Customs, "Exports," via Haver Analytics.
147. Brendan Kelly and Shay Wester, "ASEAN Caught between China's Exports Surge and Global De-Risking," *Asia Society Policy Institute*, February 17, 2025.
148. United Nations Statistics Division, "UN Comtrade Database."
149. Katrina Hamlin, "Solar Giant Illuminates China's Overcapacity Bind," *Reuters*, July 16, 2024.
150. Ishana Ratan, "Does Manufacturing Matter? Forward Linkages and Downstream Growth in the Malaysian Solar Industry," *Boston University Global Development Center*, August 2023.
151. Robert Walker, Roland Rajah, and Gilliane De Gorostiza, "Constrained Recovery: Global Shocks and Emerging Southeast Asia," *Lowy Institute*, May 2024, 15.
152. Trang Hoang and Gordon Lewis, "As the U.S. Is Derisking from China, Other Foreign U.S. Suppliers Are Relying More on Chinese Imports," *Federal Reserve*, August 2, 2024.
153. Trang Hoang and Gordon Lewis, "As the U.S. Is Derisking from China, Other Foreign U.S. Suppliers Are Relying More on Chinese Imports," *Federal Reserve*, August 2, 2024.
154. "China Strengthens Hold on Cambodia's Knitted Fabric Market," *Fibre2Fashion*, August 30, 2024.
155. Yap Yan Qing, "Malaysia Imposes Anti-Dumping Duties on Steel, Tinplate from China and Other Asian Nations," *The Edge*, August 4, 2025; "Vietnam Imposes Five-Year Anti-Dumping Duties on Chinese Hot-Rolled Steel," *Vietnam Plus*, July 7, 2025; Phusadee Arunmas, "Foreign Trade Dept to Add Items to Watch List," *Bangkok Post*, July 1, 2025; Mohd Zaky Zainuddin, "High Costs, Lack of Charging Stations Hamper EV Sales Growth," *New Straits Times*, April 28, 2025; "Ministry Plans to License E-Commerce Platforms Temu and Shein," *Saigon Giai Phong News*, April 22, 2025; "Imports of Nylon Film Products from China, Thailand, and Taiwan Subject to Anti-Dumping Duties," *MUC Consulting*, March 25, 2025; "MITI Reviews Five Legislations to Strengthen Industrial Development," *Bernama*, February 14, 2025; Indonesia Ministry of Investment, Trade, and Industry, *Preliminary Determination of the Anti-Dumping Duty Investigation on Imports of Polyethylene Terephthalate (PET) Origination or Exported from the People's Republic of China and the Republic of Indonesia*, January 7, 2025; "Vietnam to Scrap Tax Exemption for Low-Cost Imports from Feb," *Reuters*, January 4, 2025; "Indonesia Imposes Anti-Dumping Duties on Chinese Ceramics," *Algo Research*, October 22, 2024; Abdul Muslim, "Indonesia Bans Chinese App Temu," *Jakarta Globe*, October 10, 2024; "Imports of Flat-Rolled Iron from China, Korea, and Taiwan Subject to Anti-Dumping Duties," *MUC Consulting*, October 8, 2024; Fajar Hidayat, "Relocating Indonesia's Import Gates: A Shortcut to Help Local Industries Compete," *Diplomat*, September 4, 2024; "Miti Reviewing Countervailing and Anti-Dumping Duties Act 1993," *Bernama*, August 24, 2024; Monique Handa Shafira, "E-Commerce Transactions in Indonesia Projected to Reach Rp 533 Trillion in 2023," *Jakarta Globe*, January 4, 2024; "A Brief Summary of Indonesia's New Regulations on Imports," *Assegaf Hamzah & Partners*, April 19, 2024; "Indonesia to Tighten Import of Electronics Including TVs, A/Cs, and Refrigerators, Zulhas: WTO Might Be Upset if Banned," *Intimedia*, 2024; Malaysia Ministry of Finance, *Sales Tax on Imported Low-Value Goods Sold Online*, December 18, 2023; Nathaniel Yim,

"Indonesia De Minimis 2020: What the Changes Mean for E-Commerce Importers," *Janio*, June 21, 2023; Panisa Suwanmatajarn, "Temporary Measure to Collect VAT on Low-Value Goods through Thai Customs," *Legal Co.*, August 28, 2024.

156. ASEAN Stats, "Flows of Inward Foreign Direct Investment to ASEAN by Source Country and Industry."

157. Armand Meyer and Agatha Kratz, "China's Manufacturing FDI in ASEAN Grew Rapidly, but Faces Tariff Headwinds," *Rhodium Group*, April 24, 2025.

158. Evelyn S. Devadason, "Non-Tariff Measures in ASEAN: From Evidence to Policy," *European Commission*, August 2019.

159. Evelyn S. Devadason, "Non-Tariff Measures in ASEAN: From Evidence to Policy," *European Commission*, August 2019.

160. "China's BYD to Complete \$1 Billion Indonesia Plant by Year-End, Executive Says," *Reuters*, January 20, 2025.

161. Indah Pudji Astuti and Heru Andriyanto, "Chinese Car Sales Soar 153% in Indonesia as Japanese Brands Lose Ground," *Jakarta Globe*, May 11, 2025.

162. Jane Nakano and Claire Zhao, "Circular Economy Solutions for China's Steel Industry: Addressing the Dual Challenge of Overcapacity and Emissions," *Center for Strategic and International Studies*, October 18, 2024.

163. Tang Shihua, "China's Yongjin to Build USD257 Million Steel Plant in Türkiye to Supply Europe," *Yicai*, March 24, 2025; "Malaysia's Eastern Steel Produces First HRC," *South East Asia Iron and Steel Institute*, December 18, 2024; Angela Tritto, "How Indonesia Used Chinese Industrial Investments to Turn Nickel into the New Gold," *Carnegie Endowment for International Peace*, April 11, 2023.

164. "Thailand Adjusts EV Policy to Ease Production Requirements, Target Exports," *Reuters*, July 30, 2025; "Thailand Approves Tax Breaks for EVs, 'High Potential' Foreigners," *Reuters*, February 22, 2022.

165. Sankalp Phartiyal, Shruti Srivastava, and Debby Wu, "China Moves to Stall Apple, BYD Production Shifts in Asia," *Bloomberg*, January 17, 2025.

166. Daisuke Wakabayashi and Claire Fu, "Chinese E.V. Makers Rush In and Up-End a Country's Entire Auto Market," *New York Times*, July 31, 2024; Kenya Akama, "China Auto Parts Makers Triple in Thailand on EV Battery Rush," *Nikkei Asia*, May 9, 2025; Francesca Regalado, "Thai Auto Sector Has 4 Years to Adjust to China EVs, Says Major Parts Maker," *Nikkei Asia*, September 23, 2024.

167. Angela Tritto, "How Indonesia Used Chinese Industrial Investments to Turn Nickel into the New Gold," *Carnegie Endowment for International Peace*, April 11, 2023.

168. Angela Tritto, "How Indonesia Used Chinese Industrial Investments to Turn Nickel into the New Gold," *Carnegie Endowment for International Peace*, April 11, 2023.

169. David Guberman, Samantha Schreiber, and Anna Perry, "Export Restrictions on Minerals and Metals: Indonesia's Export Ban of Nickel," *U.S. International Trade Commission*, February 2024, 13.

170. Kevin Dempsey, "Request for Comments on Indonesia Market Access under the Country Practice Review of the Generalized System of Preferences," *American Iron and Steel Industry*, January 17, 2020, 4–5.

171. Angela Tritto, "How Indonesia Used Chinese Industrial Investments to Turn Nickel into the New Gold," *Carnegie Endowment for International Peace*, April 11, 2023.

172. Samantha Custer et al., "Balancing Risk and Reward: Who Benefits from China's Investments in Indonesia?" *AidData*, June 2025, 3; "Nickel in Batteries," *Nickel Institute*. <https://nickelinstitute.org/en/nickel-applications/nickel-in-batteries/>.

173. "Chinese Firms Control around 75% of Indonesian Nickel Capacity, Report Finds," *Reuters*, February 5, 2025.

174. Kari Soo Lindberg, "China's CATL Seeks \$1 Billion Loan for Indonesia Plant Expansion," *Bloomberg*, May 5, 2025; Eddie Spence, "Hyundai and LG Energy Open Indonesia's First Battery Cell Plant," *Bloomberg*, July 3, 2024.

175. U.S. Census Bureau, *USA Trade Online*; Caroline Freund et al., "Enduring Dependence: De Minimis, Transshipment, and US-China Trade," in *The State of Globalisation* (Centre for Economic Policy Research, June 2025), 37, 42.

176. Caroline Freund, "The China Wash: Tracking Products to Identify Tariff Evasion through Transshipment," *University of California San Diego School of Global Policy and Strategy*, January 2025; "Vietnam to Crack Down on Chinese Goods Relabeled to Beat U.S. Tariffs," *Reuters*, June 10, 2019.

177. Inti Pacheco, "The Not-So-Secret Way around U.S. Tariffs," *Wall Street Journal*, December 22, 2024; "Vietnam to Crack Down on Chinese Goods Relabeled to Beat U.S. Tariffs," *Reuters*, June 10, 2019.

178. Tim Daiss, "China's Solar Panel Dumping into the US via Southeast Asia Comes to an End," *Nikkei Asia*, June 10, 2025; International Trade Administration, "Monosodium Glutamate from the People's Republic of China: Final Affirmative Determination of Circumvention," Federal Register 90:22702, May 29, 2025; Inti Pacheco, "The Not-So-Secret Way around U.S. Tariffs," *Wall Street Journal*, December 22, 2024; "Vietnam to Crack Down on Chinese Goods Relabeled to Beat U.S. Tariffs," *Reuters*, June 10, 2019.
179. Caroline Freund, "The China Wash: Tracking Products to Identify Tariff Evasion through Transshipment," *University of California San Diego School of Global Policy and Strategy*, January 2025.
180. International Trade Administration, "Determining Origin: Tariff Shift and Regional Value Content Rule of Origin," accessed August 17, 2025.
181. U.S. Customs and Border Protection, *Marking of Country of Origin on U.S. Imports*, May 22, 2024.
182. U.S. Customs and Border Protection, *Marking of Country of Origin on U.S. Imports*, May 22, 2024.
183. Government of Canada, *Consolidated TPP Text—Annex 3-D—Product—Specific Rules of Origin*.
184. U.S. International Trade Administration, *Scope*, August 1, 2025.
185. Scott McBride, "An Inside Scoop on Scopes: An Overview of the Laws and Policies Governing the Scopes of Trade Remedy Orders," *University of Miami* 28, No. 1 (2020): 40–41.
186. Scott McBride, "An Inside Scoop on Scopes: An Overview of the Laws and Policies Governing the Scopes of Trade Remedy Orders," *University of Miami* 28, No. 1 (2020): 39–40.
187. Scott McBride, "An Inside Scoop on Scopes: An Overview of the Laws and Policies Governing the Scopes of Trade Remedy Orders," *University of Miami* 28, No. 1 (2020): 49–50, 66.
188. "US Department of Commerce Issues Final Rule to 'Improve Administration and Enforcement' of Antidumping and Countervailing Duty Laws," *White and Case*, September 21, 2021.
189. U.S. Department of Commerce International Trade Administration, "Notice of Scope Rulings," Federal Register 90:41057, August 22, 2025; U.S. Department of Commerce International Trade Administration, "Notice of Scope Rulings," Federal Register 90:17764, April 29, 2025.
190. Mercedes Ruehl, "Chinese Companies Seek Assurances from Malaysia on Avoiding US Tariffs," *Financial Times*, June 25, 2024.
191. Ana Swanson and Lazaro Gamio, "Trade Crime Is Soaring, U.S. Firms Say, as Trump's Tariffs Incentivize Fraud," *New York Times*, May 28, 2025; U.S. International Trade Commission, *Crystalline Silicon Photovoltaic Cells (Whether or not Partially or Fully Assembled into Other Products)*, November 2017, [I-6–I-7], [I-47–I-50]; Huimin Shi and Xuepeng Liu, "(Still) Made in China: How Tariff Hikes May Trigger Re-routing Circumvention," *Centre for Economic Policy Research*, July 11, 2019.
192. Office of the U.S. Trade Representative, *Section 201—Imported Solar Cells and Modules*, accessed August 21, 2025.
193. Kenneth Rapoza, "China's Solar Companies in Southeast Asia Whacked with 100%+ Tariffs—What's Next?" *Coalition for a Prosperous America*, February 21, 2025.
194. Chunyu Yang, "Cambodia's Solar Panel Exports: A Little Spark or a Mighty Flame?" *ASEAN+3 Macroeconomic Research Office*, September 25, 2024.
195. U.S. International Trade Administration, *Commerce Initiates Antidumping and Countervailing Duty Investigations of Crystalline Silicon Photovoltaic Cells from Cambodia, Malaysia, Thailand, and the Socialist Republic of Vietnam*, May 15, 2024.
196. U.S. International Trade Administration, *Preliminary Affirmative Determinations in the Countervailing Duty Investigations of Crystalline Photovoltaic Cells Whether or Not Assembled into Modules from Cambodia, Malaysia, Thailand and Vietnam*, October 1, 2024; "Contact Us," *SolarSpace*, accessed October 14, 2025; "SolarSpace Subsidiary Launches Operations in Cambodia," *SolarSpace*, March 9, 2023.
197. Nhean Chamrong, "Chinese Solar Industries Relocate to Indonesia, Laos to Dodge US Tariffs," *Khmer Times*, May 13, 2025.
198. Terence Lee and Selina Ho, "Southeast Asian Elites Resist a China-Led Regional Order," *East Asia Forum*, January 21, 2025.
199. Gatra Priyandita, "Chinese Economic Coercion in Southeast Asia: Balancing Carrots and Sticks," *Hybrid COE*, October 2023, 16–17.
200. Adam Wolfe, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on Dominance by Design: China Shock 2.0 and the Supply Chain Chokepoints Eroding U.S. Security*, June 5, 2025; Meghan Ostertag, "Advanced Technology Products Rely on Strong Trade Partnerships," *ITIF*, March 24, 2025.

201. Robert Atkinson, "China Is Rapidly Becoming a Leading Innovator in Advanced Industries," *ITIF*, September 16, 2024.

202. Van Anh Vuong, "The Dynamic Impact of Exporting on Firm R&D Investment," *Centre for Economic Policy Research*, January 26, 2021.