

# Decoupling: Is the West Really Moving Away From China?

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**T**he prospect of global economic decoupling has the potential to derail at least part of the long process of globalisation that began more than 50 years ago. That process began with the recognition of the People's Republic of China by the U.S. in 1979, accelerating China's accession to the World Trade Organization in 2001. The trend of globalisation continued through the Global Financial Crisis and the subsequent economic recovery. But recent developments suggest the tides may now have turned.

When might decoupling have begun? One can trace disagreements on trade at least back to China's adoption in 2015 of its Made in China 2025 policy and President Donald Trump's 2016 announcement of his America First policy. This was followed by new tariffs on solar panels and washing machines in early 2018.

These moves initially put the focus of deglobalisation on reshoring industries lost to globalisation or raising the value of goods produced locally. But deglobalisation has already shifted from bilateral changes in the location of manufacturing to diversifying the production of goods across locations to reduce concentration risk. Such risk became evident during the COVID-19 pandemic when wide differences in the capabilities of policymakers to react to external shocks and manage economic activity were revealed with new clarity.

It is easy to define decoupling in terms of shifting patterns of trade and manufacturing. But it includes many other aspects of economics and international relations that span foreign direct investment, capital flows, international education, travel and tourism, intellectual property, payment systems, and national security. All are vital in understanding how countries have moved—and are moving—away from each other.

The first section of this paper examines the timeline of recent decoupling events and the varied ways that decoupling may factor into economic and social life. The second section focuses on the shifting pattern of trade flows between the U.S. and China, as well as the impacts on the rest of the world. The third section drills deeply into patterns of foreign direct investment from China and the U.S. to the rest of the world to uncover patterns of decoupling that have occurred since 2015. This section has a key focus on the Asia-Pacific region and the industries driving the developments. The fourth and final section explores what these changing behaviours mean for economic development.

## Recent trends and pathways

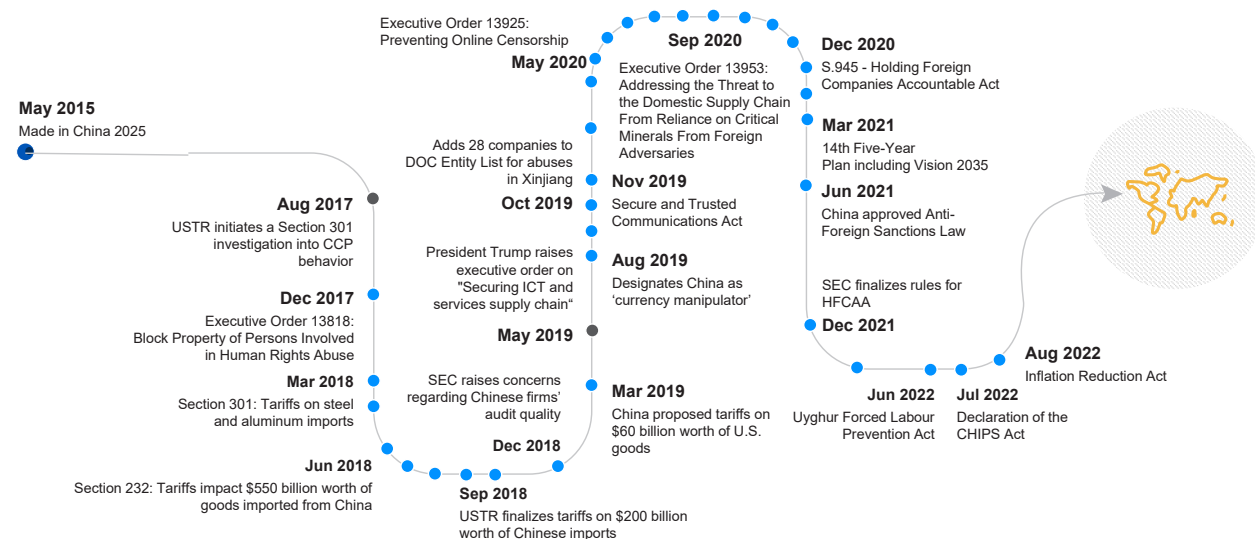
### Timeline of events

Decoupling developments have been bubbling for some time. In contrast to the market-oriented policies leading up to its accession to the WTO in 2001, China has opted for a more government-led approach in the 21st century. China's Made in China 2025 program passed in 2015, focused on building local capabilities in key areas of information, communication and technology. These actions have been met with reservation by the U.S. and its allies, especially as these efforts have raised questions about the enforcement of intellectual property rights and national security concerns.

The U.S.'s pivot from greater integration into strategic competition with China came to the fore during the Trump administration. Then-president Trump passed a series of executive orders raising tariffs against a wide array of Chinese imports. A ban on the transfer of key ICT technologies deemed important for national security was also implemented. China reciprocated by imposing tariffs on a wide variety of U.S. imports and accelerating its drive toward greater domestic supply-chain resilience.

The countries' decoupling has since moved beyond just trade (see Chart 1). Both countries have instituted legislation making it more challenging for foreign firms to operate domestically, particularly for those involved in ICT-related industries. Combined with the earlier implementation of tariffs on goods and services, the tit-for-tat tensions have resulted in the largest reversal of trade and FDI growth between the world's two largest economies in their history. Importantly, trade and capital flows fell not only because of the additional costs directly imposed by the new barriers but also because companies started to rethink and reconfigure their supply chains to mitigate risk from the heightened tensions.

Chart 1: Trade and Investment Barriers: Tools of the 21st Century



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The COVID-19 pandemic and Russia's invasion of Ukraine have further accelerated the shift to greater domestic resilience. As a result, we have seen a greater impetus placed on the decoupling and regionalisation of global supply chains. COVID-19 hit different parts of the world at different times. These asynchronous COVID-19 waves resulted in delays and global shortages of key inputs, creating significant headaches for governments, firms and households. This was notably seen for health supplies and semiconductors.

In response, many countries have announced new funding and legislation for greater domestic innovation and production across key industries, notably the semiconductor, medical, aviation and pharmaceutical industries. The U.S. CHIPS and Science Act is indicative of this direction. Understanding the importance of semiconductors for a whole host of industries, the U.S. government is prioritizing the development of local manufacturing capacity for this key component.

China, which already prioritized chips as part of its Made in China 2025 program, is now prioritizing data, by enforcing localized data storage and processing. Its National Security Law, Cybersecurity Law, and draft Data Security Law would require private companies to provide data to the government, compel companies to cooperate with the state on intelligence matters, and limit the export of certain data. As countries continue to shore up domestic capacity and focus their efforts inward to mitigate external risks, we can expect further decoupling, particularly for industries key to national security and domestic production.

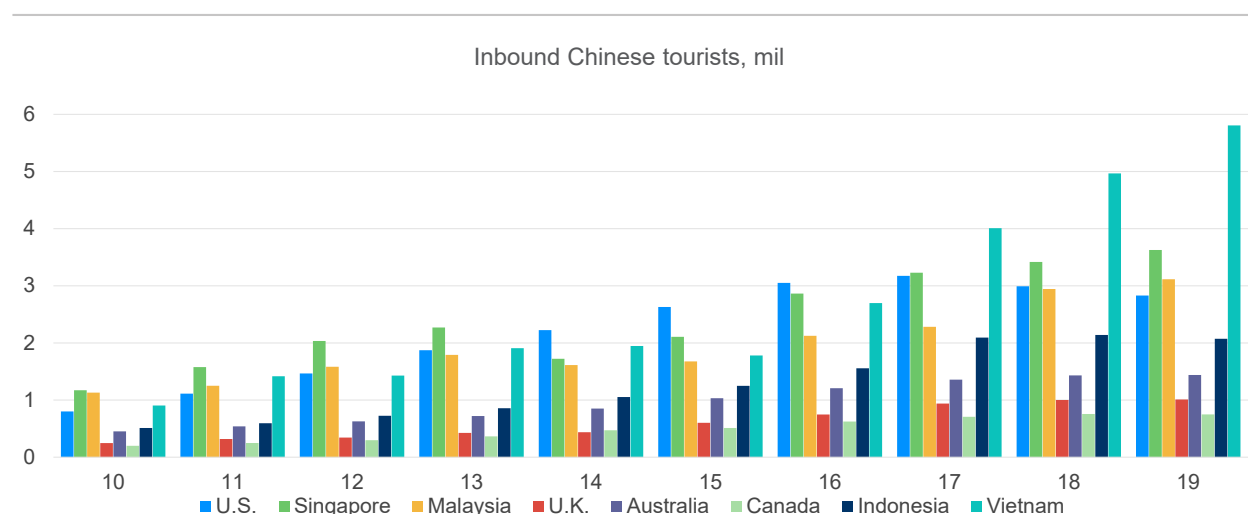
### Decoupling in all its forms

Decoupling is most thought of as the redirection of trade or production between countries. But there is much more to this phenomenon. While this paper focuses primarily on the movement of trade and investment flows, it is also important to note how other economic flows have been disrupted.

### Tourism

After more than a decade of rapid growth, Chinese tourism to the U.S. fell in 2018 amidst rising geopolitical tensions (see Chart 2). This marked the first decline in Chinese tourist numbers to the U.S. since 2003. Politi-

**Chart 2: Chinese Tourism to U.S. Peaked in 2017**



Sources: Department of Statistics, Moody's Analytics

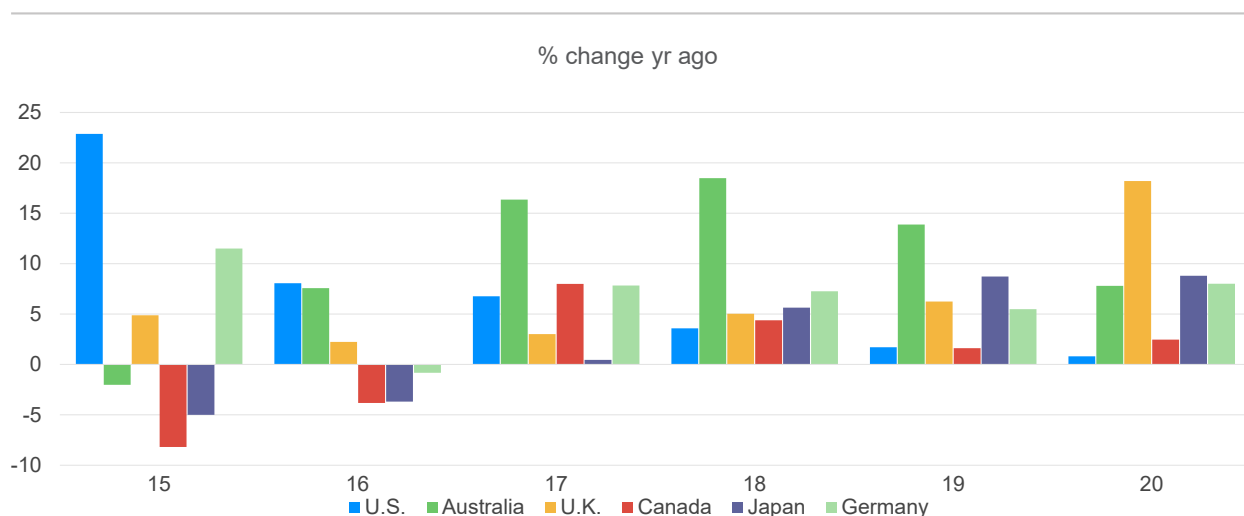
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cal strains prompted the Chinese government to issue warnings about the U.S., citing dangerous crimes and shootings as potential risks to travellers. The number of Chinese tourists to the U.S. fell further from 2018 as Chinese tourists diversified their travel. Threats of tourism boycotts and dissuading travel between countries are growing tools in political disputes. Similar threats have been issued towards Australia as tensions with China rose from 2018.

### Education

Education exports are a major boon for the U.S. economy, with China being the top contributor of overseas students. But the landscape has changed markedly. Souring political tensions between the U.S. and China saw the annual growth rate of Chinese students to the U.S. slow from 2016 (see Chart 3).

**Chart 3: Chinese Students Shift Destinations for International Study**



Sources: Institute of International Education, Moody's Analytics

There are several factors contributing to the slowing growth in Chinese students in the U.S., such as broader tourist travel, prospective students being warned of gun violence, anti-Asian racism, and deteriorating U.S.-China relations. Chinese officials have also warned of heightened uncertainty in student and work visa approvals.

The U.S. is also trying to pivot away from its reliance on Chinese students. In 2020, former President Trump issued an order barring entry to the U.S. for Chinese graduate students and postgraduate researchers with ties to military-related entities. The visa clampdown resulted in many Chinese students' applications being rejected. In addition, the U.S. issued just half the number of visas to new Chinese students than pre-pandemic in the first six months of 2022.

### Intellectual property

Intellectual property protection was one of the original issues raised by U.S. policymakers as they addressed economic, financial and trade relationships with China. It remains a critical concern today related to the

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semiconductor industry, and to many others. The U.S. Chamber of Commerce<sup>1</sup> notes that moves toward the protection of the U.S. semiconductor industry arose from China's lack of IP protection, forced technology transfer within joint ventures, and the requirement of technology sharing as a condition of entry into the Chinese market.

In response, the latest policy move in the U.S. is the CHIPS Act of 2022, which will provide \$39 billion in subsidies and tax benefits as an incentive to semiconductor makers to locate cutting-edge chip-manufacturing plants in the U.S. At the same time, however, firms benefitting from the program will be prohibited for 10 years from producing chips more advanced than 28 nanometers in China or Russia.

China is pursuing the development of its own semiconductor manufacturing technology. It may be slowed by limited access to overseas technology, but it ultimately may create its own unique and competing technology, which could further decouple the U.S. and China semiconductor industries.

Decoupling of human capital and its creation of new intellectual property could further split global technology research. Chinese students studying overseas have boosted global research both in their overseas locations as well as upon their return to China. While two-way foreign direct investment between the U.S. to China has slowed, hindered in part by a lack of IP protection in China, there is potential for decoupling of human capital as well.

Not only has the flow of students from China to the U.S. and Canada slowed in recent years, but a small though increasing number of scientists of Chinese origin are choosing to leave U.S. academic and research institutions for China and other locations, according to research from the U.S.-based Asian American Scholar Forum.<sup>2</sup> In 2021, more than 1,400 Chinese researchers and scholars left the U.S. for Chinese academic institutions. Reasons include increased scrutiny of U.S. government research grants, an increasingly hostile political environment, and increased incidents of racial discrimination. A loss of global collaboration in basic research has the potential to ultimately slow the progress of scientific advances and thus slow the potential rate of global productivity and economic growth.

### Payment systems

When China initiated the Made in China 2025 strategic plan in 2015, it also launched the Cross-Border Payment System, or CIPS, an independent clearing system with the Chinese yuan as the quoted currency. It was initially created to boost yuan internationalisation and to facilitate investments for the Belt and Road Initiative. But it is now widely viewed as an alternative payment system to circumvent the U.S. dollar-denominated SWIFT international payment network. Geopolitical tensions with the U.S. now have the potential to spill over into the financial sector. For instance, U.S.-levied sanctions against Russia following its invasion of Ukraine resulted in many of its transactions being barred from using SWIFT. Beyond ensuring financial security, the maturity of the CIPS alternative payment system could work to favour other countries that may also face sanctions by the U.S.

### Trade flows

The rise in tensions between the U.S. and China sent trade scrambling between the two nations. In 2017, the average U.S. tariff on imports of Chinese goods was just 3.1%. By 2019, that had risen to almost 25%. U.S. imports of China's goods fell sharply in response. Likewise, U.S. exports to China moderated through 2018,

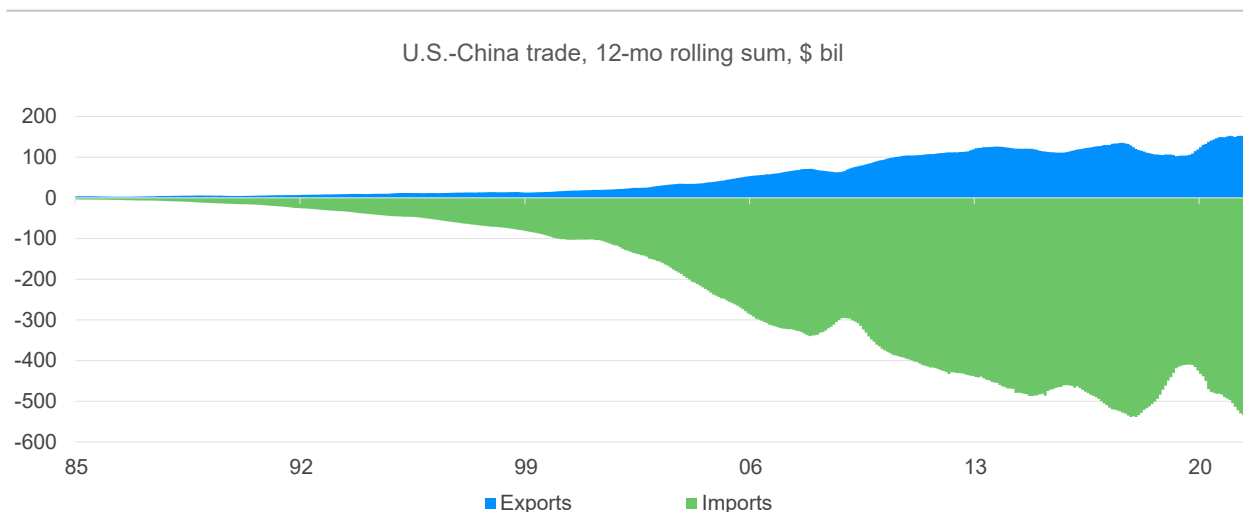
<sup>1</sup> U.S. Chamber of Commerce China Center and Rhodium Group, Understanding U.S.-China Decoupling: Macro Trends and Industry Impacts. 2021

<sup>2</sup> Yu Xie, Xihong Lin, Ju Li, Qian He and Junming Huang, "Caught in the Crossfire: Fears of Chinese-American Scientists", Asian American Scholar Forum. 2022

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as Chinese officials introduced reciprocal tariffs on U.S. goods. The onset of the COVID-19 pandemic added further disruptions to trade between the two countries. That said, U.S. imports from China have since rallied, returning to pre-trade war levels earlier this year (see Chart 4).

**Chart 4: U.S.-China Trade Has Returned to Pre-Trade War Levels...**



Sources: Census Bureau, Moody's Analytics

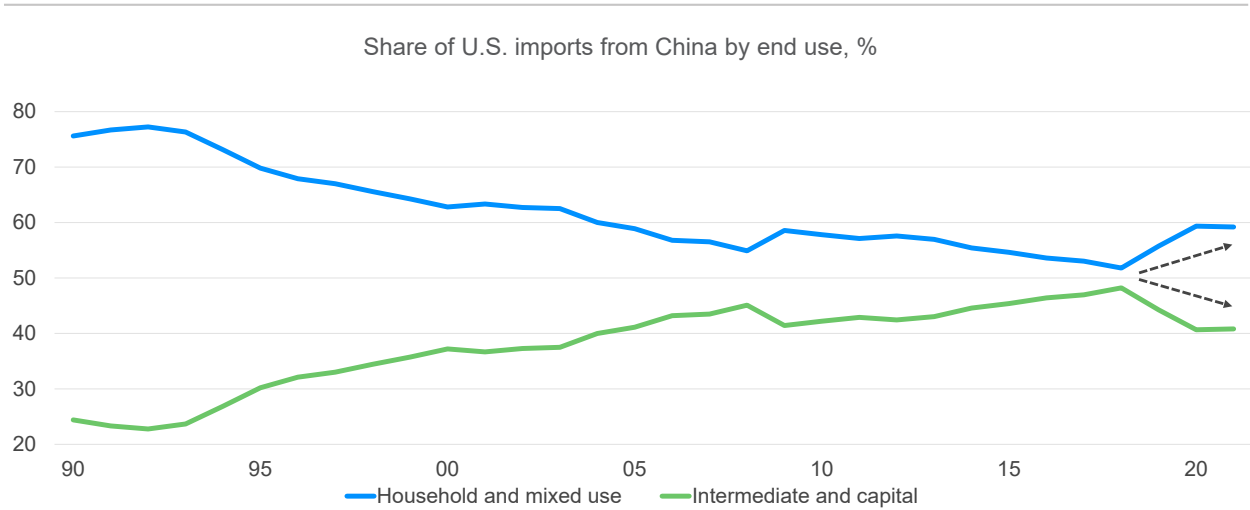
### Changing shapes

While total trade volumes may look more normal, the composition of trade between the U.S. and China has shifted dramatically. U.S. imports of intermediate and capital goods—those used as inputs into the production of other goods—have fallen sharply. As a share, intermediate and capital goods now account for just over 40% of all U.S. imports from China, having accounted for nearly half in 2018—a trend that was increasing steadily before the trade war.

This shift is significant. Intermediate and capital goods are vital inputs into U.S. production. Firms embedded in value chains—like those importing intermediate and capital goods—are vulnerable to shifts and disruptions to production occurring earlier in those same chains. If outages or political tensions prevent these necessary imports from arriving on U.S. shores, domestic production by these firms could grind to a halt. With heightened tensions and disruptions, U.S. firms appear to be shifting supply chains away from China to secure these important inputs and ensure that production flows remain steady.

Conversely, imports of household and mixed-use goods—the final goods sold directly to households—have experienced less disruption (see Chart 5). Largely, this reflects the more manageable levels of pain that would be felt if the flow of these imports was disrupted. Simplistically, having to wait 12 months for a new couch to arrive from overseas is frustrating. Having to halt entire production flows while firms try to secure new supplies is devastating.

Chart 5: ...But the Composition Is Shifting



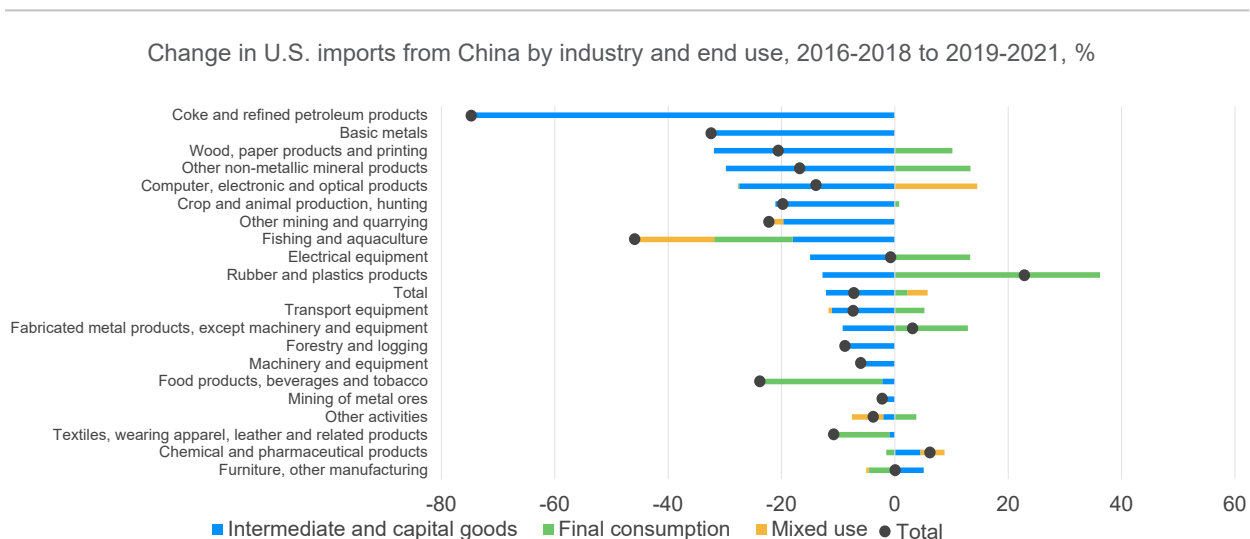
Sources: OECD, Moody's Analytics

The pivot of the U.S. away from China has been broad-based, impacting almost every industry. Key inputs into production such as refined petroleum products, metals and electronic products have seen the largest falls. Meanwhile, inputs of less strategic importance such as furniture and textiles have been more sheltered from these falls (see Chart 6).

Impacts on the rest of the world

The U.S. is looking to other parts of Asia to find new suppliers for these intermediate and capital goods. Asia excluding China now accounts for almost one-fifth of total intermediate and capital goods imported by the U.S., well up from the pre-trade war period. More modest gains have also been seen across the Americas as

Chart 6: The Fall Has Been Widespread Across Industries

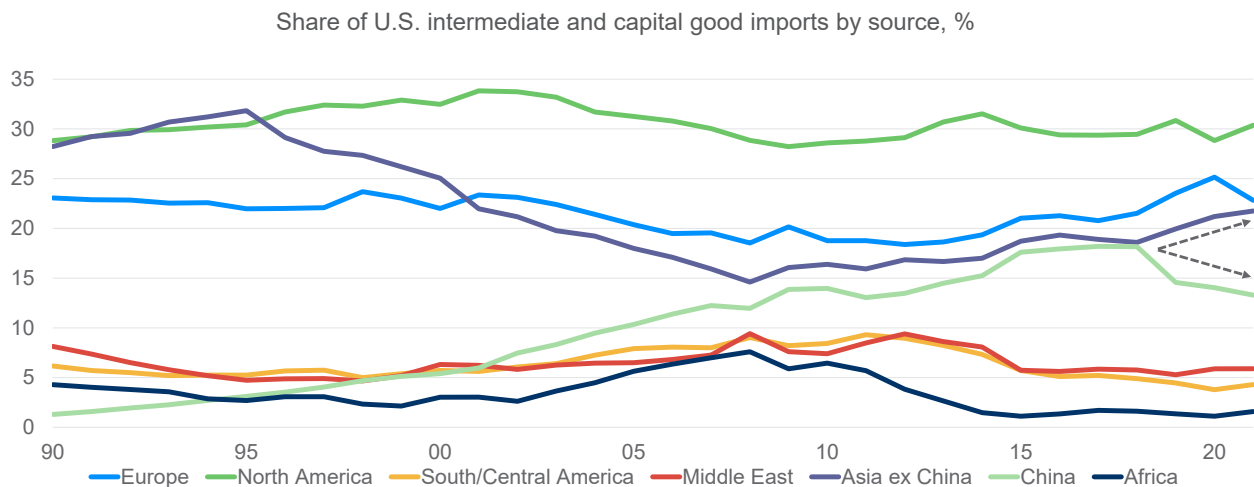


Sources: OECD, Moody's Analytics

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U.S. firms look a little closer to home. At the same time, having risen as a share for three decades, China's importance as a supplier of intermediate and capital goods to the U.S. has shrunk (see Chart 7).

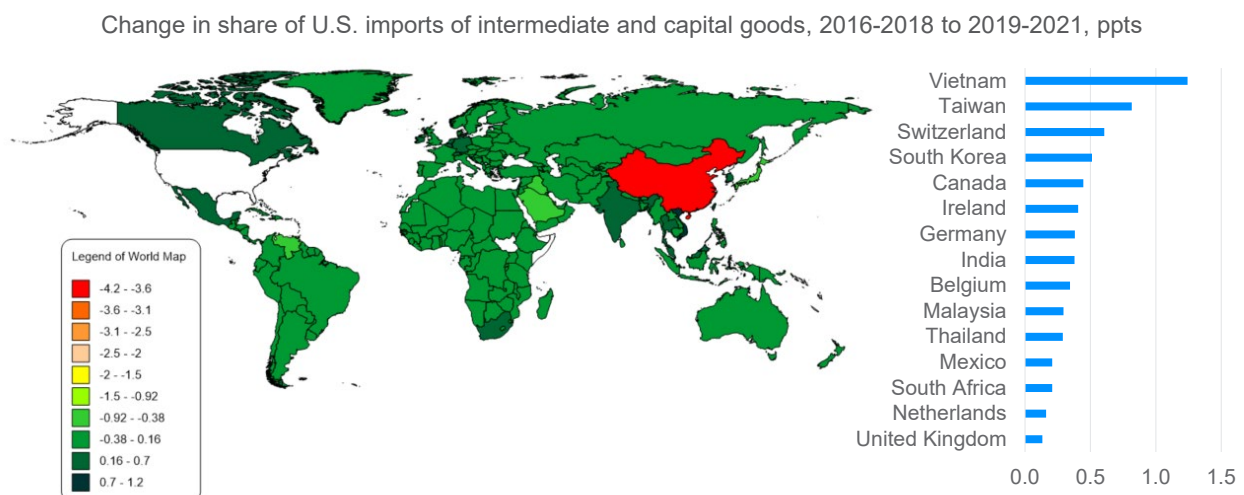
### Chart 7: The U.S. Begins to Source Intermediate Inputs From Elsewhere



Sources: OECD, Moody's Analytics

Specifically, Canada and Mexico have benefited from an increase in exports of basic metals and raw materials such as wood, petroleum and natural gas to the U.S. In Asia, Taiwan and South Korea have increased computer and electrical equipment exports; Malaysia has increased chemical, fuel and metal exports; and Vietnam and Thailand are benefiting from an increase in demand for rubber, plastics and electronic components (see Chart 8).

### Chart 8: Other Countries Have Picked Up the Slack



Sources: OECD, Moody's Analytics

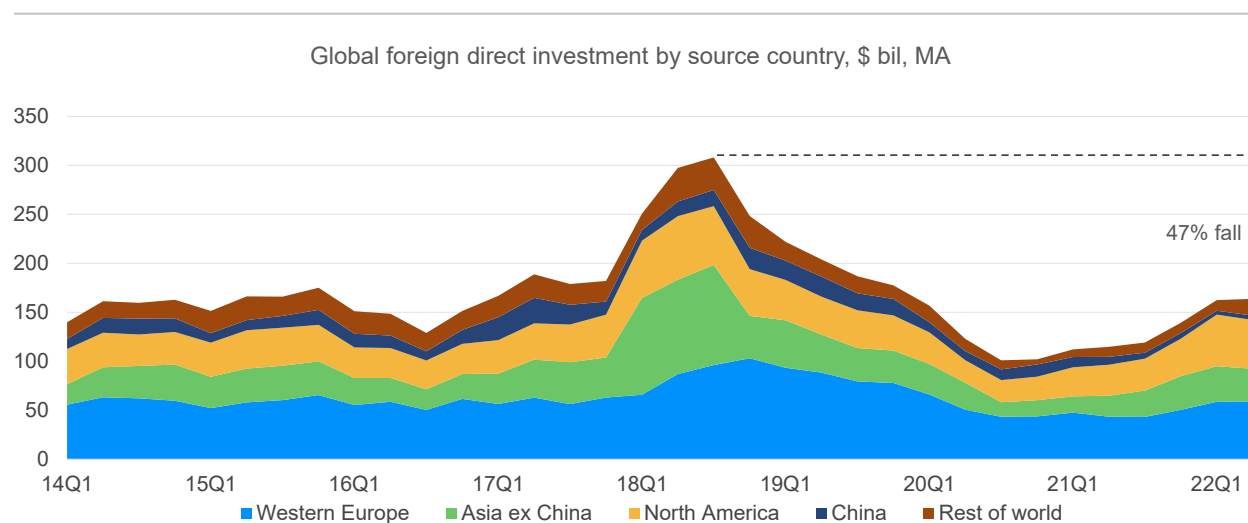
### Investment flows

Cross-border investment flows give a glimpse into the future; money to build new factories today will turn into production and exports tomorrow. In many respects, foreign direct investment is the first cog in the development of new business operations. Exploring changes in these FDI flows provides an indication as to whether the U.S.'s observed trade shift away from China is a trend that is likely to continue.

The Orbis Cross Border Investment database is used to analyse this behaviour. The database compiles and tracks more than 200,000 individual greenfield projects through the entire life cycle, from rumours to completion. In addition, the database tracks more than 100,000 merger and acquisition deals.

Global foreign direct investment flows peaked in 2018 (see Chart 9). The reduction in investment reflects a global rise in uncertainty during the second half of the 2010s. It is often said that uncertainty is investment's kryptonite and that was certainly true as the U.S.-China trade war ramped up. Between the second half of 2016 and late 2019, the World Uncertainty Index, which utilises text mining to track the level of uncertainty mentioned in media reports, almost tripled. The onset of the COVID-19 pandemic in the first quarter of 2020 further exacerbated uncertainty in the global economy. Since then, global investment flows have gradually recovered, albeit remaining roughly half of what they were during their 2018 peak.

**Chart 9: Global FDI Peaked in 2018**

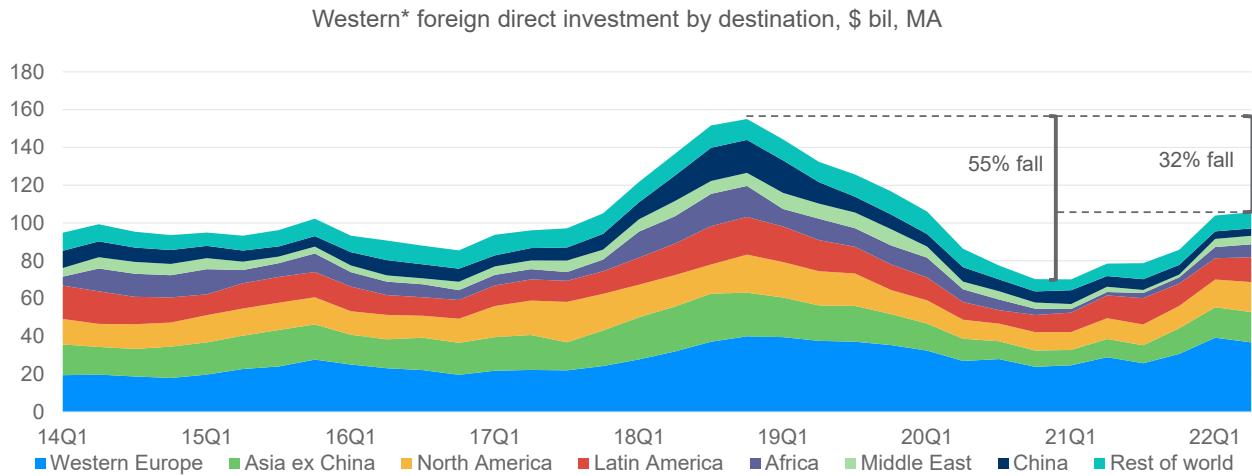


Sources: Orbis Cross Border Investment, Moody's Analytics

The recovery in Western<sup>3</sup> FDI flows following the depth of the pandemic has been stronger than from elsewhere (see Chart 10). Although still a third lower than their 2018 peak, Western FDI flows have made strong gains from their COVID-19 lows. In large part, this reflects a faster-than-expected economic recovery across the West, supporting investment and M&A activity as firms capitalised on record-low interest rates and vulnerable firms ripe for acquiring.

<sup>3</sup> Defined as North America, Western Europe and Oceania.

Chart 10: Western FDI Projects Are Recovering

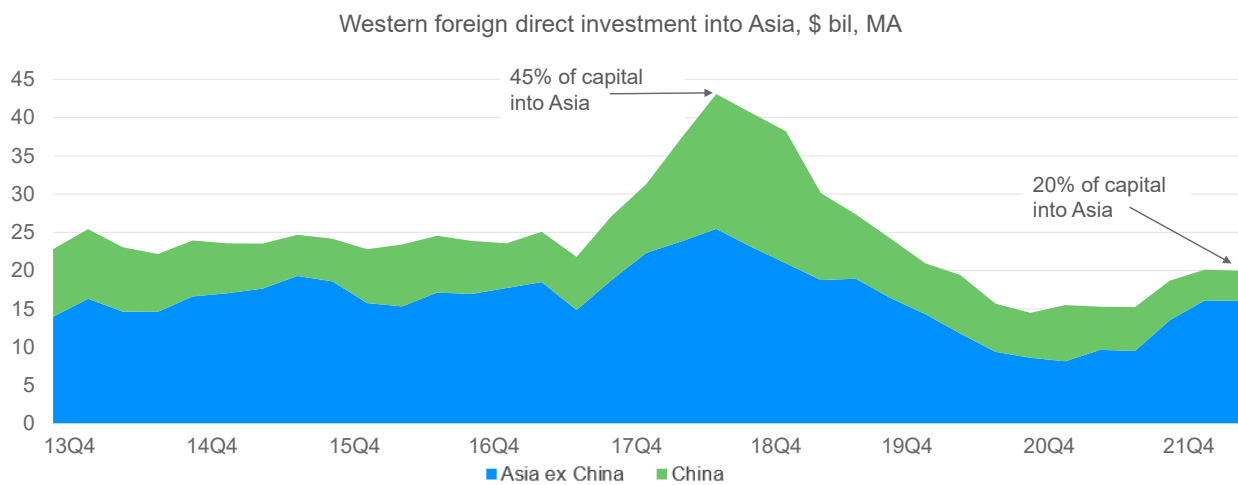


Sources: Orbis Cross Border Investment, Moody's Analytics

**Decoupling investment flows**

Intensifying U.S.-China tensions and mounting uncertainty from the pandemic and from the Russian invasion of Ukraine have driven a shift in the destinations of Western FDI flows. At its peak, China accounted for roughly half of Western FDI flows into Asia. Today, it accounts for just one-fifth (see Chart 11). This shift likely reflects two key dynamics. First, it shows a further decoupling of the West from China and diversification of supply chains to other countries. Second, it illustrates the difficult investment environment in China as it continues its zero-COVID policy and keeps its international borders largely closed. This could be the legacy of China's COVID-19 response.

Chart 11: Asia ex China Benefits From the West's Decoupling

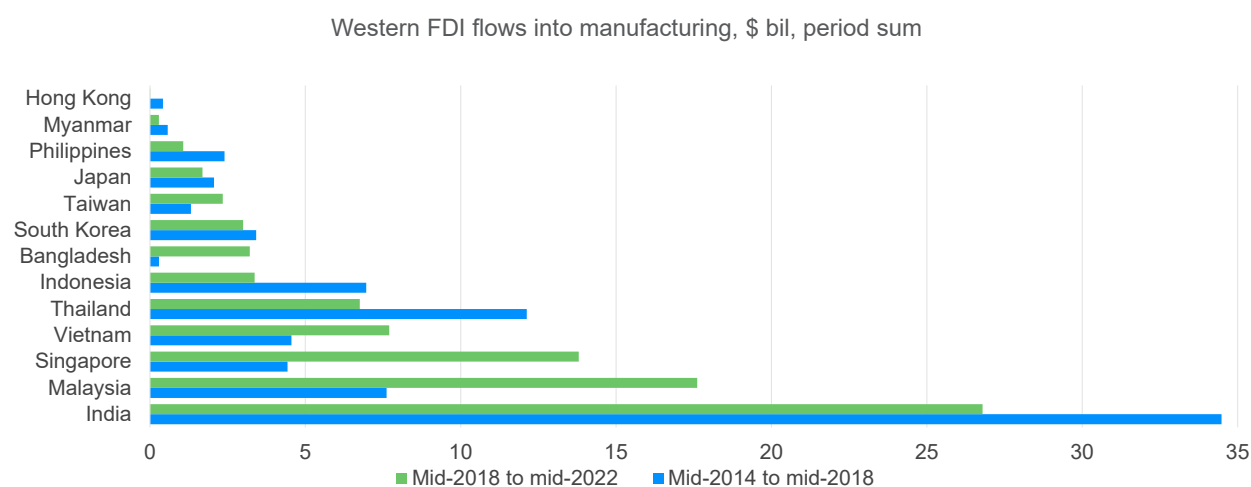


Sources: Orbis Cross Border Investment, Moody's Analytics.

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To that end, there has been a clear pivot of investment toward other countries in the region (see Chart 12). Malaysia, Singapore, Vietnam, Bangladesh and Taiwan have all seen an influx of FDI flows from the West as tensions with China have mounted. This pivot reflects the region's favourable wage dynamics and improving educational outcomes. For instance, Bangladesh has seen a surge in FDI as firms look to the subcontinent as a location for garment and textile manufacturing. Meanwhile, surges of FDI into Vietnam reflect a shift of higher-value manufacturing and processing plants to the country. Malaysia and Singapore benefit from an influx of investment into advanced manufacturing, including semiconductors and renewable energy inputs. In essence, the region's diversity allows it to pick up a wide gamut of investment from the West that might otherwise have gone to China.

**Chart 12: Accelerated FDI Across Much of Asia**



Sources: Orbis Cross Border Investment, Moody's Analytics.

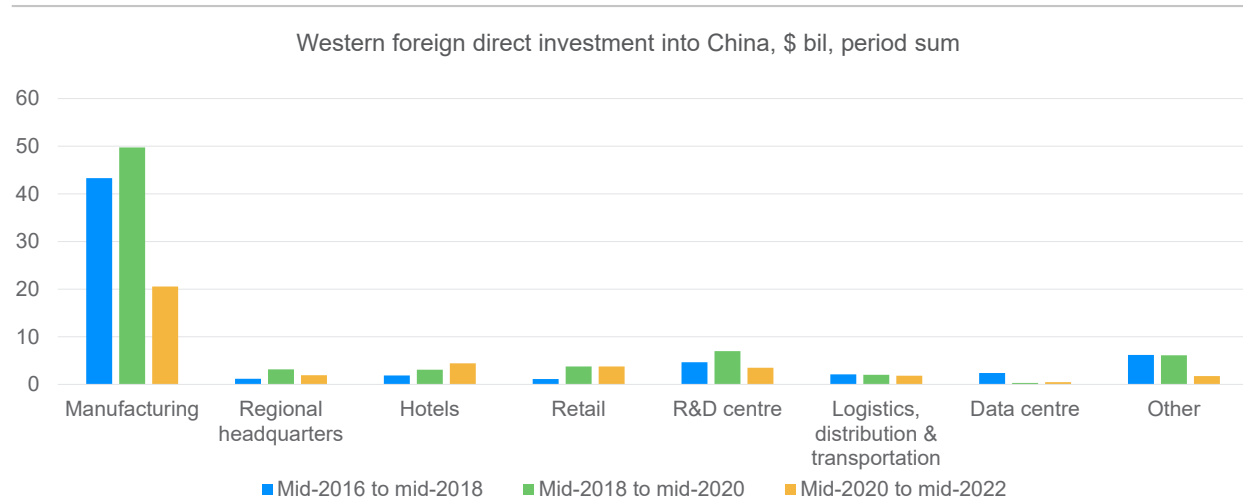
### Industry dynamics

The West's pivot away from China has centred on strategic industries, with a sharp slowdown in FDI flows into China for manufacturing. These are often key inputs into production in the U.S. and elsewhere. Relative to its peak, Western FDI flows into Chinese manufacturing have more than halved (see Chart 13). Similarly, investment into regional headquarters, research and development centres, and data centres have all dropped substantially. These industries are areas of key strategic purpose. Rising tensions and an increase in disruptions have made firms hesitant to invest.

Much of this strategic investment has since shifted to other economies within Asia (see Chart 14). Strong gains have been observed across the manufacturing sectors most important for U.S. production. FDI into computer and electronic manufacturing jumped 51% between fiscal 2015-2018 and fiscal 2019-2022. Likewise, Western FDI flows into the rest of Asia for chemical manufacturing have risen by 24%; by 52% for petroleum and coal; and by 18% for primary metals.

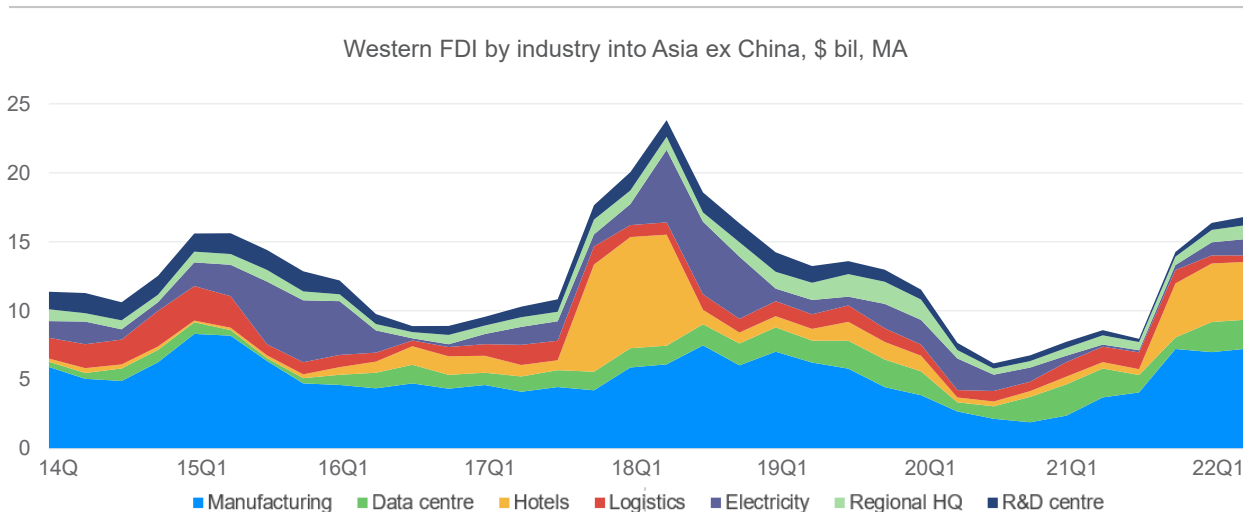
Investment into semiconductor manufacturing is gaining particular attention. The shortage of semiconductors in 2021 and continued supply-chain disruptions have pushed firms to seek alternative sources. Many

Chart 13: Slower Western FDI for Manufacturing in China...



Sources: Orbis Cross Border Investment, Moody's Analytics.

Chart 14: ...To the Benefit of Other Asian Economies...



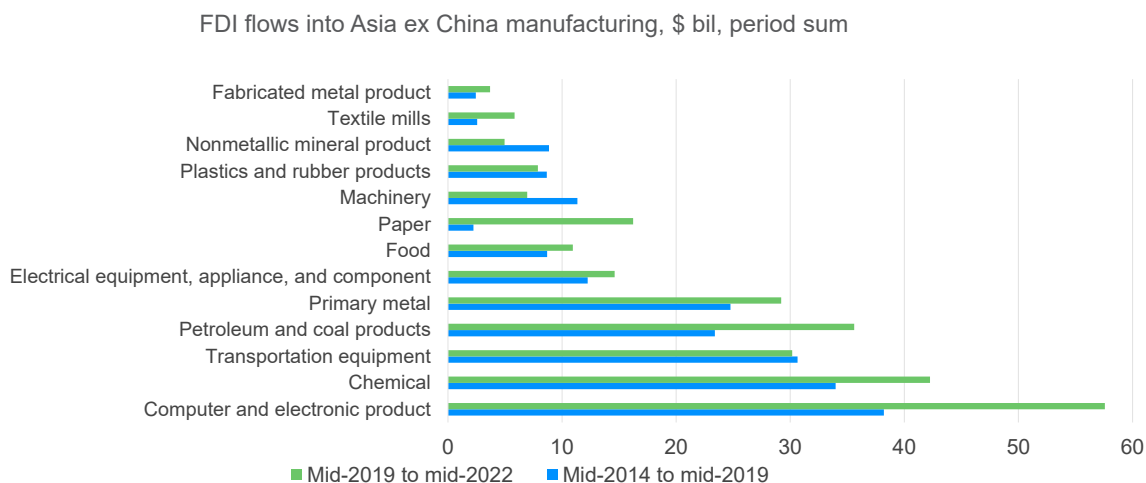
Sources: Orbis Cross Border Investment, Moody's Analytics.

have looked to the Asia-Pacific region. The Biden administration's plan to impose new curbs on exports of semiconductor chips and machinery to China reinforces the rift and decoupling between the two economic powerhouses. In response, companies have diverted focus to other countries in APAC to fortify supply chains, particularly for tech equipment, while reducing dependency on China (see Chart 15).

### What does this mean for global development?

While disruptive, the process of decoupling between the economies of the U.S. and China is also kick-starting economic activity elsewhere in the world, most notably within the Asia-Pacific region. Foreign companies are

Chart 15: ...With High-Tech Manufacturing Getting a Boost



Sources: Orbis Cross Border Investment, Moody's Analytics.

partnering with local entities to set up manufacturing plants, R&D centres and regional headquarters at an accelerating pace, as they transition key manufacturing hubs and supply chains away from China.

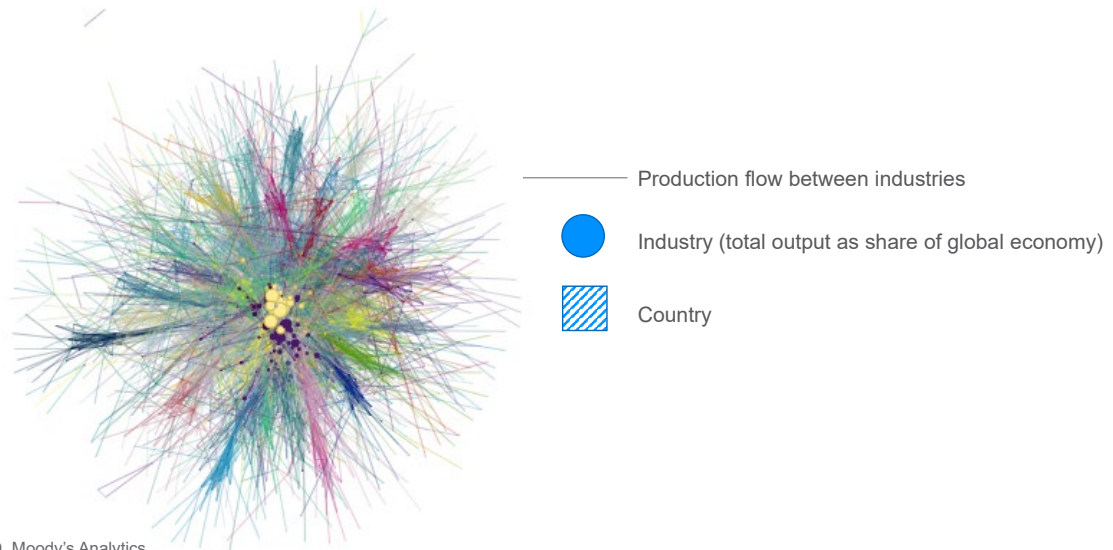
For Asia-Pacific countries, this process helps to accelerate their move up the value chain. In adapting to higher-end manufacturing and expanding production capabilities, domestic labour markets are being bolstered and upskilled. Policymakers are doubling down on providing incentives to encourage the expansion of tech-related industries, particularly in electric-vehicle and biotechnology manufacturing. For instance, the Philippines, having traditionally exported low-value electronic goods, is investing in the development of a new domestic semiconductor industry, hoping to get a slice of the growing industry. Similarly, Malaysia's semiconductor industry, which accounts for 13% of global chip assembly, is set to benefit from the U.S.' CHIPS and Science Act as the demand for assembly and testing services of chips grows. Hyundai Motors is also set to build a new electric-vehicle production plant in Singapore—the first time Hyundai is investing into a country that does not already have an established car manufacturing sector.

All this is spurring the diversification of industrial production in the region. And with more investment into the region, and structural changes in the industrial policy of the countries within the region, the Asian cubs could develop into the next generation of tigers.

### Global economy

Against this backdrop, the structure of the global economy is changing. More than 9 million production flows between countries and industries in the global economy through 2018 are visualised in Chart 16. Each country is represented by a different colour, lines show production flows between industries and countries, while the size of dots display the total value added in each industry. In essence, the closer countries and industries are with each other in the network, the more interconnected and important they are. Conversely, countries with few or no connections operate across more disparate value and supply chains.

Chart 16: Over 9 Million Production Flows Between Countries and Industries...

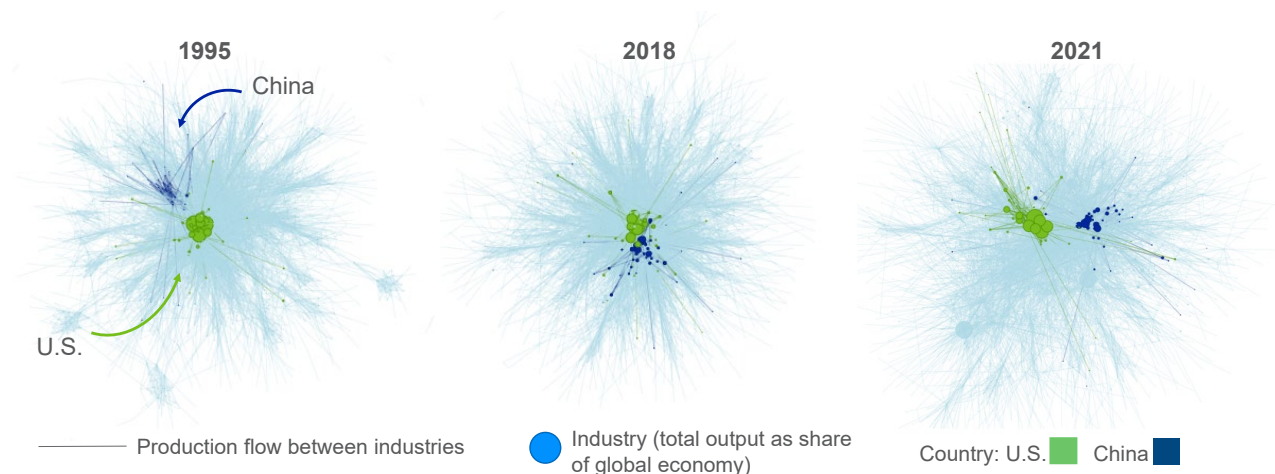


Sources: OECD, Moody's Analytics

In tracking this over time, we can see how the relationship between the U.S. and China has developed. As China has grown—seen as the increasing size of its industries between 1995 and 2018—it has become far more interconnected with the U.S. That is, production flows between industries in the U.S. and China have increased. But with the onset of tensions and the rise in decoupling, a shift has appeared. Estimates for 2021 show the U.S. and China moving further apart, becoming less connected. It is also apparent that the U.S. has expanded into other parts of the global economy as firms pivot to new supply chains. This can be seen in the U.S.' wider connections in Chart 17.

Geopolitical tensions indicate that a further decoupling between the U.S. and China is likely. This has the potential to reshape the global economy. But this also creates risks to the global economy. The move to reduce

Chart 17 ...But Increasingly Important as U.S. and China Decouple



Sources: OECD, Moody's Analytics.

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concentration risk, in China or elsewhere, may mean that industries are moving to locations where it may be difficult to accelerate productivity, or where transport nodes are less well developed. It may mean that labour will need extensive training, or that firms will need to adapt to a wider variety of regulatory systems. Thus, in coming years while there will be individual winners and losers in the competition to attract FDI, the realignment may come at the cost of marginally slower global productivity growth.

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