CHAPTER 1

YEAR IN REVIEW

SECTION 1: U.S.-CHINA BILATERAL AND CHINA'S EXTERNAL ECONOMIC AND TRADE RELATIONS

Abstract

In 2023, the United States pursued diplomatic engagement with Beijing while seeking to de-risk the economic and security relationship. De-risking has seen its most muscular expression in an unprecedented export control regime designed to stifle China's access to advanced semiconductor technologies. At the same time, bilateral trade reflects deep and continuing commercial ties between the United States and China. Beijing's increased control over corporate information flows has significantly complicated the ability of U.S. firms to assess risk in China. Meanwhile, China's role in global debt distress, attempts to internationalize the renminbi (RMB), economic sustainment of Russia and its war in Ukraine, and economic coercion in 2023 all highlight its opportunistic stance: Beijing seeks to reap benefits from the financial instability it sows while attempting to shield itself from effects of the same. China's willingness to help international rule-breakers like Russia sidestep U.S. sanctions is an example of how the Party-state seeks to bend the rules-based order in its favor.

Key Findings

- U.S. restrictions introduced in 2022 to curb China's ability to manufacture and develop advanced semiconductors have limited China's access to key segments of the chip industry that could advance its military. The controls prompted China to increase efforts to draw foreign talent to its chip industry, circumvent export controls, expand espionage activities, and promote indigenous innovation. In September 2023, Huawei began selling a smartphone that reportedly uses a Chinese-made chip capable of 5G performance despite U.S. restrictions, although China's capacity to domestically produce these chips at scale remains uncertain. The restrictions led to a drop in U.S. semiconductor exports of 50.7 percent in the first eight months of 2023 relative to the same period in 2022—down to $3.1 billion from $6.4 billion the year prior.
- Five years after the United States first imposed tariffs under the Trump Administration Section 301 investigations, the composition of bilateral trade has changed dramatically. Many of

the U.S. industries exposed to trade actions and geopolitical tensions are seeking to shift toward suppliers based outside of China; however, this may not substantially reduce U.S. reliance on Chinese producers. A growing portion of suppliers in overseas markets are owned by Chinese entities, who also seek to evade trade restrictions by setting up facilities overseas, particularly in other parts of Asia and Mexico. U.S. exposure to China also rose through transshipment of goods through third countries.

- U.S. businesses delayed or reconsidered investment in China amid a weak economic outlook there, contributing to a continued decline of foreign direct investment (FDI) flows into China in 2023 after record lows in 2022. Amid heightened geopolitical tensions, U.S. businesses frequently found their Chinese operations getting caught in the crosshairs of Chinese restrictions. While many U.S. firms continue to view access to China's market as crucial to growth, a growing number of firms are moving to limit exposure and identify alternative strategies.
- As part of China's far-reaching anti-espionage and national security campaign, restrictions on cross-border data flows have cut off offshore businesses and investors from real-time financial and economic data. Amendments to China's Counterespionage Law that went into effect in June broadened the definition of espionage activities to include any information gathering that involves material related to China's broad and ambiguous definition of national security, potentially subjecting any company that collects information to investigation for espionage.
- Developing countries that received loans financed through China's policy banks are facing widespread debt distress, but China is not providing sufficient relief. China's continued free-riding on multilateral relief efforts and persistent refusal to offer debt forgiveness to many distressed borrowers undermines U.S.-led efforts to assist developing countries through comprehensive debt relief and restructuring.
- China is attempting to expand international use of the RMB and encourage participation in its RMB-based cross-border payment system through bilateral currency agreements and swap lines. These steps could provide an alternative financial architecture for countries seeking to circumvent or insulate themselves from U.S. sanctions, but they have not meaningfully increased global settlement in RMB.

Introduction

Seeing declining foreign investment after three years of strict controls under the "Zero-COVID" policy, China sought to present itself as a market-driven, business-friendly economy in 2023, hoping to lure foreign capital and knowhow back to its market. While its external messaging may have changed, the Chinese Communist Party's (CCP) goals—to enhance the overall power of China and the CCP—have not. The CCP's approach to its external trade and financial relations is focused on promoting self-reliance while bolstering China's influence as an indispensable global sourcing hub. At the same time, CCP leaders are acutely aware of gaps in China's domestic production capacity, where China views attracting foreign research and technology as critical to accelerating industrial advancement. China's continued need for foreign business and finance clashes with a state-centric and security-focused trajectory hastened by General Secretary of the CCP Xi Jinping over the previous decade. State planners continue to use requirements for market access—including requiring companies to form joint ventures with Chinese firms—to induce companies into relocating their operations within its borders, enabling the transfer of industry knowhow, trade secrets, and technology to Chinese firms.[1]

China seeks to diversify and secure its access to critical technologies while striving in the long term to reduce reliance on foreign technology supply chains. China's vulnerabilities were exposed by U.S.-led actions at the end of 2022 to restrict China's access to advanced semiconductor technology. China's domestic semiconductor industry is struggling to develop alternative supplies of chips used in its military and artificial intelligence (AI) applications, though its capabilities continue to advance. Its dominance of the electric vehicle (EV) industry at all stages of the production chain stands out as a rare example of China achieving its self-reliance objectives.

Viewing the impact of U.S. and allied economic restrictions on Russia following its unprovoked invasion of Ukraine, Chinese leadership has been vocal about the need to weaken the sanctions power of the United States. As it seeks to reduce its reliance on U.S. dollars in bilateral trade and financial relations, this past year China finalized a range of trade and investment deals with countries, including Brazil and Saudi Arabia,* allowing for some settlement in RMB rather than the U.S. dollar, though none of the countries involved have yet reported concluding settlements under the respective arrangements.[2] China has also sought to deepen trade networks with countries beyond the sway of U.S.-led sanctions, including Iran.

This section examines key developments and trends in U.S-China bilateral economic relations and China's other external economic relations. For analysis of the CCP's domestic economy in 2023 and its long-term fiscal and financial challenges, see Chapter 3, Section 2, "Fiscal, Financial, and Debt Problems Weigh Down Beijing's Ambitions."

The United States' Evolving Approach to Economic Competition with China

Diplomatic Thaw with China

The Biden Administration launched a series of high-level diplomatic engagements with China in 2023 as it messaged the possibility of continued cooperation despite bilateral tensions. After the United States downed a Chinese spy balloon

*Although Brazil and Saudi Arabia have announced their intent to conduct some bilateral trade in RMB, both countries continue to use the U.S. dollar to settle transactions for their most important exports. While China purchases 25 percent of Saudi Arabia's oil exports, the Kingdom trades oil exclusively in the U.S. dollar. Similarly, China purchased nearly 70 percent of Brazil's soybean exports in 2022, but there is currently no publicly available information regarding the existence or extent of potential soybean sales in RMB. Regardless, Brazil and Saudi Arabia's open support for RMB internationalization presents a subtle but noteworthy shift in international attitudes regarding the use of the U.S. dollar in global trade. Gillian Tett, "Prepare for a Multipolar Currency World," *Financial Times*, March 30, 2023; Summer Said and Stephen Kalin, "Saudi Arabia Considers Accepting Yuan Instead of Dollars for Chinese Oil Sales," *Wall Street Journal*, March 15, 2022.

that intruded into U.S. airspace in February 2023, China froze its diplomatic communications with the United States for several months. The Biden Administration's efforts to maintain open lines of communication with China resumed in May 2023, when U.S. Commerce Secretary Gina Raimondo met with her Chinese counterpart in Washington.[3] Secretary Raimondo's meeting was followed by visits to Beijing by U.S. Secretary of State Antony Blinken in June 2023 and U.S. Treasury Secretary Janet Yellen and the president's special envoy for climate John Kerry, both in July 2023.[4] Secretary Yellen emphasized that the Biden Administration believes it is possible to achieve a mutually beneficial, long-term economic relationship—"one that supports growth and innovation on both sides"—during her meeting with China's Premier Li Qiang in Beijing.[5] Secretary Yellen also reiterated longstanding U.S. concerns about China's nonmarket policies.[6] Secretary Yellen's messaging that cooperation can occur in spite of geopolitical tensions reinforces an approach to economic relations with China she laid out in an April 2023 speech.[7] The strategy focuses on investing in U.S. domestic capabilities, increasing supply chain resiliency, and aligning strategies with U.S. allies and partners to shape the environment for sustained U.S.-China competition. Secretary Yellen emphasized that this strategy is narrowly focused on national security risks from China, stating, "Even as our targeted actions may have economic impacts, they are motivated solely by our concerns about our security and values. Our goal is not to use these tools to gain competitive economic advantage."[8] Additional visits by U.S. Cabinet officials in 2023, including a trip to Beijing by Secretary Raimondo in August 2023, sought to further clarify the United States' intent to maintain stable commercial relations.[9]

The United States has maintained the tariffs imposed under the Trump Administration Section 301 investigation as the U.S. Trade Representative (USTR) conducts a review of their efficacy and impact. Under the Trade Act of 1974, USTR has a statutory requirement to conduct a four-year review of the tariff actions taken under the Section 301 authority, assessing the effectiveness of the action in achieving its objective and the impact on the U.S. economy.[10] The USTR review began in September 2022 and could conclude by the end of 2023.[11] While the details of the review are not yet known, in July 2023 the USTR stated the review will consider "the existing tariffs structure and how to make the tariffs more strategic in light of impacts on sectors of the U.S. economy as well as the goal of increasing domestic manufacturing."[12] Secretary Yellen indicated that the tariffs are a point of leverage as the United States seeks to address China's unfair trade practices, stating that "it's premature to use this as an area for de-escalation, at least at this time."[13]

The United States Places "De-Risking" at the Center of Its Economic Approach

In 2023, the Biden Administration adopted the G7 concept of "de-risking" to frame its approach to the national security vulnerabilities stemming from the economic relationship with China. In a May 2023 statement, President Joe Biden and the other G7 leaders committed to de-risking as the basis for their approach to economic resiliency and security (see textbox below). By emphasizing de-risking instead of decoupling, the Biden Administration sought to reduce tensions with China and signal its pursuit of objectives it says seek to avoid a broad severance of economic relations and unintended impacts on global commerce. President Biden stated that de-risking further aims to resist Chinese economic coercion, counter Chinese nonmarket trade practices, and place limits on China's access to a "narrow set of advanced technologies critical for our national security."[14] However, the full scope of these technologies has yet to be specified.* Administration actions also continue to address forced labor concerns in Xinjiang.[15] According to Secretary Raimondo in August 2023, the United States seeks to allow trade and investment in "un-risky" areas to thrive, protecting national security while minimizing damage to other commercial relations.[16] (For more on European countries' approach to de-risking, see Chapter 5, Section 1, "Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation.")

De-Risking and Siloing Face Limits as China Seeks to Deepen Self-Reliance

De-risking is emerging as a shorthand for a transatlantic vision of reducing economic reliance on China without complete decoupling, though individual countries and companies have taken diverging approaches to defining and implementing de-risking. In March 2023, President of the European Commission Ursula von der Leyen introduced de-risking as the focus of EU policy toward China, stating that "it is neither viable—nor in Europe's interest—to decouple from China."[17] She depicted the EU's economic de-risking strategy as resting on four pillars: (1) increasing European economic competitiveness and supply chain resiliency, (2) countering Chinese economic distortions, (3) controlling the flow of technologies that pose national security risks, and (4) aligning EU policy with its partners.[18] The de-risking construct was subsequently adopted by the United States, when President Biden and the other G7 leaders released a communiqué on May 20, 2023, pledging to coordinate an approach to "economic resilience and economic security that is based on diversifying and deepening partnership and de-risking, not decoupling."[19] In short, a de-risking strategy would aim to allow companies to continue profiting inside China and broadly protect firms from China's ongoing nonmarket policies.

The United States' developing de-risking approach aligns with calls from U.S. businesses operating in China to avoid escalating geopolitical tensions with China. In its annual American Business in China White Paper, released in March 2023, the American Chamber of Commerce in China (AmCham China) set one of its three policy priorities as maintaining "channels for commercial engagement and meaningful exchange while separately addressing national security concerns and values-based differences

*For more on the challenges facing the United States' export control regime, see Chapter 4, Section 2, "Weapons, Technology, and Export Controls."

De-Risking and Siloing Face Limits as China Seeks to Deepen Self-Reliance—*Continued*

where possible."[20] Ten days prior to the G7 communiqué released in May, President and CEO of the U.S. Chamber of Commerce Suzanne P. Clark emphasized that the United States needs "to take the surgical approach of de-risking."[21] De-risking also dovetails with nascent efforts of U.S. and other foreign businesses to silo their operations in China, hiving off their China operations into localized business units and creating duplicate supply chains isolated to the Chinese market.[22] For instance, the U.S. technology company Salesforce is shifting to provide its services inside China through a partnership with Alibaba Cloud.[23] Siloing aims to insulate multinational companies' China operations from present and future disruptions stemming from policies enacted by Beijing and Washington, including measures to control technology flows.[24]

Countries and firms attempting to employ a de-risking strategy run into an immediate challenge confronting China's own dual circulation strategy. First articulated by the CCP in 2020, the strategy seeks to promote China's self-reliance while bolstering its influence as an indispensable global sourcing hub.[*][25] As Managing Director of U.S. think tank MacroPolo Damien Ma explains, by concentrating investments in technology projects and strengthening supply chains, "Beijing's strategy appears to be precisely focused on entrenching China as the irreplaceable production node."[26] A successfully realized dual circulation strategy would increase the difficulties facing U.S. and foreign companies in their efforts to reduce dependence on China and diversify supply chains.

Chinese officials attempted to strengthen ties with global businesses and thwart corporate support for U.S. and other governments' attempts to reduce economic ties. In a concerted charm offensive, Chinese officials sought to reengage global businesses and reduce their concerns about operating risks inside China, hoping to slow corporate efforts to diversify away from China, revive companies' direct investment into China, and potentially diminish business backing for future U.S. policy measures aimed at addressing national security risks. Premier Li vehemently criticized the U.S. de-risking strategy in public comments at the June 2023 World Economic Forum meeting in Tianjin, saying that governments should not "overstretch the concept of risk or turn it into an ideological tool" and instead should leave addressing risks to the business community.[27] Additionally, since China reopened to international travel at the start of 2023, senior Chinese officials have hosted and met with multiple executives of leading multinational firms who visited China, including CEOs of Airbus,[†] Apple, General Motors, Intel, JPMorgan, and Samsung.[28]

---

* For more on China's supply chain strategy, see U.S.-China Economic and Security Review Commission, Chapter 2, Section 4, "U.S. Supply Chain Vulnerabilities and Resilience," in *2022 Annual Report to Congress*, November 2022, 296–305.

† For more on China's charm offensive toward European companies, see Chapter 5, Section 1, "Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation."

In June 2023, Microsoft cofounder Bill Gates met with General Secretary Xi in Beijing, where Xi expressed China's openness to cooperation and emphasized that China would not be a "strong country seeking hegemony."[29] Tesla CEO Elon Musk visited multiple officials during a May 2023 trip to China, including China's then Foreign Affairs Minister Qin Gang, the ministers of commerce and industry, and Vice Premier Ding Xuexiang.[30] Subsequently, in July, Tesla emerged as the only foreign automaker to sign on to a pledge by China's EV industry to avoid a price war and promote "core socialist values."[31]

The United States is continuing to pursue engagement in Asia through the Indo-Pacific Economic Framework (IPEF). The United States launched IPEF in 2022 with 13 other partner countries.* Biden Administration officials have stated that IPEF is not intended to be a "traditional trade agreement"† but rather aims to develop high standard rules on trade in the Indo-Pacific and further goals related to sustainability, labor, and supply chains. The initiative offers an alternative vision of economic engagement to Beijing's own efforts to enhance its regional economic leadership and deepen economic ties. IPEF consists of four key areas of cooperation, or pillars: (1) trade; (2) supply chains; (3) clean energy, decarbonization, and infrastructure; and (4) tax and anticorruption.‡ The initiative does not involve negotiations over market access or tariff liberalization, which critics say will limit its appeal and impact.[32]

The IPEF Supply Chain Agreement, which was reached on May 27, 2023, marks the first concrete measure under the trade initiative since it was launched a year earlier.[33] IPEF partners announced an agreement on standards and mechanisms designed to bolster supply chain resilience, including by setting up three bodies to facilitate cooperation, information sharing, and efforts to coordinate supply chain diversification.§[34] The proposed supply chain agreement contains few binding commitments on the 14 IPEF partners, and it may initially spur few substantive initiatives to realign supply chains.[35] Nonetheless, the proposed coordination bodies may still play an important role in building capacity

---

*In addition to the United States, IPEF member countries include Australia, Brunei Darussalam, Fiji, India, Indonesia, Japan, Malaysia, New Zealand, Philippines, Singapore, South Korea, Thailand, and Vietnam.

†The Biden Administration may implement IPEF commitments through trade executive agreements that would not require congressional approval. Trade executive agreements, similar to the U.S.-Japan deal of 2019, must be limited in scope but can include binding commitments on certain rules. Their content may focus largely on establishing engagement among trade partners without precise market access agreements. Brock R. Williams, Rachel F. Fefer, and Mark E. Manyin, "Biden Administration Plans for an Indo-Pacific Economic Framework," *Congressional Research Service*, February 25, 2022; Kathleen Claussen, "Trade's Mini-Deals," *Virginia Journal of International Law* 62:2 (2022): 348–352.

‡For more on the United States' options for regional trade engagement in the Indo-Pacific, see U.S.-China Economic and Security Review Commission, Chapter 2, Section 2, "Challenging China's Trade Practices," in *2022 Annual Report to Congress*, November 2022, 210–216.

§The proposed agreement establishes a Supply Chain Council, a Supply Chain Crisis Network, and a Labor Rights Advisory Board. IPEF's Supply Chain Council is intended to allow countries to develop action plans to diversify and develop supply chains in critical sectors, while the Supply Chain Crisis Response Network will create an emergency communications channel to coordinate responses and disseminate information in the face of supply chain disruptions. The Labor Rights Advisory Board seeks to improve supply chain resilience by promoting higher labor standards in trade. U.S. Department of Commerce, *Indo-Pacific Economic Framework for Prosperity Agreement Relating to Supply Chain Resilience*, September 7, 2023.

in supply chain management among IPEF partners and businesses, which could help U.S. businesses identify alternative suppliers or production bases to China.[36]

The Biden Administration seeks closer ties with IPEF members, including Vietnam, as a counterweight to China's growing influence in the Indo-Pacific region. In September 2023, President Biden met with Vietnam's General Secretary Nguyen Phu Trong in Hanoi to establish a comprehensive strategic partnership.[37] The Biden Administration seeks to develop trade partners outside of China by furthering U.S-Vietnamese economic cooperation, including efforts to enhance semiconductor supply chain resilience by building capacity in both countries.[38] It is unclear, however, the extent to which developing trade relations with Vietnam will remove China from U.S. supply chains. Following the end of China's Zero-COVID policy, Chinese firms began moving production overseas to other countries in Southeast Asia and elsewhere. Vietnamese government data report Chinese firms invested in 45 new projects in the country in the first 50 days of 2023 alone.[39] In addition, nearly one-third of Vietnam's imports come from China.[40] China's deep trade and investment relations with Vietnam complicate U.S. de-risking efforts, as U.S. activities with Vietnamese partners may still ultimately depend upon Chinese firms and imports.

U.S. Targets China's Access to Advanced Technology

To curb China's advancements in critical technology, the United States began deploying a targeted strategy based on controlling supply chain chokepoints. In October 2022, National Security Advisor Jake Sullivan described the Biden Administration's approach to restricting technology transfer to China as keeping a "small yard, high fence."[41] This approach entailed keeping the scope of technology controls limited (the "small yard"), while implementing robust measures to prevent circumvention or unauthorized transfers to China (the "high fence"). In late 2022 and into 2023, the United States coordinated with Japan and the Netherlands to implement an unprecedented export control regime designed to limit China's access to advanced semiconductor technologies.[42] In August 2023, the Biden Administration also issued an executive order on outbound investment designed to limit U.S. companies' financial support for China's semiconductors and microelectronics, quantum information technology, and AI industries (for more on the scope, limitations, and potential impact of the executive order, see Chapter 4, Section 2, "Weapons, Technology, and Export Controls").[43]

U.S. Severs China's Access to Advanced Semiconductors

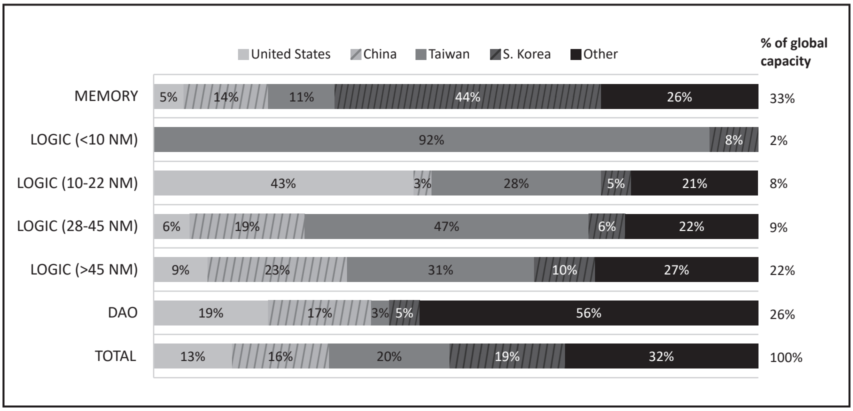
The United States introduced restrictions in 2022 intended to curb China's ability to manufacture and develop advanced semiconductors that enhance its military capabilities, cutting China's economy off from key nodes of the chip industry. On October 7, 2022, the U.S. Department of Commerce Bureau of Industry and Security (BIS) implemented a package of restrictions on U.S. exports of the most advanced computing chips,* particularly those relevant to the development of AI, and semiconductor manufacturing equipment to entities based in China.† [44] The controls do not apply to "legacy semiconductors" or less advanced chips used in home appliances, automobiles, and many connected devices. In these areas, China is likely to continue dominating production (see Figure 1). The consultancy Counterpoint estimated that the restrictions on advanced semiconductor products would only impact about 10 percent of China's logic chip production through 2025.[45] The restrictions nonetheless led to a steep drop in U.S. semiconductor exports to China. U.S. semiconductor companies exported just $3.1 billion worth of chips to China in the first eight months of 2023, a drop of 50.7 percent compared to the $6.4 billion in exports over the same period in 2022 (see Table 1).[46] The United States is meanwhile seeking to increase its self-reliance in semiconductors through the implementation of the CHIPS and Science Act of 2022, and the Biden Administration is allocating billions in tax credits and funding to industry to incentivize domestic manufacturing. In March 2023, the Departments of Commerce and the Treasury released proposed rules that prohibit CHIPS funding recipients from expanding production capacity for leading-edge chips in foreign countries of concern and place limits on the construction of legacy facilities in those countries.‡ [47]

* For logic chips (semiconductor devices that perform computer calculations to power digital devices) and system memory chips (high-performance semiconductor devices that rapidly store data during computations), the degree of sophistication is measured in the width of transistors placed onto a silicon wafer, as more transistors in a smaller space can generally process more calculations. The most advanced logic chips, produced almost entirely in Taiwan, now have transistors 3 nanometers in width (see Figure 1). The sophistication of flash memory chips—semiconductor devices that store digital data long term, in contrast to the rapid memory operation undertaken by system memory—is measured in the number of layers. Roughly, BIS has set the threshold for advanced chip fabrication as follows: for logic chips, 16 nm or 14 nm or below; for DRAM memory chips, 18 nm; for NAND flash memory chips, 128 layers or more. For more on the scope of these controls, see Chapter 4, Section 2, "Weapons, Technology, and Export Controls." U.S. Department of Commerce, Bureau of Industry and Security, *Commerce Implements New Export Controls on Advanced Computing and Semiconductor Manufacturing Items to the People's Republic of China (PRC)*, October 7, 2022.

† The rules introduce five new license requirements: (1) to sell top-end chips necessary for training machine learning models and building supercomputers; (2) to sell certain advanced semiconductor manufacturing equipment; (3) expanding the scope of foreign direct product rules to cover advanced computing chips, supercomputers, and advanced semiconductors for high-performance applications in China or to 28 entities that aided China's military in developing high-performance computing capabilities; (4) for all items subject to the Export Administration Regulations when there is "knowledge" that the item is destined for end use in the "development" or "production" of chips in China at facilities fabricating advanced chips; and (5) for U.S. persons, including U.S. citizens, passport holders, green card holders, juridical citizens, U.S. residents, and others, to "support" the "development" or "production" of advanced chips in China without a license from BIS. For more on the impact of the restrictions, see Chapter 4, Section 2, "Weapons, Technology, and Export Controls." U.S. Department of Commerce, Bureau of Industry and Security, *Commerce Implements New Export Controls on Advanced Computing and Semiconductor Manufacturing Items to the People's Republic of China (PRC)*, October 7, 2022.

‡ In what the Commerce Department refers to as "guardrails," the rules stipulate that the department will claw back any funding awards if a recipient engages in any transaction valued at over $100,000 that expands semiconductor manufacturing capacity for leading-edge and advanced facilities by 5 percent in foreign countries of concern within ten years of receiving the award. It will also claw back the reward if recipients expand their existing mature-node production capacity in a foreign country of concern beyond 10 percent or if such expansion does not predominantly serve the domestic market of that country. U.S. Department of Commerce, *Commerce Department Outlines Proposed National Security Guardrails for CHIPS for America Incentives Program*, March 21, 2023.

Figure 1: Global Distribution of Semiconductor Manufacturing Capacity by Region, 2019



Note: DAO is an acronym for discrete, analog, and optoelectronics and sensors, which refers to a range of semiconductor parts and components, including diodes, transistors, radio frequency semiconductors, and optical sensors.
Source: Antonio Varas et al., "Strengthening the Global Semiconductor Supply Chain in an Uncertain Era," *Boston Consulting Group and Semiconductor Industry Association*, April 2021, 35.

The October 7 restrictions additionally prohibit U.S. persons from helping develop China's advanced semiconductor capacity without first applying for a license exemption, effectively blocking senior U.S. semiconductor engineers and scientists from working on covered technologies at Chinese companies.* [48] In response, hundreds of U.S. personnel, including engineers from U.S. semiconductor equipment manufacturers Applied Materials, KLA, and Lam Research who worked as support personnel inside Chinese chip companies, abruptly left core positions inside China's semiconductor industry.[49] The restrictions prompted Chinese companies to intensify their efforts to attract semiconductor talent.[50] China lacks a robust domestic pipeline for training qualified semiconductor engineers and technicians, leaving Chinese chip companies heavily dependent on talent trained overseas (for more on the weakness in China's training of technical talent, see Chapter 3, Section 1, "China Training and Educating Its Next Generation Workforce").[51] After U.S. chip company Marvell Technology laid off its entire research and development (R&D) workforce in China since late 2022,† former employees were quickly head-hunted by Chinese semiconductor firms.[52] Similarly, Chinese companies are reportedly offering semiconductor talent in Taiwan five times what they could earn domestically.[53]

---

*Aside from licensing requirements, the Export Administration Regulations prohibit U.S. persons from knowingly providing "support," broadly defined, for the development or production of missiles, nuclear weapons, chemical, and biological weapons as well as foreign maritime nuclear projects. Additionally, BIS has the authority to inform U.S. persons that their activities could support these end uses and impose a licensing requirement on the activities. The October 7 restrictions use this authority to prevent U.S. persons from supporting advanced semiconductor development in China. Thomas J. McCarthy et al., "International Trade Alert: BIS Imposes New Controls to Limit the Development and Production of Advanced Computing and Semiconductor Capabilities in China," *Akin Gump*, October 27, 2022, 4–5.

†Although Marvell did not announce how many individuals it laid off inside of China, its R&D workforce at one point in the past numbered over 800 workers. *iJiWei*, "Marvell, Once Full of Chinese DNA, Becomes Leader in Decoupling from China," March 22, 2023.

Table 1: Top U.S. Exports of Advanced Semiconductors and Semiconductor Manufacturing Equipment to China, 2022 and 2023 (January through August)

Export Category	2022	2023	YoY Change
Processors and controllers	$4,520 million	$1,488 million	-67.1%
Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits	$2,952 million	$1,899 million	-35.7%
Other parts of electronic integrated circuits	$1,460 million	$1,355 million	-7.2%
Electronic integrated circuit amplifiers	$285 million	$225 million	-21.0%
Solid-state nonvolatile storage devices	$281 million	$101 million	-64.0%
Optical instruments and devices for inspecting semiconductor wafers or devices, etc.	$254 million	$193 million	-24.3%

Note: The trade data in this table reflect both semiconductor-related products that are subject to U.S. export restrictions and those that are not currently controlled.
Source: U.S. Census Bureau, *Advanced Technology Products*, October 6, 2023; U.S. Census Bureau, *Trade in Goods with China*, October 6, 2023.

As China's semiconductor industry faced export restrictions from the Netherlands and Japan, Chinese firms rushed to build out capacity by stockpiling equipment from foreign companies. On January 28, 2023, the Netherlands and Japan agreed to align their export control policies with the U.S. restrictions on China's chips sector, pledging to coordinate on controlling China's access to chokepoint technologies like semiconductor design software and lithography, where its indigenously developed technology significantly lags behind the leading edge.[54] Both the Netherlands and Japan are home to the world's leading manufacturers of photolithography machines capable of printing advanced integrated chip designs on semiconductor wafers.[55] Since 2019, the Netherlands has restricted sales to China of extreme ultraviolet photolithography machines,* which are solely produced by the Dutch firm ASML; however, neither Japan nor the Netherlands had previously controlled exports of deep ultraviolet (DUV) lithography machines used for mass-producing less advanced chips at the 14 nanometer (nm) node.[56] In July 2023, Japan added certain semiconductor manufacturing equipment, including DUV technology, to its export control list.[57] The Netherlands similarly started restricting exports in September 2023.[58] Prior to these restrictions coming into effect, Chinese companies surged their orders for foreign semiconductor manufacturing technology in 2023, capitalizing on the roughly eight-month lag between when the Dutch government announced its intent to place controls on exports to China and its implementation.[59] Between January and August 2023, China imported $3.2 bil-

*These machines are capable of mass-producing the most advanced integrated circuits at the 3 nm node.

lion (RMB 23.5 billion)* worth of semiconductor manufacturing machines from the Netherlands, a 96.1 percent increase over the $1.7 billion (RMB 12 billion) recorded over the same period in 2022.[60] China's imports of semiconductor equipment from all countries totaled $13.8 billion (RMB 100 billion) over the first eight months of 2023 as Chinese companies built up stockpiles.[61] China is on pace to more than double its imports of semiconductor equipment from 2019 levels, when the United States added the Chinese telecommunications giant Huawei to the Entity List and thereby restricted Huawei's access to semiconductor technologies, prompting Beijing to accelerate its push to expand domestic chip manufacturing capacity.[62] Even though Chinese companies mainly acquired equipment capable only of manufacturing older generations of integrated circuits, these stockpiling activities could enable China to deepen its dominance of legacy semiconductors.

Chinese companies have demonstrated their ability to produce high-end chips, despite U.S. export controls. In September 2023, Huawei began selling the Mate 60 Pro smartphone, which reportedly uses a Chinese-made chip with features that closely approximate those of U.S.-controlled semiconductor technology.[63] The Kirin 9000s, produced by the Chinese state-owned Semiconductor Manufacturing International Company (SMIC) and designed by Huawei's subsidiary HiSilicon, is capable of connecting to 5G networks and has features consistent with a 7 nm chip, a technology that was previously limited to Samsung, Intel, and TSMC semiconductors.[64] An examination of the Huawei phone conducted by experts at TechInsights confirmed that the device's processor performance means SMIC is just two generations behind 3 nm technology, which is the most advanced chip currently in production.† [65]

Experts largely assess Huawei and SMIC's newest production capabilities as a genuine breakthrough, though uncertainty regarding the extent of China's indigenization and production efficiency remains. Chris Miller, author of *Chip War*, argues that Huawei's Mate 60 Pro may be "the most 'Chinese' advanced smartphone ever made" given that "the phone's primary 7 nm processor [and] many of the phone's auxiliary chips are homegrown, including the Bluetooth, WiFi and power management chips."[66] These advances have exceeded expectations and also call into question the efficacy of current export control implementation that, as explained by National Security Advisor Jake Sullivan prior to implementation of the October 2022 controls, is intended not only to ensure the United States stays several generations ahead but also to "maintain as large of a lead as possible."[67] China's domestic advances in the critical domain of leading-edge semiconductor production raise national security challenges to the United States, given the dual-use nature of the technology and its military applications for AI computer vision, autonomous weapons systems, and other

---

*Unless noted otherwise, this section uses the following exchange rate throughout: $1 = RMB 7.25.

†TSMC is currently constructing a plant to produce 2 nm chips in Kaohsiung, Taiwan. The intended start date of mass production of these chips has yet to be determined. Hideaki Ryugen, "TSMC to Make Cutting-Edge 2-nm Chips at New Plant in Southern Taiwan," *Nikkei Asia*, August 10, 2023.

uses (for more on this, see Chapter 4, Section 2, "Weapons, Technology, and Export Controls"). As semiconductor analyst Dylan Patel argues, SMIC's advanced production process is still largely enabled by Western technology, such as immersion DUV lithography machines from ASML (which remain available for China to purchase until the end of 2023), but it is also likely facilitated by porousness in existing U.S. export controls on semiconductor manufacturing equipment.[68] In addition, the phone still appears to be made with several critical nondomestic components. For instance, the phone's memory chips are believed to come from legacy technology produced by the South Korean firm SK Hynix, although the company has denied selling to Huawei since the export controls were introduced.[69] Even amid genuine advances, the continued use of Western semiconductor production equipment and the appearance of nondomestic hardware in the latest phone produced by China's flagship telecommunications firm underscores the country's continued reliance on external producers for advanced technology.

China's retaliatory actions against the United States in response to the semiconductor controls were narrowly defined in scope. Beijing sought easy targets for punitive action that would grant leverage and deter further restrictions without incurring significant domestic costs. In 2023, China froze a handful of U.S. companies out of China's market and restricted access to two minerals critical to U.S. advanced technology industries.

- On February 16, 2023, China launched the first salvo of its Unreliable Entity List* by blacklisting Lockheed Martin and Raytheon Missile and Defense Corp, a subsidiary of RTX (formerly Raytheon Technologies), imposing trade and investment restrictions and barring the defense firms from importing or exporting weapons systems in China.[70] As U.S. export controls prevent both companies from selling military equipment in China, the restrictions had little commercial impact.[71]

- On May 21, 2023, the Cyberspace Administration of China (CAC) determined that memory chips produced by Micron contained "significant security risks," banning Chinese critical infrastructure operators from procuring Micron products.[72] The ban, which followed an investigation launched in March 2023, was CAC's first regulatory action targeting a foreign company.[73] Although Micron is a major producer of memory chips inside China, where it generated nearly 11 percent of its revenue in fiscal year 2022, CAC's restriction will likely have little impact on Chinese companies, given that Samsung and SK Hynix are peer competitors to Micron and sell similar chips inside China.[74]

- On August 1, 2023, China implemented export controls on gallium and germanium as well as dozens of related prod-

*China's Ministry of Commerce introduced the Unreliable Entity List in 2019 as a tool to target foreign companies, groups, and individuals who harm the interests of Chinese companies. The list enables the Chinese government to blacklist any foreign entity found to be "endangering national sovereignty, security or development interests of China." China Ministry of Commerce, *MOFCOM Order No. 4 of 2020 on Provisions on the Unreliable Entity List*, September 19, 2020.

ucts made with those metals,* causing shipments to halt as exporters waited to receive dual-use export licenses from China's Ministry of Commerce (MOFCOM).† [75] China exported zero gallium and germanium products in August 2023 to the United States and other countries.[76] On September 21, a spokesperson for MOFCOM stated that the ministry had since granted export licenses for the covered products to several companies, but it did not provide further detail on how many companies could resume exporting, which countries they could export to, or which products were approved. As a result, some exports may resume, but the full scope and long-term impact of these measures remain unclear as of October 6, 2023. China's restrictions could create acute supply shortages for the United States in key technologies. Both gallium and germanium are deemed critical minerals by the U.S. Geological Survey, and they have applications ranging from semiconductors to missile systems to solar panels.[77] China is the world's dominant source of both resources, accounting for 98 percent of the world's primary production of gallium ore and 60 percent of its germanium.[78] The United States has limited domestic production and stockpiles of both minerals.[79] The United States, Japan, and Germany may be able to develop alternative supply sources by retrofitting domestic refineries with the capabilities to extract the minerals, but these alternatives may not be operational in time to prevent significant shortages (see textbox below).[80]

- On September 6, 2023, China banned central government officials and state-owned enterprise (SOE) employees from using Apple and other foreign-branded devices for work purposes and from bringing privately owned foreign devices into government facilities.[81] Although the Chinese government has denied the existence of such a ban, those familiar with the matter report the government made the move in an effort to cut reliance on foreign technology and limit the flows of data outside of China's borders.[82] In addition to ostensible security concerns, the new restrictions were announced within days of the release of Huawei's Mate 60 Pro smartphone, discussed above.[83] As a result of the ban, Apple shares lost $200 billion in value just two days after the announcement, while state-sponsored Chinese media has reported the Pro Mate 60 is selling out across China.[84] The

*The covered gallium and germanium compounds include gallium nitride, gallium oxide, gallium phosphide, gallium arsenide, indium gallium nitride, gallium selenide, gallium antimonide, area melted germanium ingots, germanium dioxide, germanium tetrachloride, and compounds containing phosphorus, germanium, and zinc. The controls also cover major applications of these compounds, including gallium nitride and gallium arsenide wafers for integrated circuit production. China Ministry of Commerce, *Announcement No. 23 of 2023 of the Ministry of Commerce and the General Administration of Customs on the Implementation of Export Controls on Items Related to Gallium and Germanium* (商务部 海关总署公告2023年第23号 关于对镓、锗相关物项实施出口管制的公告), July 3, 2023.

†Exporters attempting to ship these newly controlled mineral products overseas must apply for approval through China's export licensing process. The exporter must submit information on the end user and end use when applying for the export license. China's Ministry of Commerce has not specified how it will evaluate applications nor how many licenses it will grant. *Reuters*, "China Gallium, Germanium Export Curbs Kick In; Wait for Permits Starts," August 1, 2023; China Ministry of Commerce, *Announcement No. 23 of 2023 of the Ministry of Commerce and the General Administration of Customs on the Implementation of Export Controls on Items Related to Gallium and Germanium* (商务部 海关总署公告2023年第23号 关于对镓、锗相关物项实施出口管制的公告), July 3, 2023.

prohibition on Apple is similar to China's 2021 restrictions on the use of Tesla by military, government, and SOE employees—including a ban on driving privately owned Tesla vehicles in certain government compounds. The Tesla ban was similarly implemented in a stated effort to reduce dependence on foreign technology and prevent data collected in China from moving overseas.[85]

China's Critical Mineral Export Restrictions Target U.S. Supply Chain Vulnerabilities

China's controls on gallium and germanium threaten to disrupt the United States' supply chain for high-performance semiconductors. The United States is currently highly reliant on Chinese production of the minerals, both for sourcing directly from China and indirectly through the predominance of Chinese gallium and germanium in global supply chains. China accounts for 53 percent of the United States' supply of raw gallium metal and 54 percent of its germanium imports, although raw gallium and germanium make up only a small fraction of the U.S. economy's total consumption of the minerals.[86] Over 95 percent of the United States' gallium consumption is in the form of gallium arsenide wafers, a type of semiconductor that outperforms more prevalent silicon wafers for sensitive electronic equipment, such as radar systems.[87] The United States mainly sources these wafers from Germany, Japan, and Taiwan, but producers in these countries are highly dependent on China for low-purity gallium metal. It is not yet clear whether China will approve license applications for exporting gallium and germanium products to these countries, making the impact on supply chains dependent on minerals sourced from China uncertain.[88] Estimates vary on how long inventories and reserves could last if China completely cuts off supplies of gallium and germanium.[89] In such a scenario, global inventories of the materials may run out after a number of months. While the U.S. Department of Defense maintains a strategic stockpile of germanium, it does not have reserves of gallium.[90]

The United States may be able to mitigate a long-term supply disruption to U.S. domestic technology production by restarting gallium and germanium refining at dormant facilities located in the United States and partner countries.* [91] Industry analysts expect a supply shortage induced by the export controls to drive up the price of the minerals, which may help make production profitable again outside of China and encourage refiners in Japan, the United States,† and other countries to resume production or

*Prior to 2000, the main producers of primary low-purity gallium—the raw feedstock for downstream refined gallium applications—were Germany, Japan, Kazakhstan, and Russia, ranking ahead of China's output. However, China's gallium production tracked the rapid, state-supported growth of China's aluminum industry, as the government required aluminum processors to install equipment to extract gallium. Matthew P. Funaiole, Brian Hart, and Aidan Powers-Riggs, "Mineral Monopoly: China's Control over Gallium Is a National Security Threat," *Center for Strategic and International Studies*, July 18, 2023; U.S. Geological Survey, *Gallium Statistics and Information*, 2023.

†The United States has one operational refinery in Gramercy, Louisiana, that processes bauxite into alumina, but it does not currently extract gallium from the runoff of the refining process. The multinational mineral and metal processing company Nyrstar's zinc smelting plant in Clarksville, Tennessee, is considering adding enough gallium and germanium extraction capacity to meet up

China's Critical Mineral Export Restrictions Target U.S. Supply Chain Vulnerabilities—*Continued*

retrofit other facilities to refine the controlled minerals.[92] A germanium shortage in the United States may be easier to overcome, as germanium is currently recovered from zinc mines located in Alaska and Tennessee.[93] Industry analysts differ on how long it would take to install gallium processing capacity, with some projecting a multi-year process.[94]

The gallium and germanium export controls are likely intended to signal China's willingness to curtail U.S. access to other critical minerals monopolized by China. The U.S. Geological Survey estimates that in 2022, China was the world's leading producer in 30 out of the 50 critical minerals, and it was the United States' primary import source for rare earth elements along with ten other critical minerals (see Table 2). The United States faces particularly acute vulnerabilities to China's control over the rare earths* supply chain. According to a report by the RAND Corporation, "China could effectively cut off 40–50 percent of global rare earth oxide† supply, which would affect prime manufacturers and supplier of advanced components used in the U.S. Department of Defense's systems and platforms."[95] There is precedent for China utilizing its monopoly over rare earths as a tool of economic coercion. In 2010, China reportedly restricted exports of rare earth elements to Japan for two months following a territorial dispute over the Senkaku Islands, although the restrictions were never formally announced.[96] Subsequently, Japan reduced its reliance on Chinese rare earths by diversifying suppliers and investing in non-Chinese operations internationally.[97] In 2020, 25 percent of Japan's rare earths imports by value came from China, compared to 88 percent in 2010.[98]

to 80 percent of domestic demand, a process it says will take two years. Natalie Liu, "Tennessee Refinery Could Break Chinese Chokehold on Two Critical Minerals," *Voice of America*, August 15, 2023; U.S. Geological Survey, *Mineral Commodity Summaries*, January 2023; Nyrstar, "Nyrstar Clarksville," 2023.

*Rare earths are a group of 17 metallic elements.

†Rare earth elements are commonly sold and transported as rare earth oxides, which are stable, refined compounds extracted from rare earth elements. Consequently, rare earth quantities are usually reported in their oxidized form.

Table 2: List of Critical Minerals* the United States Primarily Sourced from China, 2022

Critical Mineral	Primary Import Source	Total U.S. Imports for Consumption (metric tons)	China's Share of U.S. Imports	Major Uses
Antimony	China	25,590	63%	flame retardant; antimonial lead and ammunition
Arsenic	China	5,400	57%	herbicide and insecticide; wood pressure treatment; semiconductors for solar cells, space research, and telecommunications
Barite	China	2,300	38%	oil and natural gas drilling; radiation shields at nuclear plants and for x-rays
Bismuth	China	2,800	65%	metal additive for cast iron and pipe fittings; pharmaceuticals; semiconductor manufacturing
Gallium	China	12,000	53%	manufacturing of semiconductor wafers
Germanium	China	29,000	54%	semiconductor manufacturing; solar cells; fiberoptics; LED
Graphite (natural)	China	82,000	33%	batteries; brake linings; lubricants; steelmaking
Rare Earths (compounds and metals)	China	11,940	74%	magnets; catalysts; metallurgical; battery alloys
Tantalum	China	1,700	24%	alloys for gas turbines used in aerospace and oil and gas industries; automotive and consumer electronics
Tungsten	China	14,000	29%	cutting and wear-resistant applications in construction, metalwork, mining, and oil and gas drilling; specialty steel alloys; electrical components

*In 2022, the U.S. Geological Survey identified 50 minerals as critical minerals. The agency defines a critical mineral as "a non-fuel mineral or mineral material essential to the economic or national security of the U.S. and which has a supply chain vulnerable to disruption. Critical minerals are also characterized as serving an essential function in the manufacturing of a product, the absence of which would have significant consequences for the economy or national security." U.S. Geological Survey, *U.S. Geological Survey Releases 2022 List of Critical Minerals*, February 22, 2022.

Table 2: List of Critical Minerals the United States Primarily Sourced from China, 2022—*Continued*

Critical Mineral	Primary Import Source	Total U.S. Imports for Consumption (metric tons)	China's Share of U.S. Imports	Major Uses
Yttrium	China	1,000	94%	catalysts, electronics, lasers, metallurgy; jet-engine coatings, sensors, bearings, and seals

Note: China's share of U.S. imports is based on average imports over 2018 to 2021.
Source: U.S. Geological Survey, *Mineral Commodity Summaries*, January 2023, 21.

De-Risking Accelerates

U.S. corporations are actively seeking strategies to mitigate risks in their supply chains, prompted by their demonstrated vulnerability to policy and market shifts in China. Although China dismantled the COVID-19 controls that had sent its economy into unpredictable lockdowns throughout 2022, U.S. businesses and investors are reassessing the stability of China's domestic policy environment. With Beijing exerting increasing control over the economy and more aggressively pursuing its national security goals, the business environment for U.S. companies has grown harsher. Amid geopolitical tensions, U.S. businesses frequently found their Chinese operations getting caught up in the crosshairs of Chinese restrictions. While many U.S. firms continue to view access to China's market as crucial to growth, a growing number of firms are moving to limit exposure and identify alternative strategies.

Bilateral Trade Reflects Deep and Continuing Commercial Ties

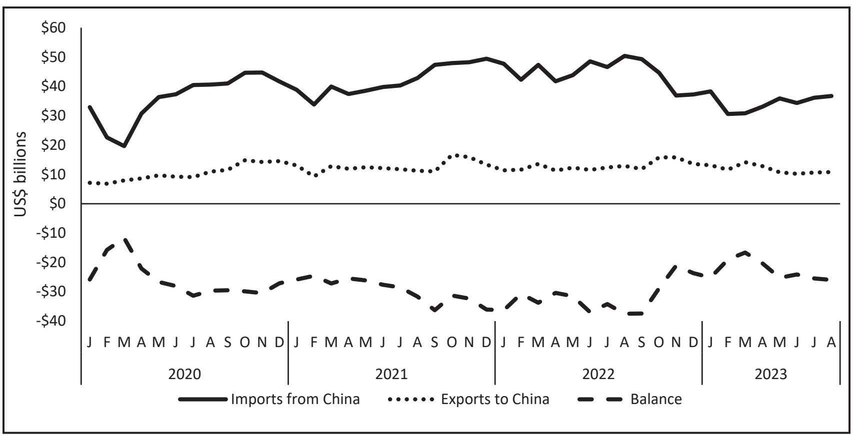
The U.S. goods trade deficit with China fell to its lowest reading since 2020, when the outbreak of COVID-19 rattled global supply chains. According to U.S. Census calculations, the U.S. trade deficit with China in the year through August 2023 shrank 33 percent compared to the same period in 2022, falling to $181.8 billion (see Figure 2).[99] This is the lowest trade deficit since 2010.[100] The improvement in the trade deficit resulted from a softening of U.S. import demand that began in September 2022 as U.S. consumers shifted spending toward services. However, U.S. data on trade with China may currently overstate the improvement in the bilateral balance. Particularly, U.S. statistical authorities may not capture the full value of China's imports into the United States, partially due to a lack of data on the tens of billions of dollars' worth of low-price goods that enter duty-free under the de minimis exception* (for more on novel drivers of the discrepancy in U.S. and Chinese trade data, see the textbox "Incomplete U.S. Data on e-Commerce Trade with China").[101] Data reported by China's customs authority show a larger surplus with the United States at $206.4 billion (RMB 1.5 trillion) in the first eight months of the year, though Chinese

*A de minimis threshold demarcates the value below which goods are considered too small to be subject to tariffs or most inspections. In the United States, this threshold was raised from $200 to $800 in 2016.

statistics also show a substantial 17.4 percent decline relative to the same period in 2022.[102]

U.S. goods imports from China totaled just $276 billion in the first eight months of 2023, falling $92.5 billion behind the pace of imports over the same period in 2022.[103] U.S. imports from China are on track to decline compared to 2022, when they reached $536.3 billion, the highest level since the onset of the trade war in 2018.[104] Throughout the pandemic, Chinese factories were allowed to keep production lines open even as municipalities put stricter quarantine provisions in place in an attempt to slow the spread of COVID-19, enabling China's export sector to meet a surge in demand for goods as U.S. businesses and consumers reallocated spending from domestic service industries.[105] However, since the end of 2022 and in the first half of 2023, consumer spending on goods has slowed, causing trade flows to revert back to the mean.[106] The softening in U.S. demand for goods compounded the challenges already faced by China's economy amid a globally weak macroeconomic environment. Slowing economic growth and high inflation worldwide contributed to a slump in global demand for Chinese exports, sapping a key driver of China's economy as falling orders forced Chinese manufacturers to lower production.[107]

Figure 2: U.S. Bilateral Goods Trade with China, January 2020–August 2023



Source: U.S. Census Bureau, *Trade in Goods with China*.

Despite new restrictions on U.S. technology exports to China, U.S. exports to China remained robust in 2023, driven by strong Chinese demand for U.S. oil, aircraft components, and biopharmaceuticals. Between January and August 2023, U.S. goods exports totaled $94 billion, largely matching the record export amount of $97.1 billion in the first eight months of 2022.[108] The strong export performance occurred despite a sharp decline in U.S. shipments of semiconductor products and manufacturing equipment resulting from U.S. export restrictions implemented in October 2022. Instead, exports were buoyed by record values of shipments in three industries: oil, aircraft components, and biotechnology.

- The United States exported crude oil to China at a record rate in the first seven months of 2023, sending 103.4 million barrels across the Pacific, an increase of 179 percent relative to 2022.[109] In value terms, China-bound crude oil exports totaled $7.9 billion in the first seven months of 2023, increasing $4.7 billion over the 2022 figure.[110] Rather than a surge in domestic demand for oil, which remained subdued as the recovery in China's economy slowed, the uptick was driven by China's smaller independent refiners taking advantage of low crude prices to export refined products or stock up inventories.[111]
- After international air travel resumed in China following the end of its Zero-COVID measures, China's aviation industry faced shortages of maintenance parts, causing it to ramp up orders for parts and components from the United States.[112] U.S. exports of civilian aircraft, engines, equipment, and parts to China in the first eight months of the year increased 46 percent year-on-year to a total of $4.7 billion, although this still lagged the pre-pandemic import level of $7.5 billion between January and August 2019.[*] [113]
- In the first quarter of 2023, biotechnology exports also increased 28.4 percent year-on-year, totaling $1.6 billion, although this surge tapered off by the middle of 2023.[†] [114] This strong trade at the start of the year was driven by U.S. shipments of immunological products dosed and packaged for Chinese hospitals and consumers, including steroids used to treat asthma.[115] U.S. biopharmaceutical and medicine sales in China have accelerated in recent years as China sped up the regulatory approval process for new drugs.[‡] [116] Shortages of drugs inside China in the second half of 2022 likely also created an acute need to rebuild medical supplies after waves of COVID-19 cases flooded China's hospitals and medical centers and increased demand for medicines.[117]

---

* Part of the surge in aviation-related trade may be associated with increased demand for components and parts to service Boeing 737 Max 8 aircraft as Chinese carriers restarted commercial flights using the plane. The Max 8 was grounded worldwide in 2019 following two fatal crashes. Though the U.S. Federal Aviation Administration reapproved the aircraft for service at the end of 2020, Chinese carriers did not redeploy the plane on commercial routes until early 2023. Su Wu, "Boeing's 737 MAX Is Back In China: Here's Who's Flying It Now," *Simple Flying*, July 2, 2023.

† These exports did not include COVID-19 vaccines. China has only approved indigenously produced COVID-19 vaccines for wide use domestically. In December 2022, China allowed the German biopharma company BioNTech to administer a batch of the BioNTech-Pfizer mRNA COVID-19 vaccine to German expatriates located in China, but it has not extended the approval to Chinese citizens. Thomas Escritt and Alexander Ratz, "First Foreign COVID Vaccines Head to China from Germany," *Reuters*, December 21, 2022.

‡ For more on how China controls market access for U.S. pharmaceutical companies, see U.S.-China Economic and Security Review Commission, Chapter 3, Section 3, "Growing U.S. Reliance on China's Biotech and Pharmaceutical Products," in *2019 Annual Report to Congress*, November 2019, 265–269.

Incomplete U.S. Data on e-Commerce Trade with China

U.S. data on the bilateral trade with China likely understates the goods trade deficit due to tariff evasion, with importers underreporting the import value to minimize their tariff payment.* Economists at the Federal Reserve estimate that import undervaluation led to $10 billion in lost tariff revenue per year for the United States.† [118] Since 2020, U.S. customs data on imports from China have fallen below China's estimates for the same flow of goods. According to Chinese data, the trade deficit reached $404 billion at the end of 2022, more than $20 billion larger than U.S. Census Bureau figures. Notably, China's General Administration of Customs historically understated the size of the U.S. goods trade deficit by around $95 billion relative to U.S. data, a discrepancy partly driven by Chinese companies forging export invoices to obtain greater tax rebates.[119]

Additionally, U.S. Census Bureau trade data do not include imports that enter the United States under the de minimis threshold—in other words, goods shipments valued at less than $800. This encompasses a significant proportion of e-commerce imports. In particular, Chinese e-commerce platforms Shein and Temu have developed expansive logistics operations based on using small parcel shipments that fall below the de minimis threshold to export consumer goods to the United States, including fast fashion apparel, leading to a rapid rise in de minimis shipments for which U.S. customs officials have limited data.‡ [120] The two companies, whose average sales prices fall well short of the de minimis threshold,§ are estimated to account for over half of all de minimis shipments from China.[121] The volume of de minimis apparel imports is reflected in a growing disparity between U.S. import statistics, which do not include de minimis shipments, and Chinese customs data, which reflect all Chinese exports regardless of whether their value falls below the U.S. de minimis threshold.[122] The U.S. Census Bureau estimates that the United States imported $22.1 billion in clothing and apparel from China in 2022, nearly $15 billion less than the $36.5 billion in value Chinese exporters recorded with China's General Administration of Customs.[123] This gap has grown in recent years, likely as a result of an expansion in the number of parcels entering the United

---

* Customs fraud and false invoicing to evade sanctions are crimes under the False Claims Act. Giovanna M. Cinelli et al., "2023 Technology Marathon: Enforcement Update: False Claims Act and International Trade," *Morgan Lewis*, June 29, 2023.

† Chinese exporters likely also overstated the value of their exports to Chinese customs authority, which allowed them to benefit from a value-added tax rebate. China has lowered the gross value-added tax and raised the value-added tax rebate on exports since the beginning of the trade war to reduce the impact of higher U.S. tariffs on Chinese exporters. Hunter L. Clark and Anna Wong, "Did the U.S. Bilateral Goods Deficit with China Increase or Decrease during the U.S.-China Trade Conflict?" *Board of Governors of the Federal Reserve System*, June 21, 2021.

‡ For more on the risks and challenges posed to U.S. regulations and laws posed by Chinese e-commerce firms, see Nicholas Kaufman, "Shein, Temu, and Chinese e-Commerce: Data Risks, Sourcing Violations, and Trade Loopholes," *U.S.-China Economic and Security Review Commission*, April 14, 2023.

§ Shein clothing and accessories average about $11 per item. Temu reports that no products offered on its website have a sales price over $800. Select Committee on the Chinese Communist Party, *Fast Fashion and the Uyghur Genocide: Interim Findings*, 2023, 8; Lora Jones, "Shein: The Secretive Chinese Brand Dressing Gen Z," *BBC*, November 9, 2021.

Incomplete U.S. Data on e-Commerce Trade with China—*Continued*

States from China using the de minimis exception (see Figure 3).* [124]

The volume of de minimis imports challenges the capacity of U.S. customs authorities to detect products from Xinjiang potentially made with Uyghur forced labor, undermining the enforcement of the Uyghur Forced Labor Prevention Act. Because the de minimis exception incentivizes Chinese e-commerce companies like Shein and Temu to ship products to the United States in tens of millions of individual parcels, U.S. customs officials are only able to inspect a fraction of all de minimis shipments from China.[125] A Bloomberg investigation published in November 2022 cross-referenced climate and weather signatures on cotton fabrics used in clothing from Chinese fast fashion e-commerce firm Shein to determine that they originated in Xinjiang.† [126] In September, Reuters reported that ten of 37 garments collected by U.S. Customs and Border Patrol in May 2023 also showed links to Xinjiang.[127] The Uyghur Forced Labor Prevention Act bans the use of Xinjiang cotton in imported clothing unless the supplier can definitively prove that the cotton was not a product of forced labor, a level of scrutiny that Shein does not appear to be undertaking.[128]

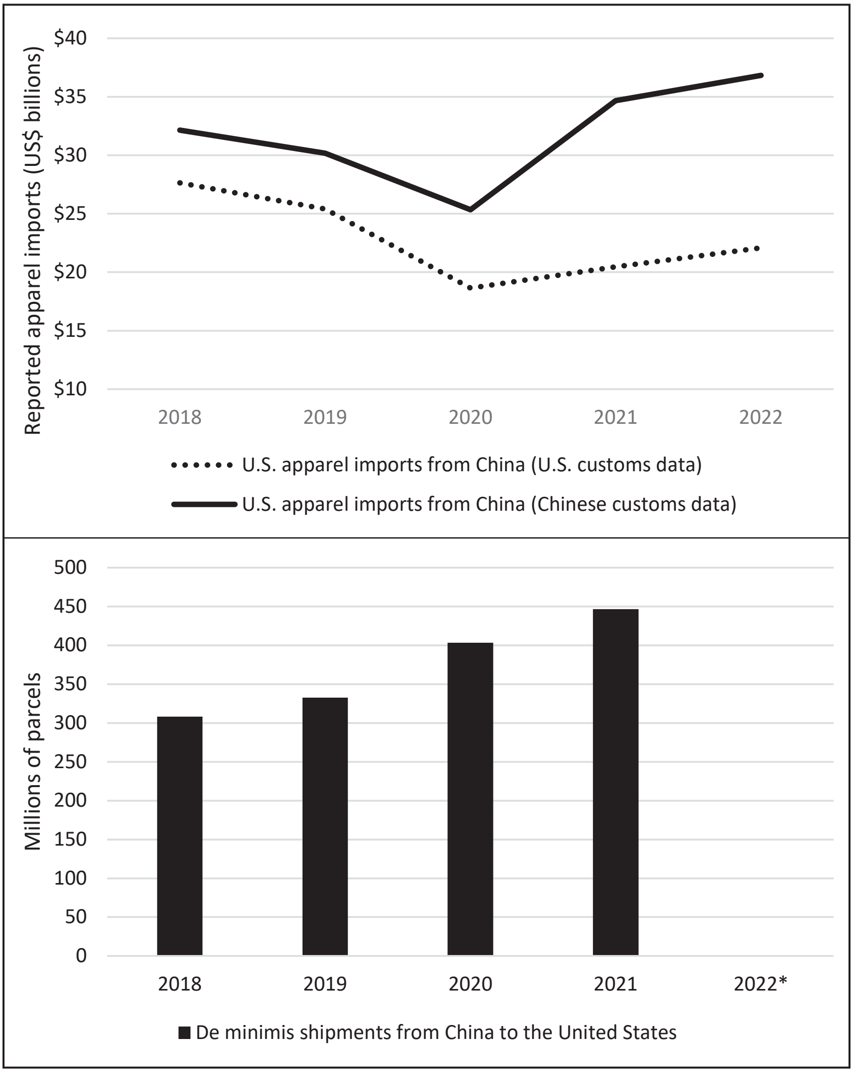
Trade War Diverted Tariffed Imports Away from China

The composition of bilateral trade has changed dramatically over the five years since the United States first imposed tariffs under the Trump Administration Section 301 investigations. U.S. industries most exposed to trade actions and geopolitical tensions have shifted toward suppliers based outside of China, a growing portion of which are Chinese companies with overseas operations. The U.S. International Trade Commission estimated that U.S. imports across all Chinese products fell 2 percent for every 1 percent increase in the tariff line on each product category.[129] According to analysis by Chad Bown, senior fellow at the Peterson Institute for International Economics, U.S. imports of Chinese products subject to tariff rate hikes were largely flat and remained below

*U.S. Customs and Border Protection (CBP) produces estimates on the value of de minimis shipments; however, the consistency of these estimates is questionable. CBP reported that de minimis shipments from China declined from $46.4 billion in fiscal year 2020 to $10.4 billion in fiscal year 2021, which conflicts with the 10.8 percent year-on-year increase in the quantity of de minimis parcels received from China for those years. This may be caused by a lack of data on de minimis shipments. According to CBP, less than half of all importers using the Section 321 exemption submit the voluntary Entry Type 86 form into the CBP's commercial trade processing portal, Automated Commercial Environment. U.S. Customs and Border Protection, *E-Commerce*, August 29, 2023; U.S. Customs and Border Protection, *Section 321 De Minimis Shipments: Fiscal Year 2018 to 2021 Statistics*, October 2022; Josh Zumbrun, "The $67 Billion Tariff Dodge That's Undermining U.S. Trade Policy," *Wall Street Journal*, April 25, 2022.

†Bloomberg contracted Agroisolab GmbH, a lab in Germany, to test the items using stable isotope analysis. This process measures variations in the isotopes of carbon, oxygen, and hydrogen in the cotton's fibers to determine the climate characteristics and altitude of the region where it was grown. Shein's cotton was compared with two fabric samples from Xinjiang. The first batch of Shein garments tested, which included pants and a blouse, matched the Xinjiang samples with only slight variations. Sheridan Prasso, "Shein's Cotton Tied to Chinese Region Accused of Forced Labor," *Bloomberg*, November 20, 2022.

Figure 3: U.S. and Chinese Data on Apparel Shipments to the United States, 2018–2022



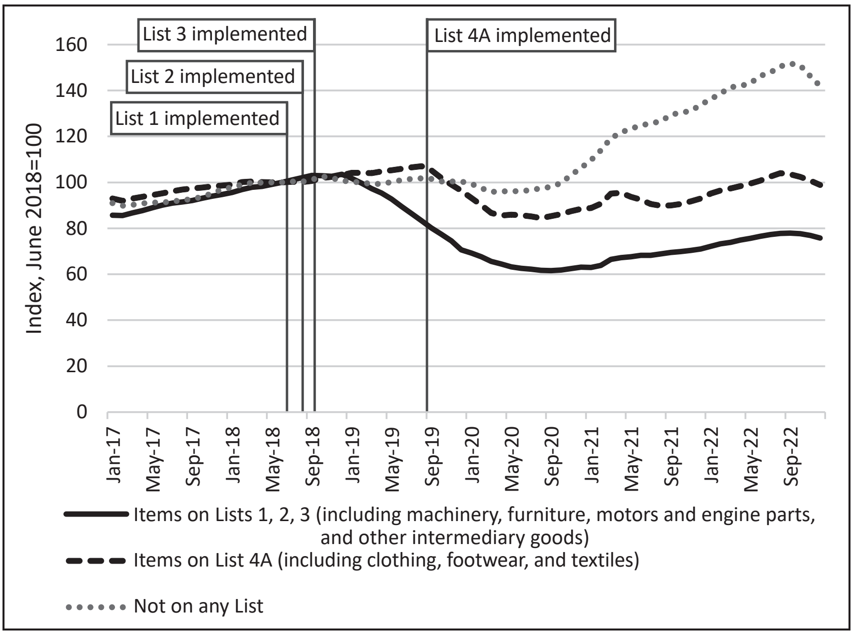
*Data on de minimis shipments from China for fiscal year 2022 were not available as of October 6, 2023.

Note: The de minimis shipments data presented in the graph refer to the quantity of packages entering the United States from China under Section 321, 19 USC 1321. The data reflect all product categories, including clothing and apparel.

Source: China General Administration of Customs, *Customs Statistics*; U.S. Census Bureau, *USA Trade Online*; U.S. Customs and Border Protection, *Section 321 De Minimis Shipments: Fiscal Year 2018 to 2021 Statistics*, October 2022.

2018 levels.[130] Figure 4 shows that after the USTR issued each of the four tariff lists as part of the Section 301 trade actions, U.S. imports of goods subject to tariffs declined. In contrast, Dr. Bown calculates that imports of Chinese goods not targeted by tariff actions were 42 percent higher in 2022 compared to the 12 months preceding the trade war.[131] Consequently, goods affected by U.S. tariff actions accounted for a declining portion of U.S. goods imports from China, dropping from 67.4 percent in 2018 to 54 percent by the end of 2022.[132]

Figure 4: Impact of Section 301 Tariffs on U.S. Imports of Chinese Goods, 2017–2022



Note: The tariffs imposed in response to the findings of the 2018 Section 301 investigation into China's nonmarket trade practices were issued on several lists of imported products between July 2018 and September 2019. Lists 1 and 2 include tariffs on about $50 billion in imports (based on 2017 values) that were implemented on July 6, 2018, and August 23, 2018, respectively. List 3 includes tariffs on about $200 billion in imports implemented on September 24, 2018. List 4 includes tariffs on about $300 billion in imports, originally to be implemented in two phases: list 4A on September 1, 2019, and the remainder on December 15, 2019, although this final list was not implemented as negotiations on the January 2020 Phase One Trade Deal began.

Source: Adapted from Chad P. Bown, "U.S. Imports from China Are Both Decoupling and Reaching New Highs. Here's How," *Peterson Institute for International Economics*, March 31, 2023; Chad P. Bown, Euijin Jung, and Zhiyao (Lucy) Lu, "Trump and China Formalize Tariffs on $260 Billion of Imports and Look Ahead to Next Phase," *Peterson Institute for International Economics*, September 20, 2018; Office of the U.S. Trade Representative, *China Section 301—Tariff Actions and Exclusion Process*.

U.S. industries ranging from clothing to electronics shifted away from China-based suppliers as they looked to avoid paying tariffs on Chinese imports. The Section 301 tariffs intensified pressure to seek alternative sourcing options outside of China, accelerating a preexisting trend driven by rising costs of production in China from increasing wages and a declining workforce, among other factors. U.S. importers increased imports from producers in other parts of Asia as well as Mexico.[133] According to global management consultancy Kearney, China's share of U.S. manufactured imports sourced from all low cost countries in Asia fell to 50.7 in 2022, declining from 65.6 percent in 2013.[134] In contrast, Vietnam's share of U.S. imports from Asia nearly doubled from its 2018 level of 5.8 percent.[135]

Chinese companies are expanding their presence in Southeast Asian supply chains, increasing U.S. exposure to Chinese content in goods imported from other countries. Even as a rising share of manufactured goods came from outside of China, the amount of Chinese content embedded in these imports rose as Chinese companies expanded their presence in Southeast Asian supply chains. Although the true magnitude of Chinese value-added content in U.S. imports is unknown due to limited efforts to fully map U.S. supply chains, trade and national production data indicate that the manufacturing sectors of ASEAN economies source a substantial share of their intermediate inputs from China. In Cambodia and Vietnam, products and services originating from China and Hong Kong accounted, respectively, for 20.2 percent and 15.8 percent of all value added in the production of exports in 2020.* [136] The electronics manufacturing sectors of these countries have become significantly dependent on Chinese inputs, particularly since 2017. In Cambodia's electronics export sector, 50.5 percent of all inputs originated in China in 2020, rising from 40.1 percent in 2017, while the share in Vietnam rose to 19.7 percent in 2020, up from 13.7 percent in 2017.[137] While these data do not break out these countries' exports just to the United States and therefore cannot reveal the full extent of Chinese products in U.S. supply chains, U.S. imports from these countries have accelerated over the past six years.† The United States' imports from Cambodia rose from $3.1 billion in 2017 to $12.2 billion in 2022, while imports from Vietnam increased from $46.5 billion to $127.5 billion over the same period.[138]

The shift in trade was also driven by Chinese suppliers physically relocating to other countries.‡ Chinese FDI in countries including Vietnam, Thailand, and Mexico increased as Chinese

---

*Across all ASEAN economies, 8.4 percent of value added to exports originated from China in 2020, up from 6.7 percent in 2017. Organization for Economic Cooperation and Development, "Trade in Value Added Database."

†A team of economists led by Caroline Freund, dean of the University of California San Diego's Global Policy and Strategy School, found that between 2017 and 2022, the United States increased trade with countries whose industries are highly integrated with China. U.S. importers were more likely to source from suppliers in other Asian economies that themselves relied on inputs from China. The authors of the study used a country's imports of products within a specific industry to measure the extent of trade linkages between China and the third country market. For a particular product, if a country's industry imported extensively from China—not just the product itself but also related and intermediate goods—the United States was more inclined to import that product from that country. Caroline Freund et al., "Is U.S. Trade Policy Reshaping Global Supply Chains?" *IMF Conference on Geoeconomic Fragmentation*, May 25, 2023.

‡Chinese companies have also used third countries as platforms to illegally transship goods to the United States, wherein Chinese exporters evade U.S. tariffs by briefly rerouting products through another country without making substantial transformations or modifications to the good. In December 2022, the U.S. Department of Commerce International Trade Administration determined that four Southeast Asian countries—Malaysia, Thailand, Vietnam, and Cambodia—were being used by Chinese companies to circumvent U.S. antidumping and countervailing duty orders on solar products from China. Combined, these four countries accounted for the majority of the United States' imports of solar products. Margaret Spiegelman, "Commerce Issues Preliminary Affirmative Rules in Solar Probes," *Inside Trade*, December 2, 2022; U.S. Department of Commerce, *Preliminary Determination of Circumvention Inquiries of Solar Cells and Modules Produced in China*, December 2, 2022.

exporters sought to move production to low-cost destinations,* avoiding the Section 301 tariffs and limiting exposure to future U.S. trade restrictions by setting up manufacturing bases outside of China.[139] The investment activities of Chinese multinational enterprises in Southeast Asia are likely to increase as China seeks to deepen its economic integration in the region, including through the Regional Comprehensive Economic Partnership—the China-initiated trade agreement that came into effect in January 2022.† [140]

China Imposes New Restrictions on Access to Business-Essential Information

Access to reliable market intelligence deteriorated under a far-reaching anti-espionage campaign designed to assert greater Party-state control over corporate information flows. Chinese security officials raided three multinational corporate advisory firms in 2023, including the U.S. due diligence firm Mintz Group in March and U.S. consulting group Bain & Co in April. Although Chinese officials did not provide an explanation for the investigations, Chinese state-owned television broadcaster CCTV produced a report on Capvision, a consultancy whose offices were raided by police in May 2023, that alleged Capvision coordinated a network of experts and insiders to sell sensitive information and state secrets.[141] The raids reportedly form part of a campaign to extend the reach of China's national security apparatus and cut off foreign companies' access to information deemed sensitive by the Party-state.[142] The antispy campaign follows March 2023 amendments to the Counterespionage Law that went into effect in July. These revisions broaden the definition of espionage activities to include any information gathering that involves material related to China's national security, expanding the remit beyond dealing in state secrets (see textbox "The CCP Considers Economic Data and Public Perception of the Economy Matters of National Security").[143]

As restrictions on cross-border data flows went into effect, offshore businesses and investors were cut off from real-time financial and economic data providers and corporate registries. Since 2022, overseas corporations reported that the widely used data provider Wind Information started restricting access to certain data services, including real-time insights into sectors of China's economy ranging from housing to retail sales.[144] Companies also lost access to databases on corporate data registries, including the business databases Qichacha and Tianyancha as well as Wind's corporate data services, preventing individuals outside of China from easily retrieving information such as the shareholders in a given Chinese company, its affiliated entities, or involvement in legal disputes.[145] The restrictions come as China implements its data governance regime‡ wherein the Party-state views cyberspace, data,

---

*Between 2018 and 2023, FDI by Chinese entities totaled $4.6 billion in Vietnam, $3.1 billion in Thailand, and $2.1 billion in Mexico. Derek Scissors, "China Global Investment Tracker," *American Enterprise Institute*, 2023.

†The Regional Comprehensive Economic Partnership encompasses 15 economies: the ten members of ASEAN (Brunei, Burma [Myanmar], Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, Vietnam), Australia, China, Japan, New Zealand, and South Korea.

‡The legal framework governing cross-border data transfers includes China's Cybersecurity Law enacted in 2017, the 2021 enactment of the Data Security Law, and the Personal Information Protection Law. Major rules to implement the laws came into effect in 2022 and 2023. They

and networks as sovereign territory and subject to local laws and restrictions.[146] The expansive authority of the data security laws is compelling Chinese companies to restrict overseas access to avoid crossing vaguely defined lines. As a result, firms and analysts face worsening information quality on China's business climate, and China's official data releases are curated and manipulated to present a more positive view of the economy (for more on China's increasingly unreliable statistics releases, see Chapter 3, Section 2, "Fiscal, Financial, and Debt Problems Weigh Down Beijing's Ambitions"). The access restrictions may also complicate foreign companies' ability to comply with home-market regulations, particularly sanctions and export restrictions targeting Chinese entities. As a result of the restrictions and the raids, U.S. businesses face greater difficulty in ensuring counterparties in China are not subject to restrictions on exports of controlled technology, U.S. investment restrictions, the Uyghur Forced Labor Prevention Act, and other requirements under U.S. law.[147]

Limits on accessing corporate registry data and the series of raids on foreign due diligence and consulting firms mark an acceleration of a long trend of censoring economic information. China's government has repeatedly imposed restrictions on access to economic data and its collection, censored domestic economic information and news, and punished foreign outlets for coverage of sensitive economic topics. In 2021, for instance, China's government censored independent indicators of inflation to control news about sharp price increases, and in 2023 it suspended a government dataset on youth unemployment after the rate for urban 16- to 24-year-olds climbed to an all-time high of 21.3 percent in June 2023.[148] In 2012, China's government also blocked Bloomberg and Businessweek's websites after they published a story on then Vice President Xi Jinping's family wealth.[149]

The CCP Considers Economic Data and Public Perception of the Economy Matters of National Security

In 2014, General Secretary Xi introduced the "Comprehensive National Security Concept," a broad-ranging framework that argues threats to the CCP regime may originate from any field in the domestic or international arena, including "economic security" and "cultural security." Under Xi, the concept has become a core tenet of decision-making, expanded to all policy areas, and permeated from the Politburo down to the grassroots governance level.* [150] It emphasizes the importance of not only averting threats but also proactively identifying and neutralizing emerg-

establish procedures for conducting a security assessment before transferring data and personal information overseas (effective September 2022), a third-party certification process for conducting cross-border data transfers (effective November 2022), and a standard contract for facilitating the data transfers overseas (effective June 2023). Qiang Tong and Wang Xintong, "How China Is Tightening Controls over Cross-Border Data Transfers," *Caixin Global*, June 14, 2023; Womble Bond Dickinson, "Cross-Border Data Transfers under China's Personal Information Protection Law," May 31, 2023; Todd Liao, "China's Cross-Border Data Transfer Security Assessment Measures Take Effect September 1," *Morgan Lewis*, August 1, 2022.

*For more, see U.S.-China Economic and Security Review Commission, Chapter 1, "CCP Decision-Making and Xi Jinping's Centralization of Authority," in *2022 Annual Report to Congress*, November 2022, 25–120.

The CCP Considers Economic Data and Public Perception of the Economy Matters of National Security—*Continued*

ing threats before they cause lasting damage.[151] The framework further regards economic security as the foundation upon which "security of the people" can be achieved, placing it second only to the "bedrock" of political security in a hierarchy of security domains.* [152] With economic security underpinning societal stability, Chinese leaders are sensitive to public opinion on the economy, regarding unfavorable economic data and phenomena that indicate discontent, such as a trend of Chinese youth "lying flat,"† as fundamental threats to national security.[153]

The revision of China's Counterespionage Law furthers a trend of state oversight of economic data and financial news, providing a national security justification for data censorship. The revisions expanded the scope of information the government may consider a threat to national security to encompass all "documents, data, materials, or items related to national security," whereas the prior version of the law had only concerned "state secrets and intelligence."[154] This codifies the Party-state's broad discretion to conduct investigations under a flexible, expansive national security definition, potentially subjecting any company that collects information to investigation for espionage.‡ [155] Commenting on the revisions, the U.S. Chamber of Commerce stated in April 2023 that the "additional scrutiny of firms providing essential business services dramatically increases the uncertainties and risks of doing business in the People's Republic."[156]

U.S. Direct Investment in China Slows amid Rising Risks

Many U.S. businesses delayed or reconsidered investment in China amid a weak economic outlook, causing FDI in China to tumble in 2022. Just 45 percent of U.S. companies surveyed by AmCham China in its 2023 Business Climate Survey planned to increase their investment plans in China, the lowest proportion in the business survey's history (see Figure 5).[157] Among those companies expanding investment, most planned only small increases. The drop in planned investment contributed to FDI flows into

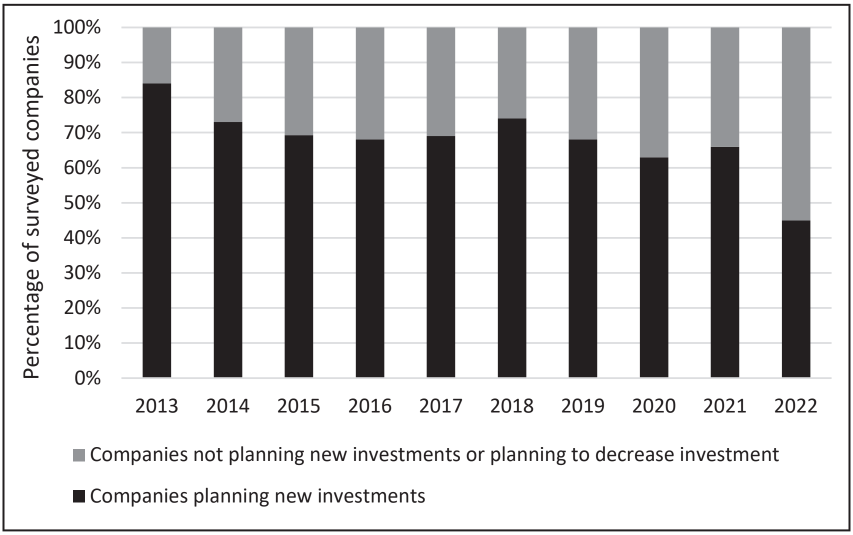
*According to Party sources, the structure of the "Comprehensive National Security Concept" comprises five elements and five relationships. The five elements are: "security of the people as the aim, political security as the fundamental principle, economic security as the foundation, military, cultural, and societal security as the guarantees, and the promotion of international security as the source of support." Tang Aijun, "Ideological Security in the Framework of the Overall National Security Outlook" (总体国家安全观视域中的意识形态安全), *Socialism Studies*, December 12, 2019. *CSIS Interpret* Translation.

†"Lying Flat" is an online meme that gained prominence in 2021 and is used to describe rejection of societal pressure. It comes as China's economy has slowed, youth unemployment has surged, and opportunities for graduates have declined despite increasingly rigorous demands of education. David Bandurski, "Lying Flat," *China Media Project*, July 17, 2023.

‡While these revisions more concretely define a broader set of conduct as espionage activity, Senior Fellow at Yale Law School's Paul Tsai China Center Jeremy Daum notes much of the enforcement and enactment authorities already existed under previously issued rules, including the 2017 *Provisions on Efforts on Counter-Espionage Security Precautions* and the 2021 *Detailed Implementation Rules for the Counter-Espionage Law*. In his assessment, the practical implications of the 2023 Counterespionage Law may be negligible, as it merely defines the existing scope of counterintelligence powers. Jeremy Daum, "Bad as It Ever Was: Notes on the Espionage Law," *China Law Translate*, May 2, 2023.

China falling to a record low, extending a multiyear slowdown in direct investment. Across U.S. and other foreign companies, greenfield FDI flows—including investments in new factories and facilities—dropped to $17 billion in 2022, 43.3 percent below the flows in 2021.[158] FDI in 2023 has proven equally dismal, with just $3.2 billion in new greenfield investment transactions in the first quarter of 2023, declining 34 percent year-on-year from the first quarter of 2022 and down 75 percent relative to 2021.[159] Total direct investment inside China, including both mergers and acquisitions and greenfield FDI by all foreign companies, fell to its lowest recorded level of $41 billion in 2022.[160]

Figure 5: Surveyed Investment Plans of U.S. Multinational Enterprises in China, 2017–2022



Note: Each year, AmCham China surveyed leaders of U.S. businesses operating in China about their investment plans for the following year.
Source: American Chamber of Commerce in China, "2023 China Business Climate Survey Report," March 2023, 48; American Chamber of Commerce in China, "2020 China Business Climate Survey Report," March 2020, 33.

Beijing's prioritization of national security undercut the Party-state's message of openness to foreign investment and led U.S. businesses to consider reducing or isolating their operations in China. In March 2023, China's newly appointed Premier Li tried in his first major public remarks to reassure global businesses, saying that China strives to create a "first-class business environment that is market-oriented, rule-of-law-based and internationalized."[161] China's government carried out a series of initiatives in 2023 to attract foreign investment, hoping that foreign capital inflows will help revive the stagnant economy. China's MOFCOM even launched a "Invest in China Year" campaign in 2023, organizing a series of events to attract foreign businesses.[162] Provincial and local governments also rolled out tax incentives for foreign investors.[163] Despite this overture to international business, a rising number of U.S. companies have indicated that they plan to reduce their presence inside China. According to AmCham China's April 2023 flash survey of U.S. businesses in China, 23 percent of surveyed businesses are relocating parts of their operations or assessing their options to do so.[164] Businesses cited tensions in the U.S.-China relationship and geopolitical risks as the number one and two challenges to their operations inside China (see Table 3). In contrast to surveys in previous years, survey respondents elevated their concerns about exposure to policy volatility and the Party-state's national security economic narrative. Concerns about the "Chinese policy environment" and "increasing Chinese protectionism and/or economic nationalism" also rose to U.S. firms' third- and fourth-largest challenges.[165]

Table 3: Top Five Challenges Facing U.S. Businesses in China, AmCham China 2023 April Flash Survey on China Business Climate Sentiment

Rank	2023 Flash Survey on China Business Climate	2022 Business Climate Survey
1	Rising tensions in U.S.-China relations	Rising tensions in U.S.-China relations
2	Geopolitical risks	Inconsistent/unclear laws and/or regulations and enforcement
3	Chinese policy environment	Rising labor costs
4	Increasing Chinese protectionism and/or economic nationalism	Regulatory compliance risks
5	Inconsistent/unclear laws and/or regulations and enforcement	Concerns about data security

Source: American Chamber of Commerce in China, "Flash Survey on China Business Climate Sentiment Updates," April 2023, 15; American Chamber of Commerce in China, "China Business Climate Survey Report," March 2023, 35.

Emerging Supply Chain Vulnerabilities in the Electric Vehicle Industry

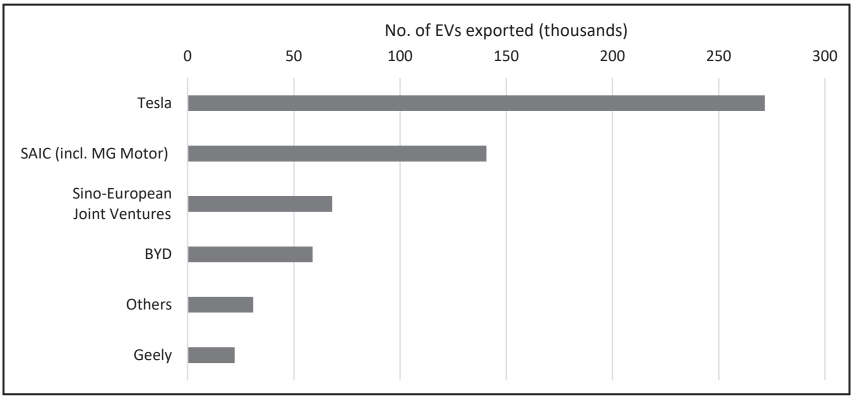
A decade of government support has made China's EV market into the world's largest and led to a surge in Chinese exports across the broader category of new energy vehicles (NEVs).* In the first seven months of 2023, China's EV exports alone increased 119 percent over the previous year.[166] China is now the world's largest EV exporter. In 2022, Chinese EV exports accounted for 35 percent of global EV trade, although a majority of China's EV exports were produced by foreign automakers manufacturing inside China, either through wholly-owned foreign enterprises or via joint ventures with Chinese automakers (see Figure 6).[167] Tesla alone made up 40 percent of China's total EV exports.[168] Western multinational EV manufacturers have established export hubs inside China, aiming to lower production costs by operating within China's dynamic EV ecosystem.† [169] In contrast to overseas sales, foreign brands make up only a small portion of China's own

* New energy vehicles (NEVs) include EVs, plug-in hybrids, and hydrogen fuel cell EVs.

† Auto parts supplier Forvia's CEO Patrick Koller estimated that Chinese automakers can manufacture EVs for over $10,000 less than European carmakers. The cost advantage of producing in China has enabled Chinese automakers to outprice competitors while also expanding into the budget vehicle segment. Over 20 percent of vehicles for sale in China were priced under $15,000 in 2022. No vehicles are for sale at that price point in either the United States or Europe. Colin

EV market, where domestic manufacturers are driving the rapid expansion of Chinese EV sales.[170] In 2022, sales of EVs and other NEVs inside China totaled 6.9 million vehicles, nearly double the sales in 2021.[171] Despite the slowing economy, NEV purchases between January and August 2023 continued to rise 40 percent year-on-year as the government stepped in to boost auto purchases using tax exemptions.[172] Currently, one in four passenger vehicles sold in China is a NEV, up from one in 20 in 2019.[*][173]

Figure 6: China's Exports of Electric Vehicles by Brand, 2022



Note: Sino-European joint ventures include ventures established between Chinese automakers and major European automakers, including BMW, Mercedes-Benz, Renault, and Volkswagen. SAIC, BYD, and Geely are Chinese automakers.
Source: Ilaria Mazzocco and Gregor Sebastian, "Electric Shock: Interpreting China's Electric Vehicle Export Boom," *Center for Strategic and International Studies*, September 14, 2023.

Made-in-China EV exports to the EU have boomed over the past two years, prompting the European Commission to launch an antisubsidy investigation into China's EV industry. On September 13, 2023, European Commission President von der Leyen announced that the EU is launching an antisubsidy investigation into EVs exported by China, stating that China is distorting the EU market by keeping prices "artificially low by huge state subsidies."[174] The investigation formally launched on October 4, 2023.[175] The EU's review of China's nonmarket EV practices is in the context of deepening ties between European and Chinese automotive sectors.[176] Europe has absorbed most of the surge in China's exports of EVs.[†][177] The EU is on track to more than double its imports of EVs from China in 2023 relative to 2022 as China's shipments of vehicles continue to accelerate (see Figure 7). The EU

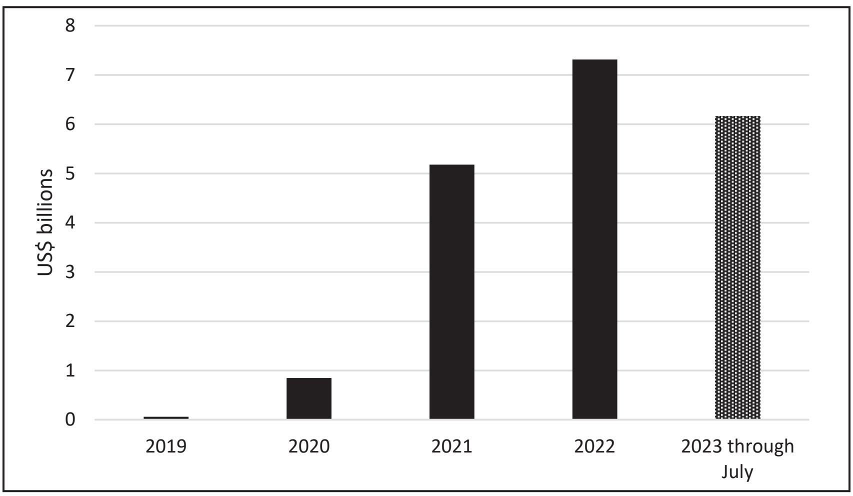
McKerracher, "Electric Vehicles Have China's Massive Middle Market Surrounded," *Bloomberg*, August 30, 2023; Ilaria Mazzocco, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China's Current Economy: Implications for Investors and Supply Chains*, August 21, 2023, 4; Joseph White, "China Has a 10,000 Euro Cost Advantage in Small EVs, Auto Supplier Says," *Reuters*, January 5, 2023.

* In 2020, China's government set a goal for NEVs to constitute 20 percent of total auto sales by 2025, a target the EV industry has now surpassed. Daniel Ren, "China Keeps 20 Percent Sales Target for Home-Grown Electric Cars by 2025, Calling Controversial Industrial Plan by Another Name," *South China Morning Post*, November 3, 2020.

† Over 70 percent of China's $3.2 billion in EV shipments were destined for Europe and the UK in 2022. Myungshin Cho, "China's Electric Car Exports Surge to Record on European Demand," *Bloomberg*, December 27, 2022.

imported $6.2 billion (€5.8 billion) in EVs from China in the first seven months of 2023, a 125.8 percent increase over the same period in 2022.[178] Made-in-China EVs make up a growing fraction of EU sales: imported EVs from China accounted for 11.2 of all EVs sold in Germany in the first half of 2023.[179] European automakers are simultaneously expanding production into China. Because the EU maintains low tariffs on EVs and European purchases subsidies are available regardless of the vehicles' country of origin, European automakers, including BMW, Mercedes, and Renault, are offshoring production to China, including through joint ventures with Chinese automakers, as they aim to lower the costs of producing cars bound for both the Chinese and European markets.[180] For instance, BMW has produced and exported its iX3 battery EV through a China-based joint venture with Brilliance since 2020.[181] The EU's most senior trade official, Valdis Dombrovskis, stated that the EU's antisubsidy probe may extend to foreign automakers' China operations if "they are receiving production-side subsidies" from China.[182] Should China escalate trade tensions in response to the EU's antisubsidy review, Europe's auto sector may also be exposed to trade costs or retaliatory measures.[183]

Figure 7: EU Imports of Battery EVs from China, 2019–2023



Note: This figure uses the following exchange rate: $1 = €0.94.
Source: Eurostat, *International Trade in Goods*.

Chinese automakers currently hold only a small share of the EV market outside of China, but they are investing heavily in expanding their overseas footprint. China's most popular domestic EV brand, BYD,* is now the world's largest EV producer and is rapidly expanding overseas. Between January and August 2023, BYD reported 117,500 in overseas NEV sales, making up 16 percent of China's total NEV exports over the same period.[184] BYD

*BYD is short for Build Your Dreams. Berkshire Hathaway was an early investor in BYD, buying $225 million in the company's Hong Kong-listed stock in 2008. In July 2022, Berkshire's stake was worth $9.5 billion, although it has since started selling its positions. Josh Funk, "Warren Buffett's Company Keeps Selling Carmaker BYD's Stock," *Associated Press*, May 8, 2023.

has already doubled the 56,000 in overseas vehicle sales it recorded for all of 2022, which were primarily exported to India, Thailand, and Brazil.[185] It expects to ramp up sales to 400,000 vehicles in 2024, aiming to leverage its low-cost EVs to enter not only developing economy markets and also increase sales to markets such as Japan and Europe.[186] It aims to send 30,000 vehicles to Mexico by 2024.[187] China's automakers are also seeking to move production closer to overseas markets.[188] Since 2016, BYD and Geely, the Chinese owner of Volvo and Polestar, have announced 14 and 15 greenfield projects outside of China, respectively.[*][189]

Chinese EV manufacturers have made limited entries into the U.S. market. Aside from BYD's success in manufacturing and selling electric buses in the United States,[†] Chinese automakers have largely avoided the U.S. market due to high tariffs on imported passenger vehicles from China and the smaller size of the U.S. EV market relative to that of Europe.[190] A handful of exceptions exist. The premium EV manufacturer Polestar plans to start production in the United States at a new facility in South Carolina in 2024, which will be the Chinese-owned automaker's first production facility located outside of China.[191] U.S. automaker General Motors plans to introduce its Buick Electra EV model—which it currently produces for sale in China—to the U.S. market in the next two years.[‡][192] Ford also has a partnership with Contemporary Amperex Technology (CATL), the world's largest battery supplier, to invest $3.5 billion into a lithium-iron-phosphate battery factory in Michigan.[193] CATL is also expanding its operations in other markets, including in Europe, where it is projected to be the region's largest battery maker once its factories in Germany and Hungary come online, potentially as early as 2025.[194]

EV Subsidies: A Replicable Success for Chinese Industrial Policy?

China's EV subsidy programs played a key role in creating an integrated supply chain for EVs over the past decade, although it came at immense cost and inefficiency.[195] Local governments, rather than central ministries, played the leading role in deploying consumer subsidies for EV purchases.[§][196] While government

* BYD has invested at least $1.3 billion in overseas facilities in Vietnam, Thailand, and Chile since 2022. Derek Scissors, "China Global Investment Tracker," *American Enterprise Institute*, 2023.

† In 2021, transit authorities across the United States operated 245 BYD buses out of a total fleet of 975 electric buses. The National Defense Authorization Act for Fiscal Year 2020 prohibited the Federal Transit Authority from awarding grants and funding for purchasing buses from manufacturers owned or controlled by corporations based in China and other nonmarket economies, effective December 2021. Some municipalities have continued to place orders for BYD buses, mainly due to the costs of switching to another supplier. U.S. Federal Transit Administration, *2021 Annual Database Revenue Vehicle Inventory*; Ian Duncan, "U.S. Funding Ban for Chinese Buses Arrives, Disrupting Transition to Electric," *Washington Post*, December 17, 2021.

‡ General Motors has not announced where it will produce the Electra if it proceeds with plans to sell it in the United States. General Motors has a history of producing Buicks in China for export to the United States; it has shipped its internal combustion engine Envision SUV from factories in China to the United States since 2016. Drew Dorian, "2025 Buick Electra E5," *Car and Driver*, 2023; Daniell Paquette, "'A Slap in the Face to U.S. Taxpayers': Most Vehicles Imported from China Are Made by an American Company," *Washington Post*, March 20, 2017.

§ While nominally called consumer subsidies, these were paid out to manufacturers rather than consumers, with the intent that producers would pass on the support to consumers through lower vehicle prices. Gerard DiPippo, Ilaria Mazzocco, and Scott Kennedy, "Red Ink: Estimating Chinese

EV Subsidies: A Replicable Success for Chinese Industrial Policy?—*Continued*

financial assistance fostered the growth of now-leading EV companies, including Shenzhen's support for BYD, the policies also led to adverse incentives for automakers. As Center for Strategic and International Studies fellow Ilaria Mazzocco observes, "Industrial policy-induced business cycles have generated strong and rapid growth, but they also tend to produce irrational exuberance, policy abuse, and market fragmentation."[197] Local governments denied subsidies for EVs made in other provinces, and public officials supported local firms by procuring solely from manufacturers located in the same city. This created a highly fragmented market with hundreds of EV manufacturers, many of which failed to bring a car into production.[*][198] Fraud was also rampant, with companies fabricating sales in order to pocket the subsidies.[199] Further, the costs of the subsidies program were immense. Between 2009 and 2017, consumer subsidies amounted to $33.8 billion (RMB 245 billion), meaning that the government fronted nearly a quarter of all EV sales.[†][200] Partially due to the spiraling costs, Beijing centralized control over the subsidies after 2016 and began to phase out consumer subsidies. Beijing terminated local consumer subsidies by June 2019, and it phased out central subsidies entirely at the end of 2022.[201]

China's control over critical mineral supplies and dominance in battery production accelerated the expansion of Chinese automakers into downstream production of EVs.[202] Because batteries are the most important and often most expensive component of EVs, Chinese EV makers benefited from China's established control over the battery supply chain.[203] In 2022, Chinese companies made up over 75 percent of global battery cell manufacturing capacity and 90 percent of all anode and electrolyte production.[204] China's CATL currently accounts for 37 percent of global market share for EV batteries.[205] BYD ranked in second place with 13.6 percent, ahead of South Korea's LG Energy Solution, which accounts for 12.3 percent.[206]

China's economic planners may struggle to replicate the success of its EV industrial policy in other industries where China lacks substantial preexisting capabilities. University of California San Diego researchers Barry Naughton, Siwen Xiao, and Yaosheng Xu argue that EVs are an example of a "long-board" industrial policy success, referring to technology areas where China already possesses competitive advantages.[207] The authors distinguish this technology from "short-board" technologies, where Chi-

Industrial Policy Spending in Comparative Perspective," *Center for Strategic and International Studies*, May 23, 2022, 55.

* In 2018, roughly 15 percent of over 400 EV manufacturers had actually brought cars to market. Analysts project that 80 percent of new NEV startups founded since China introduced its subsidy programs for EVs have exited or are exiting the market. *Bloomberg*, "China's Cutthroat EV Market Is Squeezing Out Smaller Players," June 26, 2023; Ilaria Mazzocco, "Electrifying: How China Built an EV Industry in a Decade," *MacroPolo*, July 8, 2020.

† For example, consumer subsidies for BYD's e6 model car from the municipal and national government amounted to $9,756 (RMB 60,000) each in 2014, equivalent to one-third of the factory cost of the vehicle. Ilaria Mazzocco, "Electrifying: How China Built an EV Industry in a Decade," *MacroPolo*, July 8, 2020; Dazhong Kanche, "How Far Are Electric Cars from Us? In-Depth Experience with the BYD e6" [电动车离我们多远? 深度体验比亚迪e6], July 10, 2014.

EV Subsidies: A Replicable Success for Chinese Industrial Policy?—*Continued*

na lacks the capabilities to achieve import substitution. In this latter category, China faces both high costs in growing new industries and lower benefits to the economy should they succeed. The troubled 14-year-long development of the COMAC C919, China's first domestically produced narrow-body aircraft, underscores the difficulties China faces in catching up in technologies dominated by Western producers.* [208]

Foreign Portfolio Investment in China

U.S. Financial Services Companies Reassess Their Strategies in China

Some foreign banks and investment firms have started reducing their footprint as their ventures struggle to gain ground in China's state-owned-bank-dominated financial system. As China took significant steps since 2018 to open its financial services market to foreign investment, including reforms it committed to implement nearly 20 years earlier when negotiating its entry into the WTO, U.S. financial institutions made ambitious investments to expand their China operations.[209] Foreign fund managers, banks, and insurers that entered under newly available channels encountered financial markets that were saturated by Chinese state-owned financial services companies, many of which leveraged joint ventures with foreign firms to bolster internal expertise and financial acumen, leaving global funds with just a margin of the market.[210] At the end of 2022, U.S. holdings of Chinese stocks and bonds totaled $247.2 billion, a small fraction compared to the $29.3 trillion (RMB 212.3 trillion) in total market capitalization on the Shanghai and Shenzhen Stock Exchanges alone.[211] While some foreign fund managers like Blackrock and Fidelity remain committed to competing for market share in China despite declining profitability, other U.S. financial firms are drawing back from China.[212] Vanguard is reportedly preparing to exit its financial advisory joint venture with Ant Group and close its office in Shanghai, four years after launching the venture in 2019.[213] In April 2023, the U.S. mutual fund Van Eck abandoned its plan to set up a unit in China's mutual fund market.[214] Of the total U.S. holdings, four of the largest U.S. banks operating in China—JPMorgan, Citigroup, Bank of America, and Morgan Stanley—cut their combined China exposure by 16 percent in 2022, holding just $48 billion inside China.[215]

---

*Analysts at the Center for Strategic and International Studies (CSIS) estimate that COMAC received between $49 billion and $72 billion in state support to develop the C919 as of 2020. However, as the CSIS Trustee Chair in Chinese Business and Economics Scott Kennedy notes, "It is misleading to call the C919 a Chinese plane because almost all of its components, including everything that keeps the plane aloft, are imported." China Eastern Airlines completed the first commercial C919 flight in May 2023, but COMAC has yet to find a market for the aircraft outside of China. *Reuters*, "China's Home-Grown C919 Completes First Commercial Flight," May 28, 2023; Scott Kennedy, "China's COMAC: An Aerospace Minor Leaguer," *Center for Strategic and International Studies*, December 7, 2020.

Even as some foreign financial institutions withdraw from or reduce their footprint in China's market, Chinese regulators are greenlighting more foreign-owned fund managers. Since late 2022, the China Securities Regulatory Commission (CSRC) accelerated approvals for wholly foreign-owned mutual fund and wealth management businesses in China, potentially increasing foreign firms' ability to seek profits in China's still-developing financial system. In November 2022, the Canadian asset management firm Manulife received approval to buy out its Chinese partner's stake in a joint venture fund, becoming the first financial institution to convert a joint venture into a wholly foreign-owned entity since China removed the cap on foreign ownership in the sector in 2020.[216] The CSRC subsequently approved JPMorgan's bid to take over its mutual fund joint venture in January 2023 at the same time it granted the United Kingdom (UK)-based bank Standard Chartered approval to set up a fully foreign-owned securities brokerage.[217] In February, Morgan Stanley received approval to take full control over its asset management joint venture.[218] Prior to the recent string of approvals, four other U.S. firms received approval to establish wealth management and/or mutual fund businesses: BlackRock and Goldman Sachs for majority-owned wealth management joint ventures in May 2021; and Neuberger Berman Group, Fidelity, and BlackRock for wholly owned mutual fund businesses in September 2021, August 2021, and August 2020, respectively.[219]

While gaining full control over a fund may grant foreign financial institutions greater flexibility, they will still face a Chinese financial market landscape dominated by state-backed players with deep capital pockets. Chinese regulators remain apprehensive about foreign financial services companies gaining too much influence, especially as China creates new markets for financial services.[220] Regulations on entry to China's emerging private pension market favor domestic firms, creating a barrier to nearly all foreign companies entering without a Chinese partner's support (see textbox below).

Foreign Financial Institutions Locked Out of Early Access to China's Pension Market

China launched a pilot marketplace for private pension plans in 2022 that allows individuals to contribute up to $1,791 (RMB 12,000) annually in tax-deferred plans, a system analogous to the Investment Retirement Accounts prevalent in the United States.[221] China's private pension system is projected to grow from $300 billion in 2022 to $1.7 trillion by 2025 as China's population rapidly ages, presenting a lucrative opportunity for funds that launch products on the marketplace.[222] However, most wholly foreign-owned asset managers lack the requisite domestic assets to meet the threshold for participation in pilots of the program. To start selling individual pension fund products, financial institutions must have at least $2.8 billion (RMB 20 billion) in assets in a mutual fund business, and Morgan Stanley, Manulife, and JPMorgan are currently the only wholly foreign-owned fund

Foreign Financial Institutions Locked Out of Early Access to China's Pension Market—*Continued*

managers large enough to participate.[223] Instead, large Chinese financial institutions are already moving to capture a significant portion of the nascent pension marketplace, potentially limiting the scope for the entry of foreign pension products.[224] These restrictions largely mirror a pattern of limiting foreign competition to financial markets until domestic firms have sufficient time to establish market dominance.

U.S. asset managers are also creating distance from their China-based operations as U.S. regulators increase their scrutiny of investments in China. Sequoia Capital, whose China venture capital unit has backed many of China's major tech startups, announced in June that it will split its China operations into an independent company alongside a planned restructuring that carves out its operations in India and Southeast Asia.[225] Sequoia's $56 billion in assets under management in China will be placed in a new entity called HongShan.*[226] This exceeds the $53 billion in Sequoia Capital's assets under management in the United States and Europe, combined.[227] HongShan may still be able to raise funds from U.S. investors following the completion of the business separation.[228] U.S. government restrictions on investing in Chinese companies tied to China's military-civil fusion strategy, as well as the potential implementation of Washington's outbound investment review mechanism, may reduce the opportunities for investing in China's technology sector. U.S. investment managers are also increasing scrutiny of investments that could be seen as bankrolling China's military.[229]

China's Securities Regulator Formalizes an Approval Process for Overseas Listings in the United States

At the end of 2022, China permitted U.S. regulatory inspections of China and Hong Kong-based auditors for the first time, a step that brought over 100 U.S.-listed Chinese companies into compliance with U.S. securities law and removed the possibility of a mass delisting. Prior to these investigations, the Chinese government had prevented the Public Company Accounting Oversight Board (PCAOB), a nonprofit corporation established by Congress to oversee the audits of publicly traded companies listed on U.S. exchanges, from conducting inspections of auditors based in mainland China and Hong Kong as mandated under the Sarbanes-Oxley Act of 2002.† Under a process established in the Holding Foreign Companies Accountable Act of 2018 (HFCAA), issuers that retained auditors from such noncompliant jurisdictions for several consecutive years would face a trading prohibition on

*HongShan is Mandarin for sequoia or redwood.

†Prior to the PCAOB's 2022 determination, China and Hong Kong were the only jurisdictions with PCAOB-registered auditors where the PCAOB was prevented from carrying out its oversight responsibilities. Until 2021, the PCAOB was unable to conduct inspections of firms located in Belgium as well, but the board reached an agreement with the Belgian Audit Oversight College in April 2021. U.S. Public Company Accounting Oversight Board, *PCAOB Enters into Cooperative Agreement with Belgian Audit Regulator*, April 20, 2021.

U.S. securities markets.* The Securities and Exchange Commission identified 174 issuers—including Alibaba, the largest Chinese company on U.S. exchanges by market capitalization—that were noncompliant with the provisions of the HFCAA in fiscal year 2021.[230] However, after successfully completing a round of regulatory inspections of two audit firms in mainland China and Hong Kong in late 2022,† the PCAOB retracted its determination of China and Hong Kong as noncompliant jurisdictions on December 15, 2022.[231] This reconsideration by the PCAOB means that Chinese companies do not currently face the risk of a trading ban under the HFCAA.‡ [232] It further cleared the way for new listings by companies that retain China and Hong Kong-based auditors, leading to a brief revival of listing activity in the first quarter of 2023. In the first three months of 2023, 13 Chinese companies listed on major U.S. exchanges and raised a combined total of $376 million through initial product offerings (IPOs).[233]

Although Chinese overseas IPOs rebounded at the start of 2023, listing activity stalled as the CSRC formalized oversight and regulatory control over Chinese companies going public on foreign stock exchanges. Chinese overseas IPOs ground to a near halt after March 31, 2023, when China's securities regulator revised its approval process for companies going public overseas.§ [234] Under the new review mechanism, all companies are required to register their listing with the CSRC, enabling regulators to block any proposed listing that violates China's laws and regulations or poses risks to national security and the CCP.[235] Though the CSRC touted the measures as necessary for enforcing regulatory compliance and preventing fraud, its review process is wide-ranging, including an evaluation of the company's safeguards against disclosing what the Party-state views as state secrets.[236] The new approval process forms the latest element of Beijing's evolving regulatory

*The HFCAA was signed into law on December 18, 2020. The law requires certain issuers of securities to establish that they are not owned or controlled by a foreign government. Issuers must make this certification if the PCAOB is unable to inspect an issuer's audit work papers. Securities from issuers whose audit work papers cannot be inspected by the PCAOB for three consecutive years are then prohibited from being traded on U.S. exchanges. On December 2, 2021, the Securities and Exchange Commission finalized rules to implement the HFCAA. After noncompliant companies are designated "Commission-Identified Issuers," they are required to disclose the percentage of their shares owned by a government entity, whether a government entity has a controlling financial interest in the company, the name of each CCP official who is a member of the company's board of directors, and whether the company's articles of incorporation contain any charter of the CCP. If a company is designated as a Commission-Identified Issuer for three consecutive years, trading of its securities on U.S. exchanges becomes prohibited—a timeline that was shortened to two years in the Consolidated Appropriations Act, 2023. Consolidated Appropriation Act, 2023, Pub. L. No. 117–328, 2022; U.S. Securities and Exchange Commission, *Holding Foreign Companies Accountable Act Disclosure*, December 2, 2021.

†PCAOB investigators selected eight audit engagements conducted by KPMG Huazhen LLP in mainland China and PricewaterhouseCoopers Hong Kong for inspection. U.S. Public Company Accounting Oversight Board, *PCAOB Secures Complete Access to Inspect, Investigate Chinese Firms for First Time in History*, September 15, 2022.

‡With the PCAOB vacating its HFCAA determination on mainland China and Hong Kong, these issuers will regain compliance with the HFCAA after filing their fiscal year 2022 annual reports, although this is conditional on the continued compliance of Chinese regulators with the PCAOB's oversight investigations. Should the PCAOB discover that Chinese regulators are granting it less-than-complete access to auditors of U.S.-listed issuers, whether in investigations in 2023 or beyond, it can immediately reinstate the negative determination under HFCAA. This would restart the clock under HFCAA, wherein U.S.-listed Chinese companies will have at most two years to retain an auditor from a compliant jurisdiction before they are subjected to a trading prohibition.

§Five issuers headquartered in China debuted their shares on the Nasdaq in April 2023; however, these companies had registered their listing with the U.S. exchange prior to March 31, 2023.

regime for overseas listings, which expanded rapidly since 2021 as the Party-state increased oversight of cross-border data flows. After ride-hailing app DiDi Chuxing proceeded with its blockbuster $4.4 billion IPO in June 2021 despite objections from CAC,* China clamped down on new listings as it deployed new review mechanisms for overseas IPOs, including a mandatory data review process introduced by CAC in February 2022.†[237] Overseas listings by Chinese companies in all sectors had slowed to a drip in late 2021 and 2022.[238] The CSRC's introduction of an approval process for all overseas listings in 2023 is likely intended to reopen a pathway for companies that align with Beijing's economic priorities to raise capital on foreign markets. Consequently, Chinese IPOs may increase on U.S. exchanges as the CSRC completes its approval process, which is reportedly taking upward of six months.[239] Firms operating in industries deemed sensitive by the CCP are likely to face increased scrutiny when applying to list overseas.

Listings of Chinese companies utilizing variable interest entity structures (VIEs) may accelerate under the CSRC's revised overseas IPO approval process, potentially magnifying the risks to U.S. investors. Since the early 2000s, hundreds of Chinese companies, particularly those in the internet sector,‡ have listed in the United States using VIEs—complex corporate structures that grant shareholders contractual claims to control via an offshore shell company without transferring actual ownership in the company—to circumvent China's restrictions on foreign ownership in industries the CCP deems sensitive.§ Prior to 2023, Chinese companies that list overseas using a VIE were not required to register their listings with the CSRC, as the VIE is not considered a Chinese company under China's law.[240] In its March 2023 implementation of an overseas IPO approval mechanism, the CSRC established a requirement for companies to register and receive permission before

---

*In May 2022, DiDi announced it would delist from the New York Stock Exchange and finally exited on June 2022. DiDi is still listed on U.S. over-the-counter markets with a market capitalization over $14 billion, making it by far the largest company whose shares are primarily listed on OTC markets in the United States. Yiqin Shen, Henry Ren, and Filipe Pacheco, "Chinese Ride-Hailing Giant Didi Boasts $14 Billion Value, One Year after NYSE Delisting," *Bloomberg*, June 14, 2023.

†The General Offices of the CCP Central Committee and State Council jointly issued the *Opinions on Strictly Cracking Down on Illegal Securities Activity in Accordance with Law* in July 2021. The opinions pledged to strengthen supervision of Chinese companies issuing securities overseas and enhance oversight of cross-border data flows, the latter of which was reflected in a data security review mechanism for certain companies seeking to list overseas introduced in February 2022 by CAC. The CAC review is mandatory for Chinese companies that collect personal information on more than one million users. Cyberspace Administration of China, *Cybersecurity Review Measures* (网络安全审查办法), December 28, 2021. Translation; State Council of the People's Republic of China, *The General Office of the Central Committee of the Chinese Communist Party and the General Office of the State Council of the People's Republic of China Jointly Issued the "Opinions on Strictly Cracking Down on Illegal Securities Activity in Accordance with Law"* (中共中央办公厅 国务院办公厅印发 "关于依法从严打击证券违法活动的意见"), July 6, 2021. Translation.

‡Eight of the Chinese companies to newly list on U.S. exchanges in the first half of 2023 did so using a VIE, bringing the total number of Chinese issuers using VIEs on the Nasdaq and New York Stock Exchange to 169 as of June 30, 2023, with a combined market capitalization of $823 billion, or 88.3 percent of the total market cap of all 267 U.S.-listed Chinese companies. U.S.-China Economic and Security Review Commission, *Chinese Companies Listed on Major U.S. Stock Exchanges*, January 9, 2023.

§Chinese companies are not unique in using VIEs as part of their corporate structures. VIE structures are defined in the standards for consolidating subsidiaries on corporate balance sheets under the Generally Accepted Accounting Principles, the set of accounting rules followed by most U.S. firms. Chinese companies are unique, however, in placing their core businesses inside of VIEs, which enables many Chinese companies to circumvent China's sector-level restrictions on foreign ownership (including in the internet sector) and list overseas.

going public overseas through VIE structures.*[241] On September 14, 2023, the Chinese auto insurance platform CheChe Technology became the first company formally approved by the CSRC to list using a VIE arrangement on the Nasdaq, potentially signaling Chinese regulators' intent to accelerate such listings.[242] Although the VIEs received recognition from China's security regulator in its March 2023 rules, these corporate structures still hold only dubious legal status under China's laws, and the enforceability of a VIE's contractual arrangements is unproven in Chinese courts. Foreign investors may have little recourse to enforcement in the Chinese legal system if VIE-listed companies take the company private at lower valuation or if businesses fail.[243]

China Leverages Bilateral Debt to Promote Its National Interests Externally

In the wake of a global economic downturn and following ten years of extensive and predatory lending under the Belt and Road Initiative (BRI), 2022 and 2023 saw a mounting wave of sovereign financial distress among developing countries holding debt from China's policy banks.† China has been and continues to be a primary contributor to this nascent crisis through its extensive and poorly regulated bilateral lending relationships with risky borrowers. In many ways, rising debt distress across developing countries represents the culmination of China's longstanding, irresponsible lending practices. In response to this crisis of its own creation, China seeks to leverage debt troubles and international events to expand the use and reach of the RMB through currency swap lines. In addition, China is expanding its energy partnerships with countries across Central Asia and the Middle East to increase its energy access and security while insulating itself from U.S. economic statecraft. In the long run, developing debt troubles, de-dollarization, and China's expanding partnerships with Russia and energy-producing states will reduce China's sensitivity to U.S. sanctions, grow developing and resource-rich states' ties to and dependency on China, and increase international competition for energy resources.

Rising Distress among Countries Holding Loans from China

A record number of countries that borrowed from China are in debt distress due to high interest rates, heavy loan burdens, and worsening global economic conditions. Nearly 60 percent of China's debtor nations were in financial distress in 2022, up from just 5 percent in 2010.[244] Borrowers with adjustable interest rates have been particularly vulnerable due to inflation. For instance, Argentina's semiannual payments on a $4.7 billion loan from China increased from $87 million in

*The CSRC's regulations issued in March 2023 mandate any company seeking to list outside of China to file for approval if the majority of its operations and revenue-generating activities took place in China or if the majority of its senior management are Chinese citizens. These conditions apply regardless of whether the China-based operating entity is consolidated through direct ownership or a VIE structure. China Securities Regulatory Commission, *Trial Administrative Measures of Overseas Securities Offering and Listing by Domestic Companies*, February 17, 2023, 8.

†The UN Global Crisis Response Group estimates that 3.3 billion people, or approximately 42 percent of global population, live in countries that spend more on interest payments than education or health. United Nations Global Crisis Response Group, "A World of Debt: A Growing Burden to Global Prosperity," July 2023, 14.

January to $137 million in July 2022.[245] Many borrowers with low interest rates are also facing distress as their gross domestic product (GDP) falters and the burden of external debt payments becomes unmanageable. In 2021, Zambia's external public and publicly guaranteed debt-to-GDP ratio was 133 percent, and of the $20 billion in external public debt, an estimated one-third was owed to China alone.[246]

BRI Implementation after Ten Years

Announced in 2013, General Secretary Xi's hallmark BRI is a China-led global investment and development program that seeks to fuel China's domestic growth, expand trade linkages, export excess productive capacity, and advance geopolitical influence by moving China to the center of the global order.[247] Cumulative BRI funding is estimated to have reached nearly one trillion dollars,* with $67.8 billion allocated to over 200 new engagements within BRI countries in 2022.†[248] Although the Chinese government touts the initiative as an opportunity for "win-win" cooperation with participants, China has been BRI's primary beneficiary. In the ten years since its inception, BRI has generated some successes for China, many failures for participants, and significant controversy.

Much of BRI's infrastructure building efforts have failed to deliver. Many projects either stalled or never started. Many of those completed have significant quality concerns.‡[249] For instance, in January 2023, the Ugandan government had to begin repaying the $1.44 billion it borrowed from China to fund the 600 megawatt Karuma Hydro Power Project despite the dam being three years behind schedule and inoperable as of January 2023.§[250] While Ecuador's Coca Coda Sin-

* Cumulative BRI funding includes approximately $573 billion in construction contracts and $389 billion in nonfinancial investments. Christoph Nedopil Wang, "China Belt and Road Initiative (BRI) Investment Report 2022," *Green Financing & Development Center*, February 3, 2023.

† Due to opacity in Chinese government reporting, there is debate regarding the total number of projects financed through BRI. Christopher Nedopil Wang of the Green Finance and Development Center (GFDC) affiliated with Fudan University in Shanghai uses data from the American Enterprise Institute's China Global Investment Tracker and the GFDC to estimate that 147 BRI participant countries received $67.8 billion for over 200 BRI-related engagements in 2022. In contrast, Nadia Clark, a research associate for the Council on Foreign Relations, uses a more expansive definition and counts any foreign contract signed by a Chinese enterprise with a BRI participant as a single BRI project. Using data from the Chinese Ministry of Commerce, Ms. Clark reports that Chinese enterprises signed 5,514 new contracts valued at $130 billion in 2022. Nadia Clark, "The Rise and Fall of the BRI," *Council on Foreign Relations*, April 6, 2023; Christoph Nedopil Wang, "China Belt and Road Initiative (BRI) Investment Report 2022," *Green Financing and Development Center*, February 3, 2023.

‡ Although the Chinese government does not publish official statistics on the status of BRI projects, AidData estimates that of 13,427 recorded development projects funded by China between 2000 and 2017, 2,577 have been either canceled, suspended, or stalled in implementation. Ammar A. Malik et al., "Banking on the Belt and Road: Insights from a New Global Dataset of 13,427 Chinese Development Projects," *AidData*, September 29, 2021, 7.

§ The current operational status of the dam in Uganda cannot be determined due to conflicting media accounts. According to a report published by the *Wall Street Journal*, the Karuma plant "remains inoperational" as of January 2023. An April news brief by China's Assets Supervision and Administration Commission of the State Council as well as an article published by the Ugandan state-owned media outlet *New Vision* reported that at least a portion of the plant went online in March 2023. The privately owned Ugandan media publisher *Monitor*, however, shared a video of Ugandan Prime Minister Robhinah Nabbania where she indicated that the dam was still not operational as of July 2023. *Monitor*, "Power from Karuma Dam to Cost More," July 16, 2023; John Odyek, "Karuma Dam High Voltage Transmission Lines Commissioned," *New Vision*, March 27, 2023; Xie Yuanxiao, "Uganda's Largest Hydropower Plant Starts Operation," *State-Owned Assets Supervision and Administration Commission of the State Council*, April 7, 2023. *http://webcache.*

BRI Implementation after Ten Years—*Continued*

claire hydroelectric plant was completed in 2016 and is currently operational, dam operators recorded over 7,600 visible cracks in the structure's machinery as well as missing bolts on valves controlling water flow, leading to safety and structural integrity concerns.[251] The project was funded by the China Development Bank through a $1.7 billion loan with a 6.9 percent interest rate and is in repayment.[252]

BRI has been a success for China, which has used the initiative to develop a network of politically aligned and economically entangled countries—many with substantial resource reserves—across the developing world. China's exports to BRI countries have nearly doubled from $872 billion in 2014 to $1.5 trillion at the end of 2022, and it is currently the top trading partner to more than 120 countries.[253] Its outbound foreign investment to BRI countries has increased substantially as well, rising from $9.9 billion (or 13 percent of China's total outward FDI) in 2013 to $23.8 billion (81 percent) between January and June of 2023.*[254] In addition to economic gains, BRI provides China leverage to push its political agenda. In the past three years, two countries have received BRI funding after they switched recognition from Taiwan to China, including Nicaragua in 2021 and Honduras in 2023.†[255] Moreover, recent research shows that Chinese developmental lending has an "amplification effect" on recipient countries' existing political institutions—whereby loans from China make autocratic borrowers more autocratic—thus strengthening China's economic ties to and leverage over increasingly illiberal countries.‡[256]

For many participants, BRI has resulted in mounting debt and financial distress. Of BRI's 148 members, 66 countries—or 45 percent of the total—qualify for the International Development Association (IDA), a group of 75 low-income countries that are eligible for special financing through the World Bank.[257] Among joint BRI-IDA members, there is an overrepresentation

googleusercontent.com/search?q=cache:yLjhpWr27nUJ:en.sasac.gov.cn/2023/04/07/c_15087.htm&cd=18&hl=en&ct=clnk&gl=us&client=firefox-b-1-d; Ryan Dube and Gabriele Steinhauser, "China's Global Mega-Projects Are Falling Apart," *Wall Street Journal*, January 20, 2023.

*According to data compiled by the American Enterprise Institute and the Heritage Foundation, China's total outward FDI in 2013 was $29.5 billion. By the end of June 2023, its total outward FDI had risen to $74.4 billion. American Enterprise Institute, "China Global Investment Tracker," June 2023.

†In March 2023, Honduras switched recognition from Taiwan to China. Taiwan's Foreign Minister Joseph Wu stated that Honduran President Xiomara Castro made the switch after her government requested $2.5 billion in financing from Taipei but received a more palatable offer from Beijing, a claim the Honduran government denies. Honduras is currently in negotiations with China for $20 billion in financing for a new rail line. Kylie Madry, "Honduras Probes Chinese Interest in Investing in $20 Billion Rail Line," *Reuters*, July 7, 2023; *Associated Press*, "Honduras Establishes Ties with China after Break from Taiwan," *National Public Radio*, March 27, 2023; Ben Blanchard and Gustavo Palencia, "Honduras Denies Demanding $2.5 bln in Taiwan Aid before China Announcement," *Reuters*, March 22, 2023.

‡The study uses an ordinary least-squares regression model to measure the impact of Chinese development lending on a recipient's level of democracy or autocracy over time, given the fact that these institutions begin as either an autocracy or democracy. The study uses AidData's Chinese official finance dataset to construct a panel of 104 Chinese aid recipients from 2002 to 2017. These data are paired with information on a recipient's level of autocracy or democracy as measured by Polity IV. Gregory W. Caskey, "Chinese Development Lending & the Amplification Effect," *Stanford Center on China's Economy and Institutions*, June 2022.

BRI Implementation after Ten Years—*Continued*

of countries in debt trouble. Of the ten IDA countries currently in debt distress, nine are BRI participants.*[258] Moreover, in the past three years, several BRI participants—including Sri Lanka and Zambia—have defaulted on their debt, while others—like Pakistan and Argentina—languish in prolonged economic crises.†[259] To address rising financial issues among members, between 2000 and 2021, China extended $240 billion in rescue financing to 22 countries—all of which are BRI participants—with 77 percent of this funding being extended after 2016.‡[260] This relief, however, has had little impact on BRI countries' rising loan burdens due to the scale of the issue. It is estimated that for every $1 of aid China provided, it created an additional $9 in debt.[261]

China is not providing sufficient debt relief to distressed borrowers. Despite repeated requests by the United States, World Bank, International Monetary Fund (IMF), and other democratic and developed partners, China refuses to offer broad and substantial debt relief or restructuring to developing countries in distress.§[262] In August 2022, China canceled 23 loans to African countries in an attempt to address rising financial distress and narratives surrounding China's "debt-trap diplomacy."¶[263] These cancelations accounted for less than 1 percent of the debt African countries owe to China, and most of this forgiveness went to 20-year-old defaults, loans that were long since unlikely to be repaid.[264] Moreover, of the 54 countries in Africa, China is known to have lent to 51 of these countries in the past two decades. Among these borrowers, 18 are at a moderate risk of external debt distress, 12 are at a high risk

*The BRI countries in debt distress are the Republic of the Congo, Ghana, Grenada, Laos, Malawi, Somalia, Sudan, Zambia, and Zimbabwe. São Tomé and Príncipe is the only country in debt distress that is not recognized as a BRI participant. World Bank, "Debt Sustainability Analysis," May 2023; Christoph Nedopil Wang, "China Belt and Road Initiative (BRI) Investment Report 2022," *Green Financing & Development Center*, February 3, 2023.

†There are several ways to define when a country enters a debt crisis, but in general a debt crisis occurs when a government becomes unable to pay back its loans or when it defaults on its loans. For more on Sri Lanka's and Pakistan's respective debt challenges, see U.S.-China Economic and Security Review Commission, Chapter 3, Section 3, "China's Activities and Influence in South and Central Asia," in *2022 Annual Report to Congress*, November 2022, 519–587.

‡Sebastian Horn et al. report that of the $240 billion in rescue funding offered by China, $172 billion was offered through swap lines. When calculating swap line totals, the authors treated rollovers and renewals of lines as an expansion of financing, identical to the creation of a new swap line. According to Matthew Mingey and Logan Wright, this treatment has led to significant overcounting of swap line totals. Mr. Mingey and Mr. Wright recalculate total swap lines counting rollovers and renewals based on net expansion and report that China's total swap line offers from 2000 to 2021 come to $38.5 billion, which would bring China's total estimated rescue financing to $106.5 billion. Matthew Mingey and Logan Wright, "China's External Debt Renegotiations after Zambia," *Rhodium Group*, June 29, 2023; Sebastian Horn et al., "China as an International Lender of Last Resort," *National Bureau of Economic Research*, April 2023.

§Although it is the largest bilateral creditor to the developing world, China is not a member of the Paris Club, a group of 22 creditor countries that aim to develop workable solutions to mounting debt problems among borrower countries. The 22 permanent members of the group are Australia, Austria, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Ireland, Israel, Italy, Japan, Korea, Netherlands, Norway, Russia, Spain, Sweden, Switzerland, the UK, and the United States. Shawn Donnan and Tom Hancock, "China Lent Heavily to Developing Nations. Now It's Helping Them Manage Their Debt," *Bloomberg*, March 27, 2023. Adam Hayes, "Paris Club," *Investopedia*, May 5, 2022; Paris Club, "Permanent Members."

¶"Debt-trap diplomacy" is the act of deliberately providing loans to countries the lender knows are unable to pay in an effort to gain economic and political leverage over the debtor state. Kate Bartlett, "China Cancels 23 Loans to Africa amid 'Debt Trap' Debate," *Voice of America*, August 25, 2022.

of distress, and seven are currently in distress.*[265] China's primary strategy for dealing with distressed borrowers has been to extend loan maturity, as it did with a $2 billion loan to Pakistan in March 2023 and as it offered for an undisclosed amount of debt owed by Sri Lanka in February 2023.†[266] Rolling over loans gives borrowers more time to repay but may also prolong and increase the borrowers' debt burden.[267] More recently, China has extended emergency loans to distressed countries. Between 2018 and 2021, China offered Pakistan and Sri Lanka, two major BRI partners in significant distress, more than $26 billion in emergency loan funding.[268] Emergency loans offer a way for countries to continue funding productive ventures that may facilitate future loan repayment, but they also grow the debt these countries already hold.

In addition to not providing sufficient relief to most borrowers bilaterally, China sometimes impedes multilateral efforts to restructure financially distressed countries' debts, as it did in Zambia. In 2020, Zambia's external public debt stood at $18.7 billion and central government debt was 103 percent of GDP.[269] As its foreign reserves were rapidly eaten by loan payments, Zambia requested relief through debt restructuring. While most creditors, including the United States, were willing to coordinate relief, China—which held one-third of Zambia's debt—refused to participate.[270] China instead insisted on confidential bilateral debt negotiations that would bar Zambia from discussing the terms of the deal. Without China's participation, creditors were unable to develop a comprehensive relief plan; Zambia depleted its foreign reserves and defaulted on its debt in November 2020.[271] China did finally agree to debt restructuring in 2022, but only after it became a co-chair of Zambia's creditors committee with France.[272] In June 2023, Zambia secured a multilateral agreement to restructure $6.3 billion in debts owed to foreign governments, including China. The country's debt will be rescheduled over more than 20 years with a three-year grace period during which time only interest must be paid.‡[273] Although a deal was eventually secured, China's initial refusal to participate in multilateral negotiations prolonged and potentially worsened Zambia's financial situation.

---

*According to loan data compiled by AidData and Boston University's Global Development Policy Center, Eswatini, São Tomé and Príncipe, and Somalia have no recorded instances of borrowing from China for the period of 2000 to 2020. Of those three, Somalia and São Tomé and Príncipe are in debt distress. Eswatini's risk of distress was not evaluated by the World Bank. Although these countries have not recently borrowed from China, São Tomé and Príncipe and Somalia have received developmental assistance from China in the past 20 years, including $210 million and $52 million in allocated and pledged grant funding, respectively. World Bank, "Debt Sustainability Analysis," March 2023; Boston University Global Development Policy Center, "Chinese Loans to Africa Database." 2023; AidData, "AidData's Global Chinese Development Finance Dataset, Version 2.0."

†In January 2023, the Export Import Bank of China signaled intent to extend maturity on an undisclosed amount of debt held by Sri Lanka through suspended debt repayments, although Sri Lanka appears to be moving toward a bailout package offered by the IMF. Bharatha Mallawarachi, "Sri Lanka's Parliament Approves a Debt Restructuring Plan in an Attempt to Overcome Economic Crisis," *Associated Press News*, July 1, 2023; Devjyot Ghoshal and Uditha Jayasinghe, "China Offers Sri Lanka Debt Moratorium, IMF Help Still in Doubt," *Reuters*, January 24, 2023.

‡A French official speaking on condition of anonymity reported to Reuters that French President Emmanuel Macron's talks with Xi Jinping in Beijing in April 2023 helped in facilitating the deal. For more information on President Macron's trip and Europe's relations with China, see Chapter 5, Section 1, "Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation." Leigh Thomas, Jorgelina Do Rosario and Chris Mfula, "Zambia Seals $6.3 Billion Restructuring in Breakthrough for Indebted Nations," *Reuters*, June 23, 2023.

China continues to free-ride on international efforts to alleviate distressed countries' financial burdens by continuing unsustainable lending in the wake of multilateral debt relief efforts. For instance, China has continued to lend to Honduras, which has received substantial debt relief through several multilateral programs. In 2003, Honduras had $556 million in debt forgiven as part of the IMF and World Bank's Heavily Indebted Poor Countries' Initiative, representing a 17.8 percent reduction in the Honduran government's total debt.[274] This relief was followed by an additional $141 million in IMF debt forgiveness under the Multilateral Debt Relief Initiative in 2005 and $1.4 billion provided by the Inter-American Development Bank in 2007.[275] As a result of these efforts, Honduras' external debt stocks as a percentage of gross national income fell from 81 percent in 2000 to 27 percent in 2010.[276] In taking advantage of Honduras' new fiscal health, Chinese lenders began increasing loans to the country. From 2010 to 2021, China's share of Honduras' external bilateral debt increased from 2 percent to 16 percent.* [277] In addition, many of the loans China provided came with interest rates well above the IMF's concessional rates. In 2014, while the IMF was offering around 1 percent interest on loans to low-income countries, China extended a $298 million loan to Honduras at 4.1 percent interest.[278] Honduras' debt-to-gross national income (GNI) percentage has increased steadily with Chinese lending, reaching 45 percent by 2021.[279] In 2023, even as Honduras finalized an agreement with the IMF for a 36-month credit facility for $830 million to support economic reforms, the Latin American country also entered into negotiations with China for financing for a new $20 billion rail line.[280]

Often, this lending also comes with political benefits for China. Negotiations on rail line financing for Honduras were initiated shortly after the country switched diplomatic recognition from Taiwan to Beijing earlier in 2023.[281] China has an established pattern of lending to Heavily Indebted Poor Countries (HIPC) participants following their initial participation, with the majority of Chinese loans to Comoros, the Republic of the Congo, Côte d'Ivoire, Guinea, Liberia, and Togo occurring after these countries completed the program in the early 2010s.† With the notable exception of Côte d'Ivoire, all of these countries have publicly supported China's conduct in the South China Sea and most have supported China's policies in Hong Kong and Xinjiang (for more information on China's lending to HIPCs and political benefits for China, see Appendix).

China primarily accounts for borrower risk by offering high and adjustable interest rates on loans, which tend to exceed rates provided by Western governments and multilateral institutions.[282] In addition, China typically does not disclose the

---

*In 2010, Honduras' external bilateral debt was $796 million, with China holding $18.3 million. By 2021, Honduran debt increased to $935 million, with $153 million being held by China. By comparison, the United States held only $2 million in Honduran debt in 2010 and $1.4 million in 2021. World Bank, "International Debt Statistics."

†Data on Chinese lending to these countries cover the period from 2000 to 2017. Of the 39 HIPC participants, 26 completed the program before 2010, ten completed the program after 2010, and three are currently applying for or in the program. Among countries that completed the program after 2010, just under 64 percent of lending from China occurred within seven years of finishing the HIPC. AidData, "AidData's Global Chinese Development Finance Dataset, Version 2.0."

terms of its loans, which makes it difficult for developing borrowers to directly compare interest rates across lenders.* A recent working paper by AidData, Harvard, the Kiel Institute, and the World Bank estimates interest rates on China's emergency loans are two and a half times above the IMF's rates.[283] Moreover, China often provides high-interest loans despite a borrower's preexisting debt burden.† In February 2023, China extended a $700 million loan—with an undisclosed interest rate—to Pakistan to float the country's economy as it navigates a debt crisis exacerbated by rising inflation and a series of floods.‡[284] This funding is in addition to the estimated $100 billion Pakistan owes to international creditors and $30 billion it owes China specifically.[285]

China's ability to provide comprehensive debt relief to distressed overseas borrowers is significantly limited by mounting domestic economic challenges. Forgiving loans requires lenders to accept heavy losses, but banks in China are already under pressure due to the country's slowing economy, declining home prices, and stalled real estate market.[286] In addition, the government of China itself faces a debt crisis. The IMF estimates China's total government debt stands at 121 percent of GDP in 2023, a figure that includes hidden borrowing done through financing companies set up by Chinese municipalities and provinces.[287] Moreover, China's long-awaited post-COVID-19 recovery has been slow in coming; deflationary pressures are mounting amid weak demand, pushing China's central bank to ease policy.[288] While reduced lending rates can spur consumption and economic growth, they will add further pressure to China's banks, which are already struggling to maintain profitability. (For more on China's domestic debt challenges, see Chapter 3, Section 2, "Fiscal, Financial, and Debt Problems Weigh Down Beijing's Ambitions.")

Despite a recent decline in new overseas lending, China remains a key financer for many developing borrowers. According to the Inter-American Dialogue's China-Latin America Finance Database, Chinese policy banks lent $813 million to Latin America and the Caribbean in 2022 after extending a single new loan valued at $204 million to Trinidad and Tobago for the purchase of vaccines and medical equipment in 2021.[289] This financing includes $500 million to Brazil from the China Development Bank and $192 million and $121 million to Guyana and Barbados, respectively, from the Export-Import Bank of China.[290] In addition to in-

* In a review of 100 loan contracts signed between 2000 and 2020, researchers at AidData housed within the College of William and Mary found that the Export-Import Bank of China has increased its use of confidentiality clauses in contracts, with every loan in the sample having such a clause since 2015. Anna Gelpern et al., "How China Lends: A Rare Look into 100 Debt Contracts with Foreign Governments," *AidData*, March 2021.

† While the Chinese government does not publish comprehensive data on its lending terms and practices, there are a number of organizations that track and compile what information China and its lending partners do publicly disclose. For example, AidData compiles detailed information on loans from China, including those issued by government agencies, state-owned enterprises, and private and policy banks. Of the 3,103 loans, buyer's credits, and seller's credits extended between 2000 and 2017, there are 1,659 transactions with a known interest rate, 1,940 with a known maturity length, and 1,285 with a known grace period. Samantha Custer et al., "Tracking Chinese Development Finance: An Application of AidData's TUFF 2.0 Methodology," *AidData at William & Mary*, September 29, 2021, 7.

‡ China's approach to lending tends to be more transactional and less transparent than lending through Western countries or multilateral organizations like the IMF. Adam Behsudi, "The 'Rift Is There': China vs. the World on Global Debt," *Politico*, April 11, 2023.

creasing its volume of debt holdings, China remains a creditor for its current outstanding loans, which tie borrowers to China for the duration of repayment. For example, loans on two China-funded infrastructure projects in Bangladesh—the Karnaphuli river tunnel and the Padma bridge rail link—will enter into repayment in November and December of 2023.[291] Due to the terms of these loans, many of which carry maturities of at least 20 years, China will maintain its position as lender to Bangladesh for at least another two decades.[292]

The Global Development Initiative Inserts Chinese Interests into the UN Agenda

In September 2021, during his address to the UN General Assembly, General Secretary Xi unveiled China's newest plan to forge itself into a leader in international development through the Global Development Initiative (GDI). The GDI is explicitly tied to the UN's 2030 Agenda for Sustainable Development* and aims to make China a leader in public health, poverty alleviation, and environmentally responsible economic growth.[293] China has not clarified how exactly it intends to contribute to these goals.[294] Much like BRI, the GDI arrived as a blank slate with little initial policy vision attached, giving China space to adapt the initiative and revise its purported vision to meet evolving foreign policy objectives.

Whereas BRI sought to extend China's influence through bilateral linkages, the GDI seeks to operate multilaterally through the UN. Within a year of its launch, more than 55 countries stated their support for the initiative, calling themselves the "Group of Friends" of the GDI and hosting working sessions at the UN.[295] Co-opting UN platforms benefits China by reducing the costs of coordination, lending legitimacy to its objectives, and amplifying its influence globally.† In addition, BRI has focused on funding infrastructure projects through some development aid but mostly loans. By contrast, in his address to the UN, Xi stated that the GDI would revitalize the economy by providing debt suspension and aid to developing countries, particularly those facing "exceptional difficulties."[296] This suggests that debt relief may become a component of the GDI, perhaps even to large BRI partners, even as China has yet to provide bilateral forgiveness to many of its own borrowers. Any potential multilateral UN-sponsored effort to reduce the debt burdens of countries weighted down by BRI loans would benefit China by sharing the costs of its irresponsible lending while burdening the United States with providing relief for Chinese loans.

*The UN's Sustainable Development Goals are a set of 17 global objectives adopted by all member states in 2015 that "provides a shared blueprint for peace and prosperity for people and the planet, now and into the future." The objectives primarily seek to reduce poverty while improving health and education, reducing inequality, and spurring environmentally sustainable economic growth. United Nations, "Department of Economic and Social Affairs—Sustainable Development."

†For more on China's co-option of UN agencies, see U.S.-China Economic and Security Review Commission, *PRC in International Organizations*, December 3, 2022; U.S.-China Economic and Security Review Commission, Chapter 1, Section 2, "The China Model: Return of the Middle Kingdom," in *2020 Annual Report to Congress*, December 2020, 80–135.

China's Deepening Economic Relationship with Russia

China has tossed an economic lifeline to a strategic partner, buffering Russia's economy from international sanctions and enabling its unprovoked war in Ukraine to continue. Trade between China and Russia reached a record high of $179 billion (1.3 trillion RMB) in 2022, rising 30 percent year-over-year; trade further accelerated from January to September of 2023, rising 32 percent over the same period in 2022.[297] Though China has been Russia's largest trade partner for 12 years, bilateral trade expanded significantly in the six months following the invasion. China accounted for 35 percent of Russian imports between March and September 2022, up from 20 percent over the same period in 2021. Similarly, 20 percent of total Russian exports went to China between March and September 2022, up from 15 percent in 2021.[298] Since the implementation of sanctions on Russia from the United States and its allies, China has seized on the short-term opportunity to purchase cheap commodities from its isolated, resource-rich neighbor, especially oil and gas.[299] China more than doubled its imports of Russian liquified petroleum gas (LPG) in 2022, and China's oil imports from Russia reached a record-level 1.66 million barrels per day in January 2023.[*][300] Russian imports of Chinese semiconductors, a critical dual-use technology, jumped from $200 million in 2021 to more than $500 million in 2022 (though Beijing has reportedly refrained from selling Russia its most advanced chips—those deemed strategically important—such as the Loongson processors).[301] Agricultural trade also expanded, with total Russian exports of agricultural products to China worth $7 billion in 2022, up 41 percent year-on-year.[†][302]

In a demonstration of long-term strategic ambitions that build on the recent acceleration of trade, Russian President Vladimir Putin and Xi Jinping met for a two-day bilateral summit in Moscow in March. In the past, Xi has referred to Putin as his "best and bosom friend," and the two leaders of the nominally non-allied countries with a "no limits" friendship reaffirmed their commitment to deepen relations under the Comprehensive Strategic Partnership of Coordination for the New Era.[303] The framework seeks to move forward development goals and insulate the economies of both nations from further economic restrictions imposed by the United States and its allies and partners, as well as "advance the multi-polarization of the world."[304]

Chinese companies have moved to capture market share in Russia in the wake of multinational corporations' exodus.[305] Although over 1,000 multinational firms have exited Russia since

---

*The previous record was 1.60 million barrels a day in April 2020, driven by China seizing an opportunity to buy cheap oil for its strategic reserves as global demand collapsed at the onset of the pandemic. Olga Yagova and Gleb Gorodyankin, "China Buys Record Volume of Russian Oil as European Demand Dives: Traders," *Reuters*, March 25, 2020.

†Agricultural products from Russia are not targeted by sanctions in order to mitigate food insecurity from supply shortages. Ukraine claims Russia has been stealing grain from occupied territories to sell on the world market since the war began, and this summer it said Russia intends to mask sales of stolen grain to China with software and automation tools. The G7 initiated a plan to track stolen grain from Ukraine in June 2023. Maytaal Angel, "G7 Working on Scheme to Combat Theft of Ukraine Grain, UK Says," *Reuters*, June 12, 2023; Arvin Donley, "Ukraine Claims Russia Preparing to Ship Stolen Grain to China," *World-Grain.com*, July 10, 2023; Alexander Khrebet, "National Resistance Center: Russia Preparing to Export Stolen Grain from Occupied Ukraine to China," *Kyiv Independent*, July 9, 2023.

February 2022, many Chinese companies have stayed and expanded operations while being cautious not to run afoul of international sanctions.[306] Chinese car companies and consumer electronics companies have significantly expanded their market share in Russia, with automakers Chery, Great Wall Motor, and Geely claiming 16.5 percent of passenger car and small commercial vehicle sales in Russia during 2022, up from just 6.3 percent the year before.[307] Other foreign automakers pulled out of the country and several domestic firms had to suspend production after being unable to acquire parts due to economic restrictions.*[308] Chery alone increased its sales in Russia by 31 percent in 2022, even though total new car sales in Russia dropped by 59 percent for the year.[309] Similarly, Chinese smartphone maker Xiaomi increased its market share from 45 percent in 2021 to 80 percent in 2022, and Huawei displaced HP to become the second-largest seller of notebook computers in Russia.[310] In April, the U.S. Commerce Department added 12 Chinese companies to the Entity List for supplying dual-use technology to Russia, including 3HC Semiconductors Co. Ltd., Wynn Electronics Co. Ltd., and Yongli Electronic Components Co. Ltd.[311] In June, the EU followed suit by adding three Chinese companies to an entities list included in its 11th sanctions package against Russia.[312] Then in late September, the Commerce Department sanctioned nine Chinese entities for supplying parts and aerospace components to Russian and Iranian suppliers of unmanned aerial vehicles used by Russia's military, followed by 42 additional Chinese entities on October 6 for supporting Russian military production, including through the sale of U.S.-origin microelectronics used in Russian precision-guided missiles.[313]

Beijing is leveraging its advantageous negotiating position with Russia to lock in favorable terms on long-term sources of energy, agricultural products, and raw metal inputs for its industries.[314] At the Xi-Putin summit in March, Russia committed to deliver at least 98 billion cubic meters (bcm) of gas a year to China by 2030, a more than six-fold increase of what Russia sold to China in 2022.[315] President Putin publicly stated that all parties had concluded "all agreements" on finishing Power-of-Siberia 2, an approximately 1,600 mile pipeline from the Yamal Peninsula that would reroute gas traditionally bound for Europe across Mongolia to China and add 50 bcm of annual gas transport capacity, slightly less than the now defunct Nord Stream 1 pipeline that linked Russia to Germany.[316] In a sign that China is holding out for a better deal on Power-of-Siberia 2, subsequent official statements from Xi made no mention of agreements on the pipeline.[317] Russia appeared to quickly walk back its stance, issuing a revised statement saying that pipeline details still need to be resolved.[318] In May 2023, Russia announced it would vastly increase grain exports to China via the New Land Grain Corridor, a transportation and storage network first proposed by Beijing in 2012.[319] Despite the fact that Russia was the largest exporter of wheat in 2021 and China was the larg-

* In June 2022, CNBC reported that Russian automaker Avtovaz had resumed production of its Lada Granta sedan without numerous safety features it could not install due to sanctions, including airbags, antilock braking systems, and emergency retraction locks on seatbelts. Phil McCausland, "Sanctions Force Russia to Produce Popular Car without Air Bags, Other Safety Features," *CNBC*, June 14, 2022.

est importer, China imported only 12,274 metric tons of 26 million metric tons Russia exported that year, or roughly 0.05 percent of Russia's total.[320] Russia has committed to increase that number to 8 million metric tons, or near one-third of total Russian exports, once the New Land Grain Corridor comes online.*[321] Xi has recently emphasized the need for China to diversify its food supply amid domestic climate shocks and rising trade tensions with the United States, calling agriculture a "foundation of national security."[322]

The RMB's Incremental Advance in Global Finance

Though the RMB is far from displacing the U.S. dollar as the global reserve currency, mechanisms that enable increasing use of RMB in certain payments help to shield countries targeted by U.S. sanctions while providing other countries the ability to circumvent sanctions. According to 2023 second quarter data from the IMF, the U.S. dollar comprises 59 percent of all allocated foreign exchange reserves, while the RMB comprises just 2.5 percent.[323] This puts the RMB well behind the euro at 20 percent, the yen at 5.4 percent, and the pound at 4.9 percent, and roughly equivalent to the Canadian dollar at 2.5 percent.[324] Although small in scale, the presence of the RMB in international reserves challenges the United States by offering an alternative currency to countries seeking to circumvent U.S. and allied-imposed sanctions. This includes direct targets of sanctions, such as Russia and North Korea, as well as third parties looking to continue limited exchange with targeted states. For instance, in the past year, India† and Pakistan have both used RMB to pay for some imports of Russian oil, while Bangladesh agreed to use RMB to settle payment for a nuclear power plant being built by the Russian state-owned Rosatom.[325] Small-scale transactions like these have little impact on RMB internationalization in the aggregate, but they do impact the economic and strategic calculations countries make when assessing if and how to respond to U.S. sanctions. Despite this limited usage, China is nevertheless opportunistic and quick to leverage geopolitical events and economic trends to further RMB internationalization.

China's Incremental Approach to RMB Internationalization

Despite efforts by China to promote its currency, international adoption of the RMB remains limited. It has not attained status as a significant reserve currency, and its share of global payments has not meaningfully increased over the last seven years: in April 2023, the RMB represented 2.29 percent of global reserves, up less than half a percentage point since its share of 1.82 percent in April 2016.[326] Export invoicing across North America and Asia continues to be dominated by the U.S. dollar. By contrast, only 23

* For more on China's food security challenges and policies to address them, see Lauren Greenwood, "China's Interests in U.S. Agriculture: Augmenting Food Security through Investment Abroad," *U.S.-China Economic and Security Review Commission*, May 26, 2022.

† In addition to purchasing some oil in RMB, India and Russia were in talks to establish a rupee-ruble trade system in early 2023. Talks ended without establishing any exchange mechanism due to Indian banks' concerns over expanding engagement with Russia while it was under sanctions, among other issues. K. A. Dhananjay, "End of the Road for India and Russia's Rupee-Ruble Trade?" *Diplomat*, May 22, 2023.

China's Incremental Approach to RMB Internationalization—*Continued*

percent of China's goods trade was denominated in RMB in 2023, well below the peak of 29 percent in 2015.[327] In addition, the RMB has not attained widespread use in international exchange outside of China's bilateral transactions; even within China's own trade, the majority of its transactions are not denominated in RMB.[328] Crucially, China's banking system relies heavily on the dollar for overseas borrowing and lending. According to Bank for International Settlements data, banks in China had cross-border liabilities amounting to $1.6 trillion, with $586 billion (37 percent) being dollar-denominated by Q3 of 2021.[329] Chinese nonfinancial firms issued 36 percent of dollar-denominated bonds issued by emerging market economies as of 2019.[330]

The RMB's lack of progress in gaining international adoption is driven in part by China's own monetary policy. China maintains a mostly closed capital account, meaning that the People's Bank of China tightly controls foreign exchange entering the country and the amount of RMB exiting the country and in circulation internationally. This allows it to manipulate the exchange rate by managing the supply of RMB relative to demand, but limiting the amount of RMB in circulation outside of China comes at the cost of hurting attempts to promote its use internationally.[331] While hindering widespread RMB adoption, these controls prevent capital from exiting the country, forcing businesses and households inside of China to reinvest in the Chinese economy instead of foreign enterprise, thus fueling China's domestic economic development.

Constrained by its domestic priorities, China has pursued an incremental approach to RMB internationalization alongside its more ambitious goal of establishing the RMB as a primary reserve currency.[332] This lower-intensity approach strives to boost the RMB's limited use in mostly bilateral settings, particularly through trade settlement.[333] Although nearly imperceptible in aggregated statistics, this approach has been effective in providing an alternative financial architecture for limited circumvention of some elements of U.S. economic statecraft.

Following the imposition of Western sanctions in response to the invasion of Ukraine, Russia has become increasingly reliant on China as an import source and export destination, a fact China has capitalized on by increasing the use of RMB in its trade with Russia.[334] The RMB's share in Russian import settlements rose from 4 percent to 23 percent in 2022, and now nearly all Chinese purchases of Russian commodities—including oil, coal, and some metals—are settled in RMB.[335] To accommodate this growing trade, China's commercial and policy banks have begun building out their capacity to facilitate RMB-based cross-border transactions with Russia, including by promoting the adoption of China's Cross-Border Interbank Payment System (CIPS).[336] Russia also appears to be embracing the RMB. At the start of 2023, the Russian Finance Ministry began selling RMB instead of U.S. dollars and what it deems other "unfriendly" Western currencies.[337] The ministry also developed a new structure for the country's sovereign wealth fund to hold 60 percent of its assets in RMB, including proceeds from oil and gas.[338] As a result, the Chinese RMB effectively replaced the U.S. dollar as the most traded currency in Russia in February of 2023—but only in Russia, thus effecting only a minimal fraction of global U.S. dollar transactions.[339] China's willingness to help international rulebreakers like Russia sidestep U.S. sanctions decreases the efficacy and deterring power of this key tool in U.S. economic statecraft.

In addition to Russian gas, the RMB is now being used to settle some oil trades between China and countries across the Middle East at an increasing, albeit limited, rate. During his December visit to Riyadh, Xi told Gulf Cooperation Council leaders that China would work toward buying energy commodities in RMB instead of the dollar, seeking to "make full use of the Shanghai Petroleum and National Gas Exchange as a platform to carry out RMB settlement of oil and gas trade."[340] To that end, in 2023, China settled its first liquified natural gas (LNG) purchase in RMB, with the state-owned China National Offshore Oil Corporation (CNOOC) purchasing 65,000 tons of LNG from the United Arab Emirates through the French firm TotalEnergies.[341] While Iraq still settles its oil deals in U.S. dollars, in February 2023, the Iraqi central bank stated it would allow non-oil trade with China to be settled using the RMB.[342] Despite these developments, the U.S. dollar is still used in 80 percent of global oil sales, and Saudi Arabia—which sells more than 25 percent of its total oil exports to China—trades exclusively in U.S. dollars.*[343] Although it is unlikely that any oil-producing country will shift any large portion of settlement from the dollar to RMB in the near term, the growing presence of the RMB in economic exchanges could lay the foundation for a potential transition. (See Chapter 1, Section 2, "U.S.-China Security and Foreign Affairs" for more on China's pursuit of a greater diplomatic role in the Middle East.)

China is using finance instruments like currency swap lines as an opportunity to incrementally expand the RMB's use and centrality among China's trading partners and financially distressed countries. A currency swap line is an arrangement between two central banks to exchange currency in order to provide foreign currency liquidity to domestic banks without dipping into foreign reserves. Through a swap line, a central bank can borrow RMB from the People's Bank of China and lend these funds to local banks that in turn lend to firms engaged in commercial relations with China (with funds typically used for goods trade, Chinese construction contracts, or investment into Chinese government bonds).[344] Drawing funds through a swap also bolsters foreign exchange reserves, which may help prevent a balance of pay-

*Neither China nor Saudi Arabia provide comprehensive statistics on RMB settlement in cross-border transactions; however, it is unlikely the RMB comprises a significant portion of bilateral exchange. In December 2022, China highlighted its first-ever RMB transaction with Saudi Arabia for products from China's Yiwu City, suggesting there is trade currently occurring in RMB. Ministry of Foreign Affairs of the People's Republic of China, *Foreign Ministry Spokesperson Mao Ning's Regular Press Conference on December 9, 2022*, December 9, 2022.

ment crisis wherein a country is unable to pay for essential imported goods and services due to a lack of foreign currency liquidity.[345] Such swaps can thus be an attractive option for indebted countries with substantial engagement with China. As of 2021, China has established swap lines with at least 38 countries,* amounting to $544 million outstanding, with a preference for countries that have significant export exposure to Chinese goods.[346] These swap lines tend to be infrequently used, particularly in comparison with U.S. swap lines.[347] Nonetheless, the swaps speak to China's evolving efforts to more thoroughly interconnect countries around the globe to its own sphere of influence.

The incremental advance of the RMB may further the development of alternative financial payment infrastructure, increasing China's ability to mitigate financial sanctions. At the same time that marginal RMB use allows China to exert more influence over its trading partners and debt-distressed countries, it also creates impetus for these countries to participate in alternative financial infrastructure that specializes in RMB settlements, namely China's CIPS. Cambodia provides an example of how incremental RMB internationalization may promote the use of CIPS. China has long been one of Cambodia's largest financial contributors, but the country's economic reliance on China intensified after the two signed a free trade agreement in 2020.[348] According to figures provided by China's General Administration of Customs, Cambodia's trade deficit with China nearly doubled from $6.6 billion in 2020 to $12.4 billion in 2022.[349] In addition, China is Cambodia's largest trading partner overall, producing one-third of all the country's imports.[350] Cambodia's rising purchases of Chinese imports intensified its demand for RMB, likely motivating the central bank's decision to join CIPS, which was announced in February 2023.[351] By using CIPS, China's trade settlements with Cambodia will fall outside of payments systems controlled by the United States and its allies, thus insulating these transactions from U.S. and partnered sanctions. Despite rising use of the RMB, China still faces limitations when it comes to effectively mitigating the impact of U.S. and multilateral financial sanctions, most obviously the trillions of dollars' worth of assets it holds in U.S. and allied markets.[352]

China is moving to increase Argentina's use of the RMB as that country experiences severe and prolonged economic challenges with few viable alternatives. China and Argentina have participated in currency swap line agreements every year from 2008 to 2021.[353] The frequency and value of these swaps along with the use of RMB in external transactions have increased as Argentina's debt and domestic economic turmoil have intensified in the past five years. Argentina's external public debt reached $394 billion by February of 2023, with at least $17 billion in loans being funded by Chinese banks between 2005 and 2019.[354] A drought earlier this year caused a sharp drop in

---

*China has swap lines with 38 countries but 39 central banks, including Hong Kong. China's largest swap line is with Hong Kong and valued at $69 billion. Hector Perez-Saiz and Longmei Zhang, "Renminbi Usage in Cross-Border Payments: Regional Patterns and the Role of Swaps Lines and Offshore Clearing Banks," *IMF Work Paper*, March 31, 2023, 9.

Argentina's agricultural export revenue, and a survey of analysts conducted in May by Argentina's central bank forecasts an annual inflation rate of 149 percent for 2023.[355] These factors—coupled with Argentina's unsustainable debt burden, series of defaults on its sovereign bonds, and high global interest rates—have exacerbated devaluation pressure on the Argentine peso and limited the country's ability to build up its foreign reserves.[356] In need of substantial and sustained liquidity injections to alleviate some of this pressure and with few options available, in April 2023, Argentina announced it would start purchasing $1 billion worth of Chinese imports in RMB as a measure to relieve the country's dwindling dollar reserves.[357] Argentina also renewed and extended its swap line agreement with China in June 2023, doubling the amount of funds accessible to nearly $10 billion.[358]

China plays on the desire of third countries for strategic nonalignment in the mounting U.S.-China geostrategic competition, offering the RMB as a competitive alternative to the U.S. dollar. Brazil offers an example.[359] In 2018, Brazil held no RMB in its foreign reserves. By the end of 2022, however, the RMB accounted for 5.4 percent of central bank holdings, making it Brazil's second-largest currency reserve behind the dollar.*[360] China is Brazil's largest source of imports and largest destination for exports, with bilateral trade between the two valued at $157 billion in 2022.†[361] Agricultural exports from Brazil play a particularly important role in bilateral trade, with China purchasing $48 billion in agricultural products in 2022, including nearly 70 percent of Brazil's total soybean exports.[362] In March 2023, Brazil and China reached an agreement to conduct bilateral trade and financial transactions in their own currencies, the RMB and the real.[363] Although Brazil and China have not yet publicly settled any bilateral trade using either currency, the scale of the two countries' agricultural trade lays the foundation for a substantial shift away from the U.S. dollar and toward the RMB if they were to begin settling transactions with the RMB or the real. Moreover, during his visit to Beijing in April, Brazilian President Luiz Inácio Lula da Silva called on other developing countries to replace the dollar with domestic currency in trade.[364] At the BRICS (Brazil, Russia, India, China, South Africa) summit in August 2023, Brazil's Finance Minister Fernando Haddad suggested that Brazil and Argentina could settle bilateral trade using RMB, although no actions have yet been taken in this direction.[365] A member of BRICS and one of the largest developing countries in terms of GDP and population, Brazil's limited but growing interest in de-dollarization highlights the potential long-term impact gradual RMB internationalization may have on the United States' ability to coordinate sanctions across third countries.

---

*The U.S. dollar currently comprises 80 percent of Brazil's foreign exchange reserves. *Reuters*, "Yuan Tops Euro as Brazil's Second Currency in Foreign Reserves," March 31, 2023.

†Brazil is one of 58 countries the government of China identified as having a trade surplus with China in 2022. General Administrations of Customs of China, *December 2022 Import and Export Commodity by Main Country (Region) Gross Table (USD Value)* (2022年12月进出口商品主要国别(地区)总值表(美元值)).

China's Expanding Energy Partnerships

China's import demand for energy commodities, including gas and oil, has increased as its economy marginally rebounds relative to its performance during COVID-19.* China's oil demand topped 16 million barrels per day in April 2023, up from 12.7 million barrels in April 2022, as cheap Russian crude feedstock bolstered Chinese refiners' production.[366] China further benefited from international limits on Russian crude imports by selling a portion of the newly refined oil to countries that imposed the ban, including Australia, Canada, the EU, Japan, the UK, and the United States.† [367] Similarly, China's imports of natural gas rose to a five-month high in June 2023, and the International Energy Agency forecasts China's gas consumption in 2023 to increase by more than 6 percent relative to 2022.[368] To spur growth, meet demand, and fortify energy security against potential sanctions, China has sought to expand its trade relations with existing oil and gas suppliers in Central Asia as well as establish new relations with resource-rich actors across South Asia and the Middle East, including Qatar and the Taliban in Afghanistan. China's preference for partnering with high-risk and autocratic countries helps to sustain and stabilize these governments while offering a viable path to circumvent U.S. leadership and U.S. economic statecraft.

China seeks to finalize long-stalled negotiations on an expansion to the Central Asia gas pipeline to insulate itself from U.S. sanctions while bolstering energy security and supply. Turkmenistan is currently China's largest overland supplier of natural gas, able to provide 55 billion cubic meters (bcm) of energy annually through Lines A, B, and C of the Central Asia-China gas pipeline.‡ [369] China has sought to expand this supply through BRI funding for a fourth (Line D), which would provide an additional 30 bcm of gas annually to China.§ [370] In the decade since an agreement was reached on the expansion, the pipeline—like so many BRI projects—remains incomplete.[371] This year, China renewed its efforts to complete the project by prioritizing construction on Line D as a way to secure gas inflows from its long-term overland partners, although it remains to be seen if any substantial progress is made.[372] In addition to greater supply, the pipeline's overland delivery system and location increases China's energy security, since Turkmenistan is unlikely to participate in U.S.-led sanctions given the economic significance of gas exports to China for its economy.[373]

---

* China's apparent rebound in demand for energy commodities is driven primarily by revived travel following the lifting of the Zero-COVID policy rather than significantly boosted industrial activity.

† As outlined in the Center for Research on Energy and Clean Air's analysis, China's resale of refined Russian crude not only undermines the impact of sanctions on Russia but also increases U.S. and its partners' dependence on China. Hubert Thieriot et al., "The Laundromat: How the Price Cap Coalition Whitewashes Russian Oil in Third Countries," *Center for Research on Energy and Clean Air*, April 19, 2023.

‡ Quantities of 55 bcm represent the upper limit of transportation capacity. In 2021, Turkmenistan exported only 31 bcm of gas to China. Enerdata, "Turkmenistan Plans to More than Double Gas Exports to China to 65 bcm/year," October 20, 2022.

§ China consumed approximately 378.7 bcm of natural gas in 2021. China currently sources approximately 12 percent of its natural gas from Turkmenistan. Jessica Aizarani, "Natural Gas Consumption in China from 1998 to 2021," *Statista*, March 2, 2023; Enerdata, "Turkmenistan Plans to More than Double Gas Exports to China to 65 bcm/year," October 20, 2022.

China is also developing new energy partnerships with Gulf States and South Asia, including entering into a drilling contract with the Taliban. In November 2022, China and Qatar agreed to a $60 billion 27-year contract for LNG.[374] The deal would export 4 million tons of additional LNG to China annually.[375] In terms of access to oil, China has renewed overtures to access Afghanistan's natural resources, particularly in the energy and mineral sectors, following the United States' withdrawal from Afghanistan.[376] In January 2023, China's state-owned Xinjiang Central Asia Petroleum and Gas Company signed an agreement with Taliban leadership to drill for oil in Afghanistan in January 2023.[377]

China Eases Overt Coercion as It Increases Overtures to Europe

After years of mounting aggression in its external economic relations, in 2023 China moderated its use of overt coercion against developed countries. Beginning in 2016 and reaching a peak in 2020, economic coercion has been an oft-used tool of Beijing's foreign policy, applied against both developed and underdeveloped nations alike.* Although China's use of overt coercive tactics has moderated in the past three years, between 2020 and 2022, the Australian Strategic Policy Institute recorded 73 instances of attempted coercion by China.[378] Notably, China's recent application of coercive tactics tends to focus on wealthier countries, with two attempts on Eswatini and one on Brazil and Bangladesh standing out as exceptions.†[379]

Complications in Tracking China's Economic Coercion

In an effort to address China's use of economic coercion, the United States and its partners and allies are developing policies to counteract China's intimidation tactics. In March 2023, the EU reached an agreement on a market-wide anticoercion instrument following China's attempted economic manipulation of Lithuania.‡[380] In May 2023, the G7 announced their intent to address "a disturbing rise in incidents of economic coercion" by sharing information through the newly created Coordination Platform on Economic Coercion.[381] The following month, Australia, Canada,

---

* Over this period, China's use of coercion increased in frequency, rising from just under ten cases in 2016 to a height of 38 cases in 2020. In addition, China is increasingly using coercion to pursue policy goals outside of its typical "red line" concerns, such as the recognition of Taiwan, to respond to rising issues, such as restrictions on the use of Huawei equipment in telecommunications infrastructure. Aya Adachi, Alexander Brown, and Max J. Zenglein, "Fasten Your Seatbelts: How to Manage China's Economic Coercion," *Mercator Institute for China Studies*, August 25, 2022; Fergus Hunter et al., "Countering China's Coercive Diplomacy," *Australian Strategic Policy Institute*, February 22, 2023.

† In the case of Eswatini, China sought to force the country to end its relations with Taiwan and recognize the One China policy, traditional "red line" issues for the Chinese government. In February 2020, China threatened to "isolate" Eswatini from the international community and prohibited its citizens from entering any Chinese embassy (with the exclusion of the consulate in Johannesburg). In the case of Brazil and Bangladesh, China sought to punish the countries for behaviors outside of its typical "red line" issues, including in response to the Brazilian president's criticism of China's response to COVID-19 and Bangladesh's interest in participating in the Quadrilateral Security Dialogue. Fergus Hunter et al., "Countering China's Coercive Diplomacy," *Australian Strategic Policy Institute*, February 22, 2023.

‡ For more information on China's attempted economic coercion of Lithuania and the EU's anticoercion instrument, see Chapter 5, Section 1, "Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation."

Complications in Tracking China's Economic Coercion—*Continued*

Japan, New Zealand, the UK, and the United States endorsed a joint declaration against trade-related economic coercion and nonmarket practices.[382] While neither the G7 statement nor the joint declaration mention China, officials from both the British government and the USTR point to China's exertion of economic pressure on Australia and Lithuania in political disputes as an impetus for multilateral cooperation to address economic coercion.[383]

Key to developing an effective anticoercion policy is establishing a clear and comprehensive definition of economic coercion that covers all cases and provides the basis for a unified approach. Defining and measuring China's use of economic intimidation, however, is difficult, and multiple definitions exist. In general, coercion is defined as an effort to punish or influence a foreign entity's behavior through the use of economic and noneconomic sanctions.[384] Economic sanctions typically include trade and investment restrictions, tourism bans, and popular boycotts, while noneconomic sanctions may include arbitrary detention or execution, cyberattacks, and state-issued threats.[385]

Where definitions of coercion tend to diverge is in identifying the intended targets of intimidation. For example, the Australian Strategic Policy Institute and the Mercator Institute for China Studies (MERICS) both provide effective and informative data on China's economic intimidation while focusing on different aspects of coercion; the Australian Strategic Policy Institute focuses on China's coercive actions against foreign governments, while MERICS focuses on China's coercion of foreign firms.[386] In addition, given its focus on firms, MERICS includes administrative discrimination as a form of coercion but does not count arbitrary detention or cyberattacks.[387] These differences in definition lead to different counts regarding the number of coercive actions China took in a given year; for instance, the Australian Strategic Policy Institute found 16 instances of coercion in 2021, while MERICS found 13.[388] Both approaches provide compelling insights into different aspects of China's intimidation tactics, and differences in data highlight the importance of developing a broad and comprehensive understanding of China's coercive actions against diverse targets for policy purposes.

In addition to definitional differences, assessments of China's coercion tend to focus on overt intimidation and do not include subtler and more difficult-to-detect pressure applied in private settings due to a lack of publicly available information.[389] The underreporting of private coercion has likely led to a significant undercounting of China's coercive actions. MERICS asserts that the "majority of cases [of coercion] remains invisible" due to the informal nature of China's tactics and targeted entities' fear of reprisal.[390] Based on this analysis, MERICS concludes that "China's most effective form of economic coercion might therefore be covert pressure on companies."[391]

China's declining use of overt coercion is likely driven by several factors. First, there are increasing multilateral efforts to counteract China's economic intimidation, including the G7's Coordination Platform on Economic Coercion and the EU's anticoercion instrument. Second, China is attempting to improve its international image following years of aggressive diplomacy and its poor handling of the COVID-19 pandemic.[392] In the past year, Xi has attempted to charm the heads of foreign states, notably European leaders, in an attempt to win international supporters while dividing potential coalitions of opposition (for more information on the EU's anticoercion instrument and China's charm offensive in Europe, see Chapter 5, Section 1, "Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation"). Finally, China's economic coercion has also backfired at times, causing significant consequences for China. For instance, its informal ban on Australian coal in response to Australia's call for an investigation into the origins of COVID-19 may have partially contributed to a coal shortage and subsequent series of blackouts across China in the summer of 2021, while Australia was able to sell the coal to other buyers.*[393] Continued trade restrictions against imports from Taiwan in the leadup to Taiwan's 2024 elections constitute a notable exception to China's otherwise moderated approach to coercion. (For more on China's coercion of Taiwan, see Chapter 5, Section 2, "Taiwan.")

China has hosted leaders from developed countries in an attempt to revitalize economic ties, but Beijing's refusal to offer substantive concessions—including taking steps to foster a level economic playing field and market reciprocity and to provide decisive statements condemning Russia's unprovoked war in Ukraine—has undermined the campaign's effectiveness. Between November 2022 and April 2023, Xi hosted leaders from Germany, Spain, France, and the EU in an effort to smooth over relations following Russia's unprovoked invasion of Ukraine and potentially restart the currently stalled Comprehensive Agreement on Investment.†[394] Xi did not make any substantial concessions following these meetings, however, beyond a brief call to Ukraine's President Volodymyr Zelenskyy in late April 2023 following the repeated requests of European leaders.[395] In December 2022, Australian Foreign Affairs Minister Penny Wong visited Beijing, marking the first time an Australian minister had done so in three years.[396] In discussions with her counterpart from China, Minister Wong raised issues of human rights and "trade blockages" as well as the need to manage tensions between the United States and China.[397] In February 2023, Australia's and China's trade ministers held talks to ensure "the timely and full resumption of trade" following China's imposition of sanctions in 2020 on a range of Australian goods, including coal and wine, in response to calls by then Prime Minister Scott Morrison for an investigation into the origins of COVID.[398] China partially reversed course on coal by allowing

* For more on China's coercive response to Australia, see U.S.-China Economic and Security Review Commission, Chapter 2, Section 1, "Year in Review: Economics and Trade," in *2021 Annual Report to Congress*, November 2021, 150–152.

† For more information on the Comprehensive Agreement on Investment and Europe's relations with China, see Chapter 5, Section 1, "Europe-China Relations; Convergence and Divergence in Transatlantic Cooperation."

Australian imports back into the country in January 2023, although significant sanctions remain on a variety of goods.[399]

Despite its softening approach in 2023, China continues to strengthen formal legal channels through which to implement coercive tactics. In July 2023, China implemented a new and sweeping Foreign Relations Law aimed at countering trade sanctions by the United States and its partners and allies.* The law builds on China's 2021 Anti-Foreign Sanction Law, which prohibits companies operating in China from complying with foreign sanctions.[400] China specifically takes issue with U.S.-led export controls on semiconductors and U.S. efforts to reduce reliance on Chinese suppliers in critical sectors.[401] In the new legislation, China made several thinly veiled references to coercion and sanctions, reiterating its intent "to take corresponding countermeasures" against actions that it perceived as "endanger[ing] China's sovereignty, security, and development interests."[402] In an effort to communicate U.S. policy on export controls and deepen discussion on persistent economic issues between the United States and China, U.S. Commerce Secretary Raimondo recently announced the creation of an export control enforcement information exchange platform with China. The platform aims to reduce misunderstanding of U.S. national security policies by China, with the first meeting held in August 2023.[403]

---

*For more on China's Foreign Relations Law, see Chapter 1, Section 2, "U.S.-China Security and Foreign Affairs."

Note: The Commission has issued an errata retracting this appendix. The errata may be found at: *https://www.uscc.gov/sites/default/files/2024-02/Errata_to_2023_Annual_Report.pdf*

Appendix: Highly Indebted Poor Countries' Diplomatic Support for China's Controversial International Positions

Country	Year of HIPC Initiative Completion	Total Loans Provided by China Following HIPC Initiative Completion	Total of All Chinese Loans	Publicly Supported China's Xinjiang Policy*	Publicly Supported China's Conduct in the South China Sea†	Publicly Supported China's Positions on Hong Kong‡
Afghanistan§	2010					
Benin	2003	$1.0 Billion	$1.1 Billion		X	
Bolivia	2001	$4.1 Billion	$4.1 Billion			
Burkina Faso	2002	$0	$0	X		
Burundi	2009	$159 Million	$182 Million	X	X	X
Cameroon	2006	$1.8 Billion	$1.8 Billion	X	X	X
Central African Republic	2009	$89 Million	$136 Million		X	X
Chad	2015	$41 Million	$3.2 Billion			
Comoros	2012	$146 Million	$185 Million	X	X	
Republic of the Congo	2010	$6.6 Billion	$11.4 Billion	X	X	X
Democratic Republic of the Congo	2010	$2.6 Billion	$12.1 Billion	X	X	
Côte d'Ivoire	2012	$549 Million	$960 Million			
Eritrea	Pre-Decision	$0	$636 Billion	X	X	X
Ethiopia	2004	$14.8 Billion	$14.8 Billion		X	
The Gambia	2007	$367 Million	$367 Million		X	
Ghana	2004	$31.1 Billion	$31.1 Billion			
Guinea	2012	$21.8 Billion	$21.9 Billion		X	X

*"Publicly Supported China's Xinjiang Policy" refers to countries that signed a letter in July 2019 publicly declaring their support for China's Xinjiang policies, as well as subsequent signers and other public statements.

†"Publicly Supported China's Conduct in the South China Sea" refers to countries that declared their support for China's conduct in the South China Sea via official statements and declarations.

‡"Publicly Supported China's Positions on Hong Kong" refers to countries that supported Beijing's suppression of the 2019 Hong Kong prodemocracy protests as well as states that declared their support for China's 2020 Hong Kong National Security Law.

§Afghanistan received two loans of unspecified amounts from the People's Bank of China in 2008. Both loans went to finance a joint Afghan-Chinese venture in copper mining.

Country	Year of HIPC Initiative Comple-tion	Total Loans Provided by China Following HIPC Initiative Completion	Total of All Chinese Loans	Publicly Supported China's Xinjiang Policy	Publicly Supported China's Conduct in the South China Sea	Publicly Supported China's Positions on Hong Kong
Guinea-Bissau	2010	$19.3 Million	$123 Million		X	X
Guyana	2003	$878 Million	$878 Million			
Haiti	2009	$0	$0			
Honduras	2005	$297 Million	$297 Million			
Liberia	2010	$540 Million	$549 Million		X	
Madagascar	2004	$250 Million	$250 Million		X	
Malawi	2006	$916 Million	$916 Million		X	
Mali	2003	$2.5 Billion	$2.6 Billion		X	
Mauritania	2002	$1.7 Billion	$1.7 Billion		X	X
Mozambique	2001	$7.9 Billion	$7.9 Billion	X	X	X
Nicaragua	2004	$4.9 Million	$4.9 Million			
Niger	2003	$2.7 Billion	$2.7 Billion		X	X
Rwanda	2005	$376 Million	$384 Million			
São Tomé and Príncipe	2007					
Senegal	2004	$3.1 Billion	$3.1 Billion		X	
Sierra Leone	2006	$1.6 Billion	$1.6 Billion		X	X
Somalia	Com-pleting Program		$0	X	X	X
Sudan	Com-pleting Program		$6.7 Billion	X	X	X
Tanzania	2001	$12.6 Billion	$12.6 Billion		X	X
Togo	2010	$601 Million	$786 Million	X	X	X
Uganda	2000	$975 Million	$975 Million	X	X	X
Zambia	2005	$4.5 Billion	$4.6 Billion	X	X	X

Source: Various.[404]

ENDNOTES FOR SECTION 1

1. U.S. Department of State, *2023 Investment Climate Statements: China*, 2023; China National Development and Reform Commission and Ministry of Commerce, *Special Administrative Measures (Negative List) for Foreign Investment Access (2021 Edition)* (外商投资准入特别管理措施(负面清单) (2021 年版)), December 27, 2021. Translation; Office of the United States Trade Representative, *Findings of the Investigation into China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation under Section 301 of the Trade Act of 1974*, March 22, 2018, 23–34.
2. Gillian Tett, "Prepare for a Multipolar Currency World," *Financial Times*, March 30, 2023.
3. Joe Leahy and James Politi, "U.S. and China Address Trade Tensions in Rare High-Level Washington Meeting," *Financial Times*, May 25, 2023.
4. U.S. Department of State, *Digital Press Briefing with John F. Kerry, Special Presidential Envoy for Climate*, July 19, 2023; U.S. Department of the Treasury, *Secretary of the Treasury Janet L. Yellen's Meeting with Premier Li Qiang of the People's Republic of China*, July 7, 2023; U.S. Department of State, *Secretary Blinken's Visit to the People's Republic of China (PRC)*, June 19, 2023.
5. U.S. Department of the Treasury, *Remarks by Secretary of the Treasury Janet L. Yellen at Press Conference in Beijing, the People's Republic of China*, July 8, 2023.
6. Joe McDonald, "U.S. Treasury Chief Yellen and China's No. 2 Aim for Improved Communication after Trade Disputes," *Associated Press*, July 7, 2023.
7. Zachary Warmbrodt, "Yellen Says China Talks 'Productive' at End of Beijing Trip," *Politico*, July 8, 2023; Janet L. Yellen, "Remarks by Secretary of the Treasury Janet L. Yellen on the U.S.-China Economic Relationship at Johns Hopkins School of Advanced International Studies," *U.S. Department of the Treasury*, April 20, 2023.
8. Janet L. Yellen, "Remarks by Secretary of the Treasury Janet L. Yellen on the U.S.-China Economic Relationship at Johns Hopkins School of Advanced International Studies," *U.S. Department of the Treasury*, April 20, 2023.
9. *Bloomberg*, "Biden's Commerce Secretary Raimondo Says Trade Can Stabilize US-China Ties," August 27, 2023.
10. Trade Act of 1974 §307, as codified at 19 U.S.C §2417.
11. David Lawder, "U.S. Review of China Tariffs Won't Depend on Trade 'Breakthrough,' Official Says," *Reuters*, May 30, 2023.
12. U.S. Trade Representative, "Questions for the Record for Ambassador Katherine Tai," *U.S. Senate Committee on Finance*, July 2023, 13.
13. Colby Smith, "U.S. Officials Play Down Hopes of End to Restrictions on China Trade," *Financial Times*, July 16, 2023.
14. White House, *Remarks by President Biden in a Press Conference*, May 21, 2023.
15. Marti Flacks, "What's Next for the Uyghur Forced Labor Prevention Act?" *Center for Strategic and International Studies*, June 21, 2023.
16. Gina M. Raimondo, "U.S. Secretary of Commerce Gina Raimondo Delivers Remarks Ahead of Bilateral Meeting with PRC Minister of Commerce Wang Wentao," *U.S. Department of Commerce*, August 28, 2023.
17. European Commission, "Speech by President von der Leyen on EU-China Relations to the Mercator Institute for China Studies and the European Policy Centre," March 30, 2023.
18. European Commission, "Speech by President von der Leyen on EU-China Relations to the Mercator Institute for China Studies and the European Policy Centre," March 30, 2023.
19. White House, *G7 Hiroshima Leaders' Communiqué*, May 20, 2023.
20. American Chamber of Commerce in China, "25th Annual American Business in China White Paper & Business Sentiment Flash Survey Released," April 28, 2023.
21. U.S. Chamber of Commerce, "U.S. Chamber Flags Mounting Risks Posed by Chinese Policies, Calls for Engagement to Safeguard Trade and Commerce That Does Not Pose National Security Risks," May 10, 2023.
22. Elaine Yu and Yoko Kubota, "Companies Try New Strategy to Stay in China: Siloing," *Wall Street Journal*, June 25, 2023; Yuan Yang and Tom Mitchell, "European Businesses Forced to 'Reduce, Localise and Silo' in China," *Financial Times*, September 21, 2022.
23. Elaine Yu and Yoko Kubota, "Companies Try New Strategy to Stay in China: Siloing," *Wall Street Journal*, June 25, 2023.
24. Elaine Yu and Yoko Kubota, "Companies Try New Strategy to Stay in China: Siloing," *Wall Street Journal*, June 25, 2023.
25. Jude Blanchette and Andrew Polk, "Dual Circulation and China's New Hedged Integration Strategy," *Center for Strategic and International Studies*, August 24,

2020; *Xinhua*, “The Politburo Standing Committee of the CCP Central Committee Held a Meeting Chaired by Xi Jinping” (中共中央政治局常务委员会召开会议 习近平主持), May 14, 2020. Translation.
26. Damien Ma, “Reordering the Global Order: A World of ‘Nodes and Acquends,’” *MacroPolo*, August 31, 2023.
27. *Bloomberg*, “China Premier Warns Economic Barriers Will Lead to Confrontation,” June 26, 2023.
28. Lilian Zhang, “Intel CEO Wraps Up Low-Key China Trip as U.S. Chip Giant Taps Hot Chinese Demand for Semiconductors,” *South China Morning Post*, July 14, 2023; Joe Leahy et al., “Can China’s Charm Offensive with Business Ease U.S. Tensions?” *Financial Times*, June 30, 2023; Linda Lew, “GM CEO Mary Barra Visits China, Meets Shanghai Party Chief,” *Bloomberg*, May 24, 2023; *Reuters*, “Airbus CEO Faury Meets Chinese Officials ahead of Macron Visit,” April 4, 2023; Iris Deng, “Apple CEO Tim Cook Meets with New Premier Li Qiang on Trip to Reaffirm Commitment to China Market,” *South China Morning Post*, March 28, 2023; Jo He-rim, “Samsung Chief Travels to China First Time in Three Years, Meets with Key Officials,” *Korea Herald*, March 26, 2023.
29. *Reuters*, “Xi Jinping Meets Bill Gates in China, Calls Him ‘an Old Friend,’” June 16, 2023.
30. Zeyi Yang, “Elon Musk’s Quiet, Untweeted China Trip,” *MIT Technology Review*, June 7, 2023; *Reuters*, “Elon Musk’s Whirlwind China Trip Included Talks with Vice Premier,” June 1, 2023; *Associated Press*, “China’s Commerce Minister Meets Tesla’s Musk, Promises Support to Foreign Companies,” May 31, 2023.
31. Raffaele Huang and Yoko Kubota, “Tesla Joins Chinese Carmakers in Pledge to End EV Price War,” *Wall Street Journal*, July 6, 2023.
32. Demetri Sevastopulo and Kana Inagaki, “Joe Biden Waters Down Indo-Pacific Economic Framework to Win More Support,” *Financial Times*, May 20, 2022.
33. U.S. Department of Commerce, *Substantial Conclusion of Negotiations on Landmark IPEF Supply Chain Agreement*, May 27, 2023.
34. U.S. Department of Commerce, *U.S. Department of Commerce Publishes Text of Landmark Indo-Pacific Economic Framework for Prosperity (IPEF) Supply Chain Agreement*, September 7, 2023; U.S. Department of Commerce, *Press Statement on the Substantial Conclusion of IPEF Supply Chain Agreement Negotiations*, May 27, 2023; U.S. Department of Commerce, *Substantial Conclusion of Negotiations on Landmark IPEF Supply Chain Agreement*, May 27, 2023.
35. U.S. Department of Commerce, *Indo-Pacific Economic Framework for Prosperity Agreement Relating to Supply Chain Resilience*, September 7, 2023; Aiden Arasasingham et al., “Assessing IPEF’s New Supply Chains Agreement,” *Center for Strategic and International Studies*, May 31, 2023.
36. Emily Benson, Japhet Quitzon, and William Alan Reinsch, “Securing Semiconductor Supply Chains in the Indo-Pacific Economic Framework for Prosperity,” *Center for Strategic and International Studies*, May 30, 2023.
37. Sui-Lee Wee, “Vietnam and U.S. Forge Deeper Ties as Worries Rise about China,” *New York Times*, September 8, 2023.
38. Jackie Northam, “Biden Ends Hanoi Trip by Making Trade Agreement with Vietnam,” *NPR*, September 11, 2023; White House, *FACT SHEET: President Joseph R. Biden and General Secretary Nguyen Phu Trong Announce the U.S.-Vietnam Comprehensive Strategic Partnership*, September 10, 2023.
39. Francesco Guarascio, “Analysis: Chinese Suppliers Race to Vietnam as COVID Let-Up Opens Escape Rout from Sino-U.S. Trade War,” *Reuters*, March 16, 2023.
40. Jackie Northam, “Biden Ends Hanoi Trip by Making Trade Agreement with Vietnam,” *NPR*, September 11, 2023.
41. Jake Sullivan, “Remarks by National Security Advisor Jake Sullivan on the Biden-Harris Administration’s National Security Strategy,” *White House*, October 13, 2022.
42. Gregory C. Allen, Emily Benson, and Margot Putnam, “Japan and the Netherlands Announce Plans for New Export Controls on Semiconductor Equipment,” *Center for Strategic and International Studies*, April 10, 2023.
43. Emily Benson and Gregory C. Allen, “A New National Security Instrument: The Executive Order on Outbound Investment,” *Center for Strategic and International Studies*, August 10, 2023.
44. U.S. Department of Commerce, Bureau of Industry and Security, *Commerce Implements New Export Controls on Advanced Computing and Semiconductor Manufacturing Items to the People’s Republic of China (PRC)*, October 7, 2022.
45. Cheng Ting-fang And Shunsuke Tabeta, “China’s Chip Industry Fights to Survive U.S. Tech Crackdown,” *Nikkei Asia*, November 30, 2022.
46. U.S. Census Bureau, *USA Trade Online*.

47. U.S. Department of Commerce, *Commerce Department Outlines Proposed National Security Guardrails for CHIPS for America Incentives Program*, March 21, 2023; U.S. Department of the Treasury, *Treasury Department Mobilizes Semiconductor Supply Chain Investment Incentives with Key CHIPS Investment Tax Credit Guidance*, March 21, 2023.
48. Jeremy Mark and Dexter Tiff Roberts, "United States-China Semiconductor Standoff: A Supply Chain under Stress," *Atlantic Council*, March 2023, 3.
49. Cheng Ting-fang and Shunsuke Tabeta, "China's Chip Industry Fights to Survive U.S. Tech Crackdown," *Nikkei Asia*, November 30, 2022.
50. Cheng Ting-fang and Shunsuke Tabeta, "China's Chip Industry Fights to Survive U.S. Tech Crackdown," *Nikkei Asia*, November 30, 2022.
51. Denis Simon, written testimony for the U.S.-China Economic and Security Review Commission, *Hearing on China's Challenges and Capabilities in Educating and Training the Next Generation Workforce*, February 24, 2023, 2.
52. Lilian Zhang, "U.S. Semiconductor Firm Marvell Lays Off Entire China Research and Development Team in Latest Round of Job Cuts amid Industry Slowdown," *South China Morning Post*, March 22, 2023; Cheng Ting-fang and Yifan Yu, "U.S. Chip Curbs Spark Recruitment Rush in China's Tech Sector," *Nikkei Asia*, November 4, 2022.
53. Gregory C. Allen, "China's New Strategy for Waging the Microchip Tech War," *Center for Strategic and International Studies*, May 3, 2023.
54. Yuka Hayashi and Vivian Salama, "Japan, Netherlands Agree to Limit Exports of Chip-Making Equipment to China," *Wall Street Journal*, January 28, 2023.
55. Saif M. Khan, "The Semiconductor Supply Chain: Assessing National Competitiveness," *Center for Security and Emerging Technology*, January 2021, 30.
56. Saif M. Khan, "Securing Semiconductor Supply Chains," *Center for Security and Emerging Technology*, January 2021, 19–20.
57. Riho Nagao, "Japan's New Chip Equipment Export Rules Take Effect Sunday," *Nikkei Asia*, July 23, 2023; Gregory C. Allen, Emily Benson, and Margot Putnam, "Japan and the Netherlands Announce Plans for New Export Controls on Semiconductor Equipment," *Center for Strategic and International Studies*, April 10, 2023.
58. Ben Jiang, "China's Semiconductor Ambitions Dealt Fresh Blow by New Dutch Export Rules on ASML Chip-Making Machines," *South China Morning Post*, July 1, 2023; Cagan Koc and Diederik Baazil, "ASML to Face New Export Restrictions to China as Soon as June 30," *Bloomberg*, June 22, 2023; Dylan Patel, "The Gaps in the New China Lithography Restrictions—ASML, SMEE, Nikon, Canon, EUV, DUV, ArFi, ArF Dry, KrF, and Photoresist," *SemiAnalysis*, January 29, 2023.
59. Andy Lin and Qianer Liu, "China Imports Record Amount of Chipmaking Equipment," *Financial Times*, August 25, 2023.
60. China General Administration of Customs, *Customs Statistics*.
61. Andy Lin and Qianer Liu, "China Imports Record Amount of Chipmaking Equipment," *Financial Times*, August 25, 2023; China General Administration of Customs, *Customs Statistics*.
62. Cheng Ting-Fang and Lauly Li, "U.S.-China Tech War: Beijing's Secret Chipmaking Champions," *Nikkei Asia*, May 5, 2021; *Foreign Policy*, "Semiconductors and the U.S.-China Innovation Race," February 16, 2021; China General Administration of Customs, *Customs Statistics*.
63. Naoki Watanabe and Rintaro Tobita, "Huawei's Mate 60 Pro Has U.S. Asking Questions on Chips," *Nikkei Asia*, September 8, 2023.
64. Gregory C. Allen, "In Chip Race, China Gives Huawei the Steering Wheel: Huawei's New Smartphone and the Future of Semiconductor Export Controls," *Center for Strategic and International Studies*, October 6, 2023; Naoki Watanabe and Rintaro Tobita, "Huawei's Mate 60 Pro Has U.S. Asking Questions on Chips," *Nikkei Asia*, September 8, 2023; Saad Hasan, "Why China's Big Chip Breakthrough Has Rattled the U.S.," *TRTWorld*, September 2022.
65. Vlad Savov and Debby Wu, "Huawei Teardown Shows Chip Breakthrough in Blow to US Sanctions," *Bloomberg*, September 4, 2023; Hideaki Ryugen, "TSMC to Make Cutting-Edge 2-nm Chips at New Plant in Southern Taiwan," *Nikkei Asia*, August 10, 2023.
66. Chris Miller, "What the Most 'Chinese' Smartphone Yet Tells Us about Politics," *Financial Times*, September 21, 2023.
67. White House, *Remarks by National Security Advisor Jake Sullivan at the Special Competitive Studies Project Global Emerging Technologies Summit*, September 16, 2022.
68. Dylan Patel, Afzal Ahmad, and Myron Xie, "China AI & Semiconductors Rise: US Sanctions Have Failed," *SemiAnalysis*, September 12, 2023; Che Pan, "Chinese

Chip Makers Can Import Critical ASML Tools until 2024, as New Netherlands Rules Restrict Access to DUV Systems," *South China Morning Post*, September 1, 2023.
69. Katrina Hamlin, "China's Next Chip Battle Is for the Bottom Line," *Reuters*, September 18, 2023.
70. Huizhong Wu, "China Reveals New Details of Raytheon, Lockheed Sanctions," *Associated Press*, April 18, 2023.
71. Sylvia Pfeifer, "'We Can De-Risk but Not Decouple' from China, Says Raytheon Chief," *Financial Times*, June 19, 2023; *Reuters*, "China Sanctions Lockheed Martin, Raytheon over Taiwan Arms Sales," February 16, 2023.
72. Lingling Wei, "Beijing Bans Micron as Supplier to Big Chinese Firms, Citing National Security," *Wall Street Journal*, May 21, 2023; Cyberspace Administration of China, *Micron's Products Sold in China Fail Cybersecurity Review* (美光公司在华销售的产品未通过网络安全审查), May 21, 2023. Translation.
73. Lingling Wei, "Beijing Bans Micron as Supplier to Big Chinese Firms, Citing National Security," *Wall Street Journal*, May 21, 2023.
74. Matthew Reynolds, "Micron Aggression: The Right Response to Beijing's Ban on the U.S. Chipmaker," *Center for Strategic and International Studies*, June 22, 2023; *Bloomberg*, "China Bars Micron Chips in Escalation of US Tech Clash," May 21, 2023.
75. *Reuters*, "China Gallium, Germanium Export Curbs Kick In; Wait for Permits Starts," August 1, 2023.
76. Clement Tan, "China Exports Zero Germanium and Gallium in August as National Security Curbs Bite," *CNBC*, September 20, 2023.
77. James T. Areddy and Sha Hua, "China Restricts Exports of Two Minerals Used in High-Performance Chips," *Wall Street Journal*, July 4, 2023; U.S. Geological Survey, *2022 Final List of Critical Minerals*, February 22, 2022.
78. Andy Home, "China Flexes Critical Metals Muscles with Export Curbs," *Reuters*, July 10, 2023; U.S. Geological Survey, *Mineral Commodity Summaries*, January 2023.
79. *Reuters*, "Companies Respond to China's Curbs on Gallium and Germanium Exports," July 7, 2023; James T. Areddy and Sha Hua, "China Restricts Exports of Two Minerals Used in High-Performance Chips," *Wall Street Journal*, July 4, 2023.
80. *Reuters*, "Beijing's Curbs on Niche Metal Exports Threaten China Supply Gut," July 6, 2023.
81. Yoko Kubota, "China Bans iPhone Use for Government Officials at Work," *Wall Street Journal*, September 6, 2023.
82. Ethan Wang and Bernard Orr, "China Says It Has Not Banned Purchase, Use of Foreign Phone Brands," *Reuters*, September 13, 2023; Yoko Kubota, "China Bans iPhone Use for Government Officials at Work," *Wall Street Journal*, September 6, 2023.
83. Nicole Goodkind, "Apple Lost $200 Billion in Two Days after Reports of iPhone Ban in China," *CNN Business*, September 7, 2023.
84. Nicole Goodkind, "Apple Lost $200 Billion in Two Days after Reports of iPhone Ban in China," *CNN Business*, September 7, 2023; *Global Times*, "Huawei Mate 60 Pro Triggers Buying Spree among Chinese Consumers," September 2, 2023.
85. Keith Zhai and Yoko Kubota, "China to Restrict Tesla Use by Military and State Employees," *Wall Street Journal*, March 19, 2021; *Reuters*, "Tesla Cars Barred from Some China Government Compounds—Sources," May 21, 2021.
86. U.S. Geological Survey, *Mineral Commodity Summaries*, January 2023.
87. Bailey Crane, "Critical Minerals and the U.S.-China Chip War," *Center for Strategic and International Studies*, July 14, 2023; Wafer World, "What Exactly Are GaAs Wafers Anyways?" September 20, 2020.
88. Bailey Crane, "Critical Minerals and the U.S.-China Chip War," *Center for Strategic and International Studies*, July 14, 2023.
89. Alexander Holderness et al., "Understanding China's Gallium Sanctions," *Center for Strategic and International Studies*, July 7, 2023; Ben Blanchard and Jan Schwartz, "VW Ready to Deal with China Metal Curbs; Chipmakers Play Down Fallout," *Reuters*, July 6, 2023.
90. *Reuters*, "Pentagon Has Strategic Germanium Stockpile, but No Gallium Reserves," July 6, 2023.
91. Alexander Holderness et al., "Understanding China's Gallium Sanctions," *Center for Strategic and International Security*, July 7, 2023; Arjun Kharpal, "What Are Gallium and Germanium? China Curbs Exports of Metals Critical to Chips and Other Tech," *CNBC*, July 4, 2023.
92. ING, "China Strikes Back in the Tech War, Restricting Exports of Gallium and Germanium," July 7, 2023.
93. U.S. Geological Survey, *Mineral Commodity Summaries*, January 2023, 78.

94. Alexander Holderness et al., “Understanding China’s Gallium Sanctions,” *Center for Strategic and International Studies*, July 7, 2023; Ben Blanchard and Jan Schwartz, “VW Ready to Deal with China Metal Curbs; Chipmakers Play Down Fallout,” *Reuters*, July 6, 2023.
95. Fabian Villalobos et al., “Time for Resilient Critical Material Supply Chain Policies,” *RAND Corporation*, 2022.
96. Simon Evenett and Johannes Fritz, “Revisiting the China-Japan Rare Earths Dispute of 2010,” *VoxEU*, July 19, 2023; China Power Team, “Does China Pose a Threat to Global Rare Earth Supply Chains?” *Center for Strategic and International Studies*, July 17, 2020.
97. Mary Hui, “Japan’s Global Rare Earths Quest Holds Lessons for the US and Europe,” *Quartz*, April 23, 2021; United Nations, Statistics Division, “UN Comtrade Database”; Julian Ryall, “Japan Moves to Secure Rare Earths to Reduce Dependence on China,” *South China Morning Post*, August 17, 2020.
98. United Nations, Statistics Division, “UN Comtrade Database.”
99. U.S. Census Bureau, *Trade in Goods with China*.
100. U.S. Census Bureau, *Trade in Goods with China*.
101. Josh Zumbrun, “The $67 Billion Tariff Dodge That’s Undermining U.S. Trade Policy,” *Wall Street Journal*, April 25, 2022.
102. China General Administration of Customs, *Customs Statistics*.
103. U.S. Census Bureau, *Trade in Goods with China*.
104. U.S. Census Bureau, *Trade in Goods with China*; Marrian Zhou and Rintaro Tobita, “U.S.-China Trade Hit Record in 2022 despite Tensions,” *Nikkei Asia*, February 7, 2023.
105. Bryce Baschuk, “Big Driver of the Global Economy Last Year Is Slowing Down, UN Says,” *Bloomberg*, March 23, 2023; Caroline Freund, “Surging Demand for Imports Has Been a Major Driver of U.S. Inflation since the Pandemic Hit,” *Peterson Institute for International Economics*, October 11, 2022; David J. Lynch, “Consumers Are Shifting Their Spending from Goods to Services,” *Washington Post*, May 28, 2022.
106. Lucia Mutikani, “Declining Imports Compress U.S. Trade Deficit in June,” *Reuters*, August 8, 2023.
107. Ji Siqi, “China Trade: Slowing Exports to Bottom Out in Late 2023 amid ‘Increasingly Clear’ Weak Demand,” *South China Morning Post*, May 9, 2023; Sun Yu, “China’s Richest County Suffers Export Slump as U.S. Tension Hits Factories,” *Financial Times*, March 25, 2023; Lori Ann LaRocco, “U.S. Manufacturing Orders from China Down 40% in Unrelenting Demand Collapse,” *CNBC*, December 4, 2022.
108. U.S. Census Bureau, *Trade in Goods with China*.
109. U.S. Energy Information Administration, “Crude Oil Exports by Destination,” *Petroleum and Other Liquids*.
110. U.S. Census Bureau, *Trade in Goods with China*.
111. Clyde Russell, “China Stored Massive Volume of Crude Oil in May, Giving It Options,” *Reuters*, June 19, 2023; Rogan Quinn and Logan Wright, “Discounts and Teapots Alter China’s Oil Trade,” *Rhodium Group*, May 18, 2023; Oceana Zhou, “China Data: April Crude Imports Drop 16% to 10.4 Mil B/D,” *S&P Global*, May 9, 2023.
112. Henry Canaday, “Part Suppliers Face Challenges in China’s Rapidly-Recovering Aviation Market,” *Aviation Week*, August 3, 2032.
113. U.S. Census Bureau, *USA Trade Online*.
114. U.S. Census Bureau, *USA Trade Online*; U.S. Census Bureau, *U.S. Trade in Advanced Technology Products*.
115. Niels Graham, “The U.S. Is Relying More on China for Pharmaceuticals—and Vice Versa,” *Atlantic Council*, April 20, 2023.
116. U.S.-China Business Council, “U.S. Exports to China 2023,” 2023, 7.
117. Cui Xiaotian et al., “After China’s Covid U-Turn, A ‘Tsunami’ of Infected Strip Bare Pharmacy Shelves,” *Caixin Global*, December 26, 2022; Ling Xin, “‘No Ibuprofen, No Aspirin, Absolutely Nothing’: China’s Covid Patients Feel the Pain of Drugs Shortage,” *South China Morning Post*, December 19, 2022.
118. Hunter L. Clark and Anna Wong, “Did the U.S. Bilateral Goods Deficit with China Increase or Decrease during the US-China Trade Conflict?” *Board of Governors of the Federal Reserve System*, June 21, 2021.
119. Hunter L. Clark and Anna Wong, “Did the U.S. Bilateral Goods Deficit with China Increase or Decrease during the US-China Trade Conflict?” *Board of Governors of the Federal Reserve System*, June 21, 2021; Michael F. Martins, “What’s the Difference—Comparing U.S. and Chinese Trade Data,” *Congressional Research Service*, CRS RS 22640, May 20, 2020.
120. Katherine Masters, “Key Trade Loophole Keeps Cheap Chinese Products Flowing to U.S.,” *Reuters*, August 4, 2023; Select Committee on the Chinese Communist Party, *Fast Fashion and the Uyghur Genocide: Interim Findings*, 2023, 5.

121. Select Committee on the Chinese Communist Party, *Fast Fashion and the Uyghur Genocide: Interim Findings*, 2023, 5–6.
122. Josh Zumbrun, “The Tiny Loophole That Understates the Trade Deficit with China,” *Wall Street Journal*, June 17, 2022.
123. U.S. Census Bureau, *USA Trade Online*; China General Administration of Customs, *Customs Statistics*.
124. Josh Zumbrun, “The $67 Billion Tariff Dodge That’s Undermining U.S. Trade Policy,” *Wall Street Journal*, April 25, 2022.
125. Select Committee on the Chinese Communist Party, *Fast Fashion and the Uyghur Genocide: Interim Findings*, 2023, 5.
126. Sheridan Prasso, “Shein’s Cotton Tied to Chinese Region Accused of Forced Labor,” *Bloomberg*, November 20, 2022.
127. Katherine Masters, “U.S. Customs Finds Garments Made with Banned Chinese Cotton,” *Reuters*, September 1, 2023.
128. Gavin Bade, “Fast Fashion Giant with Ties to China Tries to Shake Forced Labor Claims,” *Politico*, June 5, 2023; U.S. Customs and Border Protection, *Uyghur Forced Labor Prevention Act*, December 23, 2021.
129. U.S. International Trade Commission, *Economic Impact of Section 232 and 301 Tariffs on U.S. Industries*, May 2023, 158.
130. Chad Bown, “U.S. Imports from China Are Both Decoupling and Reaching New Highs. Here’s How,” *Peterson Institute for International Economics*, March 31, 2023.
131. Chad Bown, “U.S. Imports from China Are Both Decoupling and Reaching New Highs. Here’s How,” *Peterson Institute for International Economics*, March 31, 2023.
132. Chad Bown, “U.S. Imports from China Are Both Decoupling and Reaching New Highs. Here’s How,” *Peterson Institute for International Economics*, March 31, 2023.
133. Pablo Fajgelbaum et al., “The ‘Bystander Effect’ of the U.S.-China Trade War,” *VoxEU*, June 10, 2023; Mark Szakonyi, “Sourcing Shift from China Pulls U.S. Import Share to More than a Decade Low,” *S&P Global Market Intelligence*, February 1, 2023.
134. Primrose Riordan et al., “China Set to Account for Less than Half of U.S.’s Low-Cost Imports from Asia,” *Financial Times*, June 3, 2023; Kearney, “America Is Ready for Reshoring. Are You? 2022 Reshoring Index,” June 2023, 12.
135. Primrose Riordan et al., “China Set to Account for Less than Half of U.S.’s Low-Cost Imports from Asia,” *Financial Times*, June 3, 2023; Kearney, “America Is Ready for Reshoring. Are You? 2022 Reshoring Index,” June 2023, 12.
136. Organization for Economic Cooperation and Development, “Trade in Value Added Database.”
137. Organization for Economic Cooperation and Development, “Trade in Value Added Database.”
138. U.S. Census Bureau, *USA Trade Online*.
139. Max de Haldevang, “Chinese Manufacturers Get Around U.S. Tariffs with Some Help from Mexico,” *Bloomberg*, September 13, 2022.
140. Matthew Mingey et al., “ESG Impacts of China’s Next-Generation Outbound Investments: Indonesia and Cambodia,” *Rhodium Group*, August 24, 2023; Peter A. Petri and Michael G. Plummer, “East Asia Decouples from the United States: Trade War, COVID-19, and East Asia’s New Trade Blocs,” *Peterson Institute for International Economics*, June 2020, 21–24.
141. *CCTV*, “Consulting Giant Have a Hidden Agenda to Spy on State Secrets, Revealing a Large Number of Details” (咨询巨头别有用心刺探国家机密, 大量细节披露), May 9, 2023.
142. Lingling Wei, “China Puts Spymaster in Charge of U.S. Corporate Crackdown,” *Wall Street Journal*, May 18, 2023; *Bloomberg*, “Police Raid Consulting Firm as China Starts Anti-Spy Campaign,” May 8, 2023.
143. *China Law Translate*, “Counter-Espionage Law of the P.R.C. (2023 ed.),” April 26, 2023; China’s National People’s Congress, *Counter-Espionage Law of the People’s Republic of China* [中华人民共和国反间谍法], April 26, 2023. Translation.
144. Rebecca Feng, “A Chinese Alternative to Bloomberg Terminals Quietly Limits Information Overseas,” *Wall Street Journal*, May 27, 2023; *Bloomberg*, “China Restricts Overseas Access to Key Corporate Information,” May 3, 2023.
145. *Bloomberg*, “China Restricts Overseas Access to Key Corporate Information,” May 3, 2023.
146. Lingling Wei, Yoko Kubota, and Dan Strumpf, “China Locks Information on the Country Inside a Black Box,” *Wall Street Journal*, April 30, 2023.

147. Elaine Yu and Dan Strumpf, "U.S. Companies in China Worry Due Diligence Will End in Spy Dramas," *Wall Street Journal*, May 5, 2023.

148. *Economist*, "China's Defeated Youth," August 17, 2023; Michael Lelyveld, "China Blocks Reporting on Commodity Prices," *Radio Free Asia*, July 2, 2021; China National Bureau of Statistics via CEIC database.

149. Michael Martina, "Bloomberg Sites Blocked in China Days after Xi Family Wealth Story," *Reuters*, July 4, 2012.

150. Katja Drinhausen and Helena Legarda, "'Comprehensive National Security' Unleashed: How Xi's Approach Shapes China's Policies at Home and Abroad," *Mercator Institute for China Studies*, September 15, 2022; U.S.-China Economic and Security Review Commission, *2022 Annual Report to Congress*, November 2022, 40–41; Yun Sun, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on CCP Decision-Making and the 20th Party Congress*, January 27, 2022, 7; Joel Wuthnow, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on CCP Decision-Making and the 20th Party Congress*, January 27, 2022, 2.

151. Sheena Chestnut Greitens, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on U.S.-China Relations at the Chinese Communist Party's Centennial*, January 28, 2021, 4–5; *Xinhua*, "Xi Jinping: Persist in the Comprehensive National Security Concept, Walk the Road of National Security with Chinese Characteristics" (习近平: 坚持总体国家安全观 走中国特色国家安全道路), April 16, 2014. Translation.

152. Tang Aijun, "Ideological Security in the Framework of the Overall National Security Outlook" (总体国家安全观视域中的意识形态安全), *Socialism Studies*, December 12, 2019. Translation.

153. Katja Drinhausen and Helena Legarda, "'Comprehensive National Security' Unleashed: How Xi's Approach Shapes China's Policies at Home and Abroad," *Mercator Institute for China Studies*, September 15, 2022; Ji Siqi, He Huifeng, and Brian Peach, "What Is 'Lying Flat,' and Why Are Chinese Officials Standing Up to It?" *South China Morning Post*, October 24, 2021.

154. Global Legal Monitor, "China: Counterespionage Law Revised," *Library of Congress*, September 21, 2023; Nathaniel Taplin, "Beijing's Bain Raid, Espionage Law Are Self-Sabotage," *Wall Street Journal*, April 28, 2023; China Standing Committee of the National People's Congress, *Counter-Espionage Law of the People's Republic of China* (中华人民共和国反间谍法), April 26, 2023. Translation.

155. Vincent Brussee and Kai von Carnap, "Amended Anti-Espionage Law Aims to Curate China's Own Narrative," *Mercator Institute for China Studies*, May 25, 2023; Jeremy Daum, "Bad as It Ever Was: Notes on the Espionage Law," *China Law Translate*, May 2, 2023.

156. U.S. Chamber of Commerce, "U.S. Chamber Statement of Concerns over PRC Investment Climate," April 28, 2023.

157. American Chamber of Commerce in China, "2023 China Business Climate Survey Report," March 2023, 48.

158. Seth O'Farrell, "China's National Security Concerns Cap Record FDI Lows," *fDi Intelligence*, May 30, 2023.

159. Seth O'Farrell, "China's National Security Concerns Cap Record FDI Lows," *fDi Intelligence*, May 30, 2023.

160. Logan Wright, Agatha Kratz, and Armand Meyer, "When Multinationals Start De-risking, How Will Beijing Know?" *Rhodium Group*, July 18, 2023.

161. Liu Zhen, "China to Stay Open 'No Matter What,' Premier Li Qiang Tells Global CEOs in 'First Class Business Environment' Pledge," *South China Morning Post*, March 27, 2023.

162. Trivium China Markets, "Nothing to See Here," April 21, 2023; China's Ministry of Commerce, *Press Conference*, March 18, 2023; Evelyn Cheng and Daisy Cherry, "China Is Rolling out the Red Carpet to Attract Foreign Executives," *CNBC*, March 2, 2023.

163. Mia Nulimaimaiti, "China Urged to Ensure 'Predictable' Policies as Regional Economic Engines Unveil Pro-Investment Measures to Kick-Start Growth," *South China Morning Post*, January 31, 2023.

164. American Chamber of Commerce in China, "Flash Survey on China Business Climate Sentiment Updates," April 2023, 20.

165. American Chamber of Commerce in China, "Flash Survey on China Business Climate Sentiment Updates," April 2023, 20.

166. China Association of Automobile Manufacturers, "Automobile Industry Production and Sales in August 2023" (2023年8月汽车工业产销情况), September 11, 2023. Translation.

167. Andrew Batson, "Peak Globalization and China's EV Exports," *Tangled Woof*, July 12, 2023; Roland Irle, "Global EV Sales for 2022," *EV Volumes*, 2023; International Energy Agency, "Global EV Outlook 2023," 2023, 11.
168. Andrew Batson, "Peak Globalization and China's EV Exports," *Tangled Woof*, July 12, 2023; Roland Irle, "Global EV Sales for 2022," *EV Volumes*, 2023.
169. Gregor Sebastian, "In the Driver's Seat: China's Electric Vehicle Makers Target Europe," *Mercator Institute for China Studies*, September 1, 2021.
170. Barry van Wyk, "China's Top 15 Electric Vehicle Companies," *China Project*, May 18, 2023.
171. China Association of Automobile Manufacturers via CEIC database.
172. Trivium China Markets, "The Tax Break That Never Dies," June 26, 2023; Qiaoyi Li and Liz Lee, "China Unveils $72 Billion Tax Break for EVs, Other Green Cars to Spur Demand," *Reuters*, June 21, 2023; China Association of Automobile Manufacturers via CEIC database.
173. China Association of Automobile Manufacturers via CEIC database.
174. Ursula von der Leyen, "2023 State of the Union Address by President von der Leyen," *European Commission*, September 13, 2023.
175. European Commission, *Commission Launches Investigation on Subsidised Electric Cars from China*, October 4, 2023.
176. Zeyi Yang, "Europe Is About to Crack Down on Chinese Electric Cars," *MIT Technology Review*, September 26, 2023.
177. Myungshin Cho, "China's Electric Car Exports Surge to Record on European Demand," *Bloomberg*, December 27, 2022.
178. Eurostat, *International Trade in Goods*.
179. Ilaria Mazzocco and Gregor Sebastian, "Electric Shock: Interpreting China's Electric Vehicle Export Boom," *Center for Strategic and International Studies*, September 14, 2023.
180. Ilaria Mazzocco and Gregor Sebastian, "Electric Shock: Interpreting China's Electric Vehicle Export Boom," *Center for Strategic and International Studies*, September 14, 2023; Gregor Sebastian and François Chimits, "'Made in China' Electric Vehicles Could Turn Sino-EU Trade on Its Head," *Mercator Institute for China Studies*, May 30, 2022.
181. Ilaria Mazzocco and Gregor Sebastian, "Electric Shock: Interpreting China's Electric Vehicle Export Boom," *Center for Strategic and International Studies*, September 14, 2023.
182. Joe Leahy, "Foreign Brands Including Tesla to Face Scrutiny as Part of EU Probe into China Car Subsidies," *Financial Times*, September 26, 2023.
183. Joshue Posaner, Barbara Moens, and Stuart Lau, "EU Risks Trade War with China over Electric Vehicles," *Politico*, September 13, 2023.
184. China Association of Automobile Manufacturers, "Production and Sales of the Automobile Industry in August 2023," September 11, 2023; BYD Company, "Voluntary Announcement Production and Sales Volume for August 2023," September 1, 2023; BYD Company, "Voluntary Announcement Production and Sales Volume for July 2023," August 1, 2023; BYD Company, "Voluntary Announcement Production and Sales Volume for June 2023," July 2, 2023; BYD Company, "Voluntary Announcement Production and Sales Volume for May 2023," June 1, 2023; BYD Company, "Voluntary Announcement Production and Sales Volume for April 2023," May 2, 2023; BYD Company, "Voluntary Announcement Production and Sales Volume for March 2023," April 4, 2023; BYD Company, "Voluntary Announcement Production and Sales Volume for February 2023," March 1, 2023; BYD Company, "Voluntary Announcement Production and Sales Volume for January 2023," February 1, 2023.
185. Joe McDonald and Yuri Kageyama, "Chinese Electric Vehicle Brands Expand to Global Markets," *Associated Press*, May 2, 2023.
186. Edward White et al., "China Set to Overtake Japan as World's Biggest Car Exporter," *Financial Times*, September 11, 2023.
187. Kylie Madry, "China's BYD to Sell EVs in Mexico in 2023, Aims for Up to 30,000 Sales in 2024," *Reuters*, November 29, 2022.
188. Ilaria Mazzocco, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China's Current Economy: Implications for Investors and Supply Chains*, August 21, 2023, 6.
189. Alex Irwin-Hunt, "BYD in Driving Seat of China's EV Supremacy," *fDi Intelligence*, April 22, 2022.
190. David Ferris and Joshua Posaner, "Miles Apart: The U.S. and Europe Diverge on China Car Threat," *Politico*, June 23, 2023.
191. Ilaria Mazzocco and Gregor Sebastian, "Electric Shock: Interpreting China's Electric Vehicle Export Boom," *Center for Strategic and International Studies*, Sep-

tember 14, 2023; *Reuters*, "Polestar to Start Production in South Carolina from 2024, Says CEO," April 18, 2023.
192. Rhian Hunt, "GM Drops Electra GS Trademark Filing in the U.S.," *GM Authority*, September 18, 2023; Joey Capparella, "Buick Electra SUV Coming to U.S. in 2024, Could It Be This Electra E5?" *Car and Driver*, December 19, 2022.
193. Seaton Huang, "Ford-CATL Partnership Illustrates the Challenge of Decoupling EV Supply Chains," *Council on Foreign Relations*, March 7, 2023; Keith Naughton, Gabrielle Coppola, and Edward Ludlow, "Ford Is Investing $3.5 Billion in EV Battery Plant with Chinese Firm," *Bloomberg*, February 13, 2023.
194. Victoria Waldersee, "Politics Aside, China's CATL Ramps Up Cell Production in Germany," *Reuters*, January 26, 2023.
195. Ilaria Mazzocco, "Electrifying: How China Built an EV Industry in a Decade," *MacroPolo*, July 8, 2020.
196. Ilaria Mazzocco, "Electrifying: How China Built an EV Industry in a Decade," *MacroPolo*, July 8, 2020.
197. Ilaria Mazzocco, "Electrifying: How China Built an EV Industry in a Decade," *MacroPolo*, July 8, 2020.
198. Ilaria Mazzocco, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on China's Current Economy: Implications for Investors and Supply Chains*, August 21, 2023, 2.
199. Ilaria Mazzocco, "Electrifying: How China Built an EV Industry in a Decade," *MacroPolo*, July 8, 2020.
200. Scott Kennedy, "China's Risky Drive into New-Energy Vehicles," *Center for Strategic and International Studies*, November 2018, 16.
201. *Reuters*, "Tesla, EV Rivals Absorb Costs after China Pulls Plug on Subsidy," January 5, 2023; China Ministry of Finance, *Notice on the Use of Financial Subsidy Policies for the Promotion of New Energy Vehicles* (关于2022年新能源汽车推广应用财政补贴政策的通知), December 21, 2021. Translation; S&P Global, "China Continues Support for New-Energy Vehicles Despite Subsidy Phaseout," November 11, 2019.
202. Zeyi Yang, "How Did China Come to Dominate the World of Electric Cars?" *MIT Technology Review*, February 21, 2023; Anna Holzmann, "China's Battery Industry Is Powering Up for Global Competition," *Mercator Institute for China Studies*, October 24, 2018.
203. Robert Rapier, "Why China Is Dominating Lithium-Ion Battery Production," *Forbes*, August 4, 2019.
204. *BloombergNEF*, "China's Battery Supply Chain Tops BNEF Ranking for Third Consecutive Time, with Canada a Close Second," November 12, 2022.
205. Heejin Kim, "China's CATL Extends Lead as World's Top EV Battery Maker," *Bloomberg*, January 4, 2023.
206. Heejin Kim, "China's CATL Extends Lead as World's Top EV Battery Maker," *Bloomberg*, January 4, 2023.
207. Barry Naughton, Siwen Xiao, and Yaosheng Xu, "The Trajectory of China's Industrial Policies," *UC Institute on Global Conflict and Cooperation*, June 2023, 11.
208. Niraj Chokshi and Tiffany May, "China Crosses a Flying Milestone but Remains in the Boeing-Airbus Gap," *Wall Street Journal*, June 1, 2023; Scott Kennedy, "China's COMAC: An Aerospace Minor Leaguer," *Center for Strategic and International Studies*, December 7, 2020.
209. Martin Chorzempa, "Did the U.S.-China Phase One Deal Deliver a Win for U.S. Financial Services?" *Peterson Institute for International Economics*, January 27, 2020.
210. Cathy Chan, "Wall Street's Biggest Banks Face a Harsh Reality Check in China," *Bloomberg*, May 16, 2023; Ken Wilcox, "SVB's First Failure," *Wire China*, March 19, 2023.
211. International Monetary Fund, "Coordinated Portfolio Investment Survey," September 14, 2023; Shanghai Stock Exchange via CEIC database; Shenzhen Stock Exchange via CEIC database.
212. Jack Pitcher and Rebecca Feng, "Wall Street's China Dreams Slip Away," *Wall Street Journal*, August 23, 2023.
213. Thomas Hale and Cheng Leng, "Vanguard Plans Exit from China Joint Venture," *Financial Times*, April 5, 2023; Selena Li, "Vanguard to Exit China Funds JV with Ant, Close Shanghai Office—Sources," *Reuters*, March 21, 2023.
214. *Bloomberg*, "Van Eck Dismantles China Mutual Fund Team in Retreat," April 13, 2023.
215. Cathy Chan, "Wall Street's Biggest Banks Face a Harsh Reality Check in China," *Bloomberg*, May 16, 2023.
216. Rebecca Feng, "Manulife Wins China Mutual Fund Approval," *Wall Street Journal*, November 21, 2022.

217. *Bloomberg*, “JPMorgan, StanChart Approved for Fully-Owned China Ventures,” January 19, 2023.
218. Enoch Yiu, “Morgan Stanley Approved to Take Full Control of Mainland Joint Venture as China Further Opens Its US$4 Trillion Asset Management Market,” *South China Morning Post*, February 5, 2023; Morgan Stanley, “Morgan Stanley Investment Management Receives Approval for Full Ownership of Its China Mutual Funds Joint Venture,” February 3, 2023.
219. Yue Yue, “China Awards Wholly Owned Mutual Fund License to Third Foreign Firm,” *Caixin Global*, September 27, 2021; Yue Yue and Han Wei, “Fidelity Cleared to Open Its Own China Mutual Fund Business,” *Caixin Global*, August 7, 2021; *Bloomberg*, “Goldman Forms Wealth Venture with China’s Largest Bank,” May 25, 2021; *Reuters*, “BlackRock Expands China Footprint with Wealth Management Licence,” May 11, 2021; *Bloomberg*, “BlackRock Gets Approval to Set Up Mutual Fund Company in China,” August 29, 2020.
220. Johannes Petry, written testimony for U.S.-China Economic and Security Review Commission, *Hearing on U.S. Investment in China’s Capital Markets and Military-Industrial Complex*, March 19, 2021, 2–3.
221. Selena Li and Jason Xue, “JPMorgan, UBS, and Others Vie for Bigger Share of China’s Pension Market,” *Reuters*, November 30, 2022.
222. Selena Li and Jason Xue, “JPMorgan, UBS, and Others Vie for Bigger Share of China’s Pension Market,” *Reuters*, November 30, 2022.
223. *Bloomberg*, “BlackRock, Fidelity Lose Out in $1 Trillion China Pension Market,” March 27, 2023; Li Yu, “Involving a Market Worth Hundreds of Billion RMB, Personal Pension Funds Are Accelerating Their Entry! 18 Banks, 15 Securities Firms, and 6 Third-Party Institutions May Have Distribution Qualifications” (涉及千亿市场，个人养老金入市加速! 18家银行, 15家券商, 6家三方机构或具代销资格), *21st Century Business Herald*, June 28, 2022. Translation.
224. *Bloomberg*, “BlackRock, Fidelity Lose Out in $1 Trillion China Pension Market,” March 27, 2023.
225. Kate O’Keeffe, Berber Jin, and Aruna Viswanatha, “Sequoia Made a Fortune Investing in the U.S. and China. Then It Had to Pick One,” *Wall Street Journal*, June 27, 2023; Lauren Hirsch, “Venture Capital Giant Sequoia Spins Off China and India Units,” *New York Times*, June 6, 2023.
226. Lauren Hirsch, “Venture Capital Giant Sequoia Spins Off China and India Units,” *New York Times*, June 6, 2023.
227. Lauren Hirsch, “Venture Capital Giant Sequoia Spins Off China and India Units,” *New York Times*, June 6, 2023.
228. Kaye Wiggins et al., “U.S. Investors Face Uncertain Future in China after Tech Ban,” *Financial Times*, August 10, 2023.
229. Lauren Hirsch, “Venture Capital Giant Sequoia Spins Off China and India Units,” *New York Times*, June 6, 2023; Jack Stone Truitt, “U.S. Banks’ China Ambitions Wane as Political Tensions Linger,” *Nikkei Asia*, May 27, 2023; Cathy Chan, “Wall Street’s Biggest Banks Face a Harsh Reality Check in China,” *Bloomberg*, May 16, 2023.
230. U.S. Securities and Exchange Commission, *Holding Foreign Companies Accountable Act*, February 1, 2023.
231. U.S. Public Company Accounting Oversight Board, *HFCAA Determination Report*, December 15, 2022.
232. Stephen Foley, “U.S. Regulators Gain Access to Audits of Chinese Companies,” *Financial Times*, December 15, 2022; Chris Prentice, Xie Yu, and Susan Heavey, “Chinese Firms Avert Delisting as U.S. Audit Watchdog Gets Full Inspection Access,” *Reuters*, December 15, 2022.
233. U.S.-China Economic and Security Review Commission, *Chinese Companies Listed on Major U.S. Stock Exchanges*, January 9, 2023.
234. Scott Murdoch and Kane Wu, “Regulatory Logjam in China Offshore Listings Hits Firms’ Funding Plans,” *Reuters*, June 29, 2023; China Securities Regulatory Commission, *Trial Administrative Measures of Overseas Securities Offering and Listing by Domestic Companies*, February 17, 2023, 8; Jason Xue and Tom Westbrook, “Chinese Companies Rush for U.S. Listings ahead of New Rules,” *Reuters*, March 31, 2023.
235. Evelyn Cheng, “China Formalizes Rules for Overseas IPOs,” *CNBC*, February 19, 2023; *Bloomberg*, “China Eases Overseas Listing Rules, Paving Way for Rebound,” February 17, 2023.
236. *Bloomberg*, “China Eases Overseas Listing Rules, Paving Way for Rebound,” February 17, 2023; Coco Feng, “China’s Foreign Listing Regulations That Mandate Cybersecurity Reviews Apply to Hong Kong, Experts Say,” South China Morning Post, February 18, 2023; Yue Yue and Kelsey Cheng, “What China’s Overhaul of

Overseas IPO Rules Is All About," *Caixin Global*, January 19, 2022; China Securities Regulatory Commission, *Relevant Officials of CSRC Answered Reporter Questions*, December 23, 2021.

237. Logan Wright and Jordan Schneider, "Financial Decoupling: What, Me Worry?" *Rhodium Group*, December 13, 2021; Lingling Wei and Keith Zhai, "Chinese Regulators Suggested Didi Delay Its U.S. IPO," *Wall Street Journal*, July 5, 2021.

238. Rita Liao, "With Beijing's Green Light, Mobility Unicorns Zeekr and WeRide Inch Closer to U.S. IPOs," *TechCrunch*, August 30, 2023; Cyberspace Administration of China, *Cybersecurity Review Measures* (网络安全审查办法), December 28, 2021. Translation.

239. Rita Liao, "With Beijing's Green Light, Mobility Unicorns Zeekr and WeRide Inch Closer to U.S. IPOs," *TechCrunch*, August 30, 2023; Scott Murdoch and Kane Wu, "Regulatory Logjam in China Offshore Listings Hits Firms' Funding Plans," *Reuters*, June 29, 2023.

240. Yue Yue and Kelsey Cheng, "What China's Overhaul of Overseas IPO Rules Is All About," *Caixin Global*, January 19, 2023.

241. Li Cheng, Sun Haishan, and Zhuang Haojia, "Impact on the Overseas Listing of Enterprises with Agreed Control Structure ('VIE Structure')" (对协议控制架构('VIE架构')企业境外发行上市的影响), *Global Law Office*, February 19, 2023. Translation; Evelyn Cheng, "China Formalizes Rules for Overseas IPOs," *CNBC*, February 19, 2023; China Securities Regulatory Commission, *Heads of Relevant Departments of CSRC Answer Questions from Reporters* (证监会有关部门负责人答记者问), February 17, 2023. Translation.

242. Trivium China Markets, "V.I.E.-sy Does It," September 18, 2023; Kelsey Cheng and Yue Yue, "Chinese VIE Firm One Step Closer to U.S. IPO under New Listing Rules," *Caixin Global*, September 16, 2023.

243. Shitong Qiao, "Finance against Law: The Case of China," *Harvard International Law Journal* 64:2 (Spring 2023): 431–487; Paul Gillis, "Antitrust and VIE," *Seeking Alpha*, November 12, 2020.

244. Carmen Reinhart, Christoph Trebesch, and Sebastian Horn, "China's Overseas Lending and the War in Ukraine," *VoxEU*, April 11, 2022.

245. Keith Bradsher, "In Global Slowdown, China Holds Sway over Countries' Fates," *New York Times*, October 6, 2022.

246. International Monetary Fund, "Zambia: Request for an Arrangement under the Extended Credit Facility," September 6, 2022, 8; Deborah Brautigam, "How Zambia and China Co-Created a Debt 'Tragedy of the Commons,'" *China-Africa Research Initiative*, 2021, 6.

247. James McBride, Noah Berman, and Andrew Chatzky, "China's Massive Belt and Road Initiative," *Council on Foreign Relations*, February 2, 2023.

248. Christoph Nedopil Wang, "China Belt and Road Initiative (BRI) Investment Report 2022," *Green Financing and Development Center*, February 3, 2023; Lingling Wei, "China Reins in Its Belt and Road Program, $1 Trillion Later," *Wall Street Journal*, September 26, 2022.

249. Ryan Dube and Gabriele Steinhauser, "China's Global Mega-Projects Are Falling Apart," *Wall Street Journal*, January 20, 2023.

250. Ryan Dube and Gabriele Steinhauser, "China's Global Mega-Projects Are Falling Apart," *Wall Street Journal*, January 20, 2023.

251. Alexandra Valencia, "Ecuador Power Company Discovers More Problems at Chinese-Built Plant," *Reuters*, July 20, 2021; Nicholas Casey and Clifford Krauss, "It Doesn't Matter if Ecuador Can Afford This Dam. China Still Gets Paid," *New York Times*, December 24, 2018.

252. AidData, "AidData's Global Chinese Development Finance Dataset, Version 2.0 [Project ID#38935]," 2021.

253. China's General Administration of Customs via CEIC database; Mark A. Green, "China Is the Top Trading Partner to More than 120 Countries," *Wilson Center*, January 17, 2023.

254. American Enterprise Institute, "China Global Investment Tracker," June 2023.

255. James McBride, Noah Berman, and Andrew Chatzky, "China's Massive Belt and Road Initiative," *Council on Foreign Relations*, February 2, 2023.

256. Gregory W. Caskey, "Chinese Development Lending & the Amplification Effect," *Stanford Center on China's Economy and Institutions*, June 2022; Nabamita Dutta, Peter T. Leeson, and Claudia R. Williamson, "The Amplification Effect: Foreign Aid's Impact on Political Institutions," *Kyklos* 66:2 (April 11, 2013): 208–228.

257. International Development Bank, "Borrowing Countries," July 24, 2023; World Bank, "Debt Sustainability Analysis," May 2023.

258. World Bank, "Debt Sustainability Analysis," March 2023.

259. *Financial Times*, "China's Emerging Belt and Road Debt Crisis," July 27, 2022.

260. Sebastian Horn et al., “China as an International Lender of Last Resort,” *National Bureau of Economic Research*, April 2023, 4, 10–12.
261. Ammar A. Malik et al., “Banking on the Belt and Road: Insights from a New Global Dataset of 13,427 Chinese Development Projects,” *AidData*, September 29, 2021, 7.
262. Eric Martin, “China Debt Restructuring Is at Impasse, World Bank Chief Says,” *Bloomberg*, May 8, 2023; Alan Rappeport, “Pressure Mounts on China to Offer Debt Relief to Poor Countries Facing Default,” *New York Times*, April 14, 2023.
263. Kate Bartlett, “China Cancels 23 Loans to Africa amid ‘Debt Trap’ Debate,” *Voice of America*, August 25, 2022.
264. Keith Bradsher, “In Global Slowdown, China Holds Sway over Countries’ Fates,” *New York Times*, October 6, 2022; Jyhjong Hwang and Oyintarelado Moses, “China’s Interest-Free Loans to Africa: Uses and Cancellations,” *Boston University Global Development Policy Center*, September 2022.
265. World Bank, “Debt Sustainability Analysis,” March 2023.
266. Asif Shahzad and Ariba Shahid, “China Rolls Over $2 Billion Loan to Pakistan as It Struggles with External Liquidity,” *Reuters*, March 31, 2023; *Associated Press*, “China Confirms Offer to Sri Lanka of Debt Moratorium,” February 3, 2023.
267. Jason Douglas, “China’s Lending Strategy in Emerging Markets Risks Prolonging Borrowers’ Pain,” *Wall Street Journal*, September 8, 2022.
268. AidData, “China as an International Lender of Last Resort Dataset, Version 1.0,” March 28, 2023; Rachel Savage, “China Spent $240 Billion Bailing Out ‘Belt and Road’ Countries—Study,” *Reuters*, March 28, 2023; Keith Bradsher, “After Doling Out Huge Loans China Is Now Bailing Out Countries,” *New York Times*, March 27, 2023; Tom Hancock, “China’s $26 Billion Pivot from Infrastructure to Emergency Loans,” *Bloomberg*, August 3, 2022.
269. International Monetary Fund, “Zambia: Staff Report of the 2023 Article IV Consultation, First Review Under the Extended Credit Facility Arrangement, and Financing Assurances Review—Informational Annex,” June 30, 2023, 21; World Bank, “World Bank Data Bank—Zambia.”
270. Bernard Condon, “China’s Loans Pushing World’s Poorest Countries to Brink of Collapse,” *Associated Press*, May 18, 2023.
271. Bernard Condon, “China’s Loans Pushing World’s Poorest Countries to Brink of Collapse,” *Associated Press*, May 18, 2023.
272. Lingling Wei, “China Reins in Its Belt and Road Program, $1 Trillion Later,” *Wall Street Journal*, September 26, 2022.
273. Leigh Thomas, Jorgelina Do Rosario, and Chris Mfula, “Zambia Seals $6.3 Billion Restructuring in Breakthrough for Indebted Nations,” *Reuters*, June 23, 2023.
274. International Monetary Fund and International Development Association, “Honduras: Enhanced Heavily Indebted Poor Countries (HIPC) Initiative Completion Point Document,” March 9, 2005, 20, 35.
275. Inter-American Development Bank, “IDB Governors Approve $4.4 Billion in Debt Relief for Bolivia, Guyana, Haiti, Honduras and Nicaragua,” March 16, 2007; International Monetary Fund, “Press Release: IMF to Extend 100 Percent Debt Relief to Honduras under the Multilateral Debt Relief Initiative,” December 23, 2005.
276. World Bank, “Data Bank—External Debt Stocks (% of GNI—Honduras).”
277. World Bank, “International Debt Statistics.”
278. AidData, “AidData’s Global Chinese Development Finance Dataset, Version 2.0.”; International Monetary Fund, “Rates Query—SDR Interest Rate, January 1, 2014, to December 31, 2014.”
279. World Bank, “Data Bank—External Debt Stocks (% of GNI—Honduras).”
280. International Monetary Fund, “IMF Executive Board Approves US$822 Million Arrangements Under the Extended Fund Facility and the Extended Credit Facility for Honduras and Concludes 2023 Article IF Consultation,” September 21, 2023; Carolina Pulice and Gustavo Palencia, “IMF Reaches $830 mln Staff-Level Deal to Support Honduras Economy,” *Reuters*, August 11, 2023; Kylie Madry, “Honduras Probes Chinese Interest in Investing in $20 Billion Rail Line,” *Reuters*, July 7, 2023.
281. Isabel Woodford, Gustavo Palencia, and Sarah Kinosian, “Debts and Investment Spur Honduran Change of Allegiance to China,” *Reuters*, March 15, 2023.
282. Keith Bradsher, “In Global Slowdown, China Holds Sway over Countries’ Fates,” *New York Times*, October 6, 2022.
283. Sebastian Horn et al., “China as an International Lender of Last Resort,” *National Bureau of Economic Research*, April 2023.
284. Asif Shahzad and Ariba Shahid, “Pakistan Set for 0.29% GDP Growth in FY23,” *Reuters*, June 8, 2023; Asif Shahzad, “China Lends Pakistan Further $700 mln to Shore Up FX Reserves,” *Reuters*, February 22, 2023.

285. Amy Hawkins, "Pakistan's Fresh £580m Loan from China Intensifies Debt Burden Fears," *Guardian*, February 23, 2023.
286. Keith Bradsher, "In Global Slowdown, China Holds Sway over Countries' Fates," *New York Times*, October 6, 2022.
287. International Monetary Fund, "People's Republic of China, 2022 Article IV Consultation," February 2023.
288. Qiaoyi Li and Kevin Yao, "Slump in China Bank Loans, Prices Raise More Worries about Recovery, Adds Pressure on C.Bank," *Reuters*, May 11, 2023.
289. Rebecca Ray and Margaret Myers, "China-Latin America Finance Databases," *Inter-American Dialogue*, 2023.
290. Rebecca Ray and Margaret Myers, "China-Latin America Finance Databases," *Inter-American Dialogue*, 2023.
291. Syful Islam, "Bangladesh's Looming Debt Bills to China, Russia Fuel Forex Fears," *Nikkei Asia*, August 18, 2023.
292. AidData, "AidData's Global Chinese Development Finance Dataset, Version 2.0," 2021.
293. Mercedes Page, "Unpacking China's Global Development Initiative," *Lowy Institute*, August 1, 2022.
294. Xi Jinping, "Bolstering Confidence and Jointly Overcoming Difficulties to Build a Better World" (坚定信心 共克时艰 共建更加美好的世界), *Interpret: China*, September 21, 2021. Translation; Xi Jinping, "Bolstering Confidence and Jointly Overcoming Difficulties to Build a Better World" (坚定信心 共克时艰 共建更加美好的 世界), General Debate of the 76th Session of the United Nations General Assembly, New York City, United States, September 9, 2021. Translation.
295. Joseph Lemoine and Yomna Gaafar, "There's More to China's New Global Development Initiative than Meets the Eye," *Atlantic Council*, August 18, 2022.
296. Xi Jinping, "Bolstering Confidence and Jointly Overcoming Difficulties to Build a Better World" (坚定信心 共克时艰 共建更加美好的世界), *Interpret: China*, September 21, 2021. Translation; Xi Jinping, "Bolstering Confidence and Jointly Overcoming Difficulties to Build a Better World," (坚定信心 共克时艰 共建更加美好的 世界), General Debate of the 76th Session of the United Nations General Assembly, New York City, United States, September 9, 2021. Translation.
297. Simone McCarthy, "Trade Between Russia and China is Booming So Much that Shipping Containers Are 'Piling Up'," *CNN Business*, September 29, 2023; Laure He, "China Is Helping to Prop Up the Russian Economy. Here's How," *CNN Business*, February 26, 2023; *Reuters*, "China's 2022 Trade with Russia Hit Record $190 Bln—Customs," January 13, 2023.
298. Amanda Lee, "Stymied by the West, Russia Is Getting Critical Semiconductors from China, Hong Kong," *South China Morning Post*, February 3, 2023; Sebastian Bienkowski et al., "Effectiveness of U.S. Sanctions Targeting Russian Companies and Individuals," *Free Russia Foundation*, January 2023, 4, 36, 38; Luna Sun, "China's Private Firms See Russia as Land of Opportunity, Up for Grabs amid West's Exodus," *South China Morning Post*, March 29, 2022.
299. Thomas Graham, "Putin-Xi Summit Reinforces Anti-U.S. Partnership," *Council on Foreign Relations*, March 24, 2023.
300. *Bloomberg*, "Russian Oil Flows to China Hit Highest Levels since Ukraine Invasion," February 20, 2023; Vladimir Soldatkin, "Russia More than Double Its LPG Exports to China in 2022, Data Shows," *Reuters*, January 12, 2023.
301. Sebastian Bienkowski et al., "Effectiveness of U.S. Sanctions Targeting Russian Companies and Individuals," *Free Russia Foundation*, January 2023, 48; Coco Feng, "China Bans Export of Loongson Chips Due to Strategic Importance and Military Sensitivity, Russian Newspaper Reports," *South China Morning Post*, December 15, 2022.
302. *Global Times*, "Russia May Export More Wheat, Barley to China amid Push for Land Grain Corridor: Experts," May 12, 2023.
303. Victor Sanjinez, Han Huang, and Andrew London, "China and Russia: A Friendship with 'No Limits,'" *South China Morning Post*, March 28, 2023; *Xinhua*, "Xi, Putin Agree to Deepen Comprehensive Strategic Partnership of Coordination for New Era," March 22, 2023; Simon Tisdall, "Now That Putin Is Xi's 'Best and Bosom Friend,' Where Does That Leave the West?" *Guardian*, July 27, 2019.
304. Chris Devonshire-Ellis, "The Putin-Xi Summit—Their Joint Statement and Analysis," *China Briefing*, March 22, 2023.
305. Vita Spivak, "How Sanctions Have Changed the Face of Chinese Companies in Russia," *Carnegie Endowment for International Peace*, May 18, 2023; Mikhail Karpov, "China-Russia Relations: Economic Cooperation Provides Foundation for Thriving Strategic Partnership," *South China Morning Post*, April 5, 2023.

306. Yale School of Management, "Over 1,000 Companies Have Curtailed Operations in Russia—But Some Remain," July 13, 2023; Vita Spivak, "How Sanctions Have Changed the Face of Chinese Companies in Russia," *Carnegie Endowment for International Peace*, May 18, 2023.
307. *Nikkei Asia*, "Chinese Cars, Phones Gain Ground in Russia's Sanctions-Hit Economy," February 28, 2023.
308. Gleb Stolyarov and Jake Cordell, "Russian Car Sales Down 58.8% in 2022 as Sanctions Hit Industry Hard," *Reuters*, January 12, 2023.
309. *Nikkei Asia*, "Chinese Cars, Phones Gain Ground in Russia's Sanctions-Hit Economy," February 28, 2023; Gleb Stolyarov and Jake Cordell, "Russian Car Sales Down 58.8% in 2022 as Sanctions Hit Industry Hard," *Reuters*, January 12, 2023.
310. *Nikkei Asia*, "Chinese Cars, Phones Gain Ground in Russia's Sanctions-Hit Economy," February 28, 2023.
311. U.S. Department of Commerce, Bureau of Industry and Security, "Additions and Revisions of Entities to the Entity List," *Federal Register* 88:23332 (April 17, 2023); Han Wei, "U.S. Blacklists 12 Chinese Companies over Alleged Russia Ties," *Caixin Global*, April 14, 2023.
312. European Commission, *EU Adopts 11th Package of Sanctions against Russia for Its Continued Illegal War against Ukraine*, June 23, 2023; Alberto Nardelli and Jorge Valero, "EU Set to Scrap Trade Curbs to Some Chinese Firms on Russia," *Bloomberg*, June 15, 2023.
313. *Reuters*, "US Restricts Trade with 42 Chinese Entities over Russia Support," October 7, 2023; U.S. Department of Commerce, Bureau of Industry and Security, *Commerce Adds 49 Entities to the Entity List for Providing Support to Russia's Military and/or Defense Industrial Base*, October 6, 2023; Julia Shapero, "US Sanctions Chinese, Russian Companies over Ukraine War Technology," *Hill*, September, 25, 2023; U.S. Department of Commerce, Bureau of Industry and Security, "Addition of Entities and Revision to Existing Entities on the Entity List; Removal of Existing Entity from the Military End User List," *Federal Register*, 88:66271 (September 27, 2023); U.S. Department of Commerce, Bureau of Industry and Security, *Commerce Adds 28 Entities to Entity List for Conspiracy to Violate U.S. Export Controls and Other Activities Contrary to U.S. National Security Interests*, September 25, 2023.
314. Thomas Graham, "Putin-Xi Summit Reinforces Anti-U.S. Partnership," *Council on Foreign Relations*, March 24, 2023.
315. Kari Soo Lindberg and Stephen Stapczynski, "Xi Aligns with Putin against US, but Hesitates on Gas Deal," *Bloomberg*, March 22, 2023.
316. Emily Chow, "Explainer: Does China Need More Russian Gas via the Power-of-Siberia 2 Pipeline?" *Reuters*, March 22, 2023.
317. Kari Soo Lindberg and Stephen Stapczynski, "Xi Aligns with Putin against US, but Hesitates on Gas Deal," *Bloomberg*, March 22, 2023; China Ministry of Foreign Affairs, *President Xi Jinping and Russian President Vladimir Putin Sign Joint Statement of the People's Republic of China and the Russian Federation on Deepening the Comprehensive Strategic Partnership of Coordination for the New Era and Stress Settling the Ukraine Crisis through Dialogue*, March 22, 2023.
318. Anastasia Stognei, Joe Leahy, and Yuan Yang, "Power of Siberia: China Keeps Putin Waiting on Gas Pipeline," *Financial Times*, May 25, 2023; Kari Soo Lindberg and Stephen Stapczynski, "Xi Aligns with Putin against US, but Hesitates on Gas Deal," *Bloomberg*, March 22, 2023.
319. Zhang Hongzhou and Genevieve Donnellon-May, "How China-Russia Grain Corridor Can Help Beijing Safeguard Food Security and Boost Agricultural Trade," *South China Morning Post*, June 8, 2023.
320. Hallie Gu, "China's Buying a Lot of Commodities from Russia, Just Not Wheat," *Bloomberg*, May 22, 2023; Aditya Kondalamahanty and Sampad Nandy, "A Look at Russia-China Wheat, Sunflower Oil Trade as Ukraine Crisis Rages," *S&P Global Insight*, March 8, 2022.
321. Zhang Hongzhou and Genevieve Donnellon-May, "How China-Russia Grain Corridor Can Help Beijing Safeguard Food Security and Boost Agricultural Trade," *South China Morning Post*, March 29, 2022.
322. Zhang Hongzhou and Genevieve Donnellon-May, "How China-Russia Grain Corridor Can Help Beijing Safeguard Food Security and Boost Agricultural Trade," *South China Morning Post*, June 8, 2023.
323. International Monetary Fund, "Currency Composition of Official Foreign Exchange Reserves (COFER)," June 30, 2023.
324. International Monetary Fund, "Currency Composition of Official Foreign Exchange Reserves (COFER)," June 30, 2023.
325. Shivangi Acharya and Riddhima Talwani, "Indian Refiners Used Yuan to Pay for Some Russian Oil Imports, Official Says," *Reuters*, July 14, 2023; Ariba Shahid

and Asif Shahzad, "Exclusive: Pakistan Paid in Chinese Currency for Discounted Russian Oil," *Reuters*, June 13, 2023; Ruma Paul, "Bangladesh to Pay Russia in Yuan for Nuclear Plant," *Reuters*, April 17, 2023.

326. Gerard DiPippo and Andrea Leonard Palazzi, "It's All about Networking: The Limits of Renminbi Internationalization," *Center for Strategic and International Studies*, April 18, 2023; Swift, "RMB Tracker," May 2023; Swift, "RMB Tracker," May 2016; Federal Reserve, *The International Role of the U.S. Dollar, Accessible Data*, October 6, 2021.

327. Gerard DiPippo and Andrea Leonard Palazzi, "It's All about Networking: The Limits of Renminbi Internationalization," *Center for Strategic and International Studies*, April 18, 2023.

328. Swift, "RMB Tracker," May 2023; Gerard DiPippo and Andrea Leonard Palazzi, "It's All about Networking: The Limits of Renminbi Internationalization," *Center for Strategic and International Studies*, April 18, 2023; Federal Reserve, *The International Role of the U.S. Dollar, Accessible Data*, October 6, 2021; Swift, "RMB Tracker," May 2016.

329. Laura E. Kodres, Leslie Sheng Shen, and Darrell Duffie, "Dollar Funding Stresses in China," *Federal Reserve Bank of Boston*, November 1, 2022, 5.

330. Laura E. Kodres, Leslie Sheng Shen, and Darrell Duffie, "Dollar Funding Stresses in China," *Federal Reserve Bank of Boston*, November 1, 2022, 7.

331. Michael Pettis, "Will the Chinese Renminbi Replace the U.S. Dollar?" *Review of Keynesian Economics* 10:4 (Winter 2022), 499–512.

332. Gerard DiPippo and Andrea Leonard Palazzi, "It's All about Networking: The Limits of Renminbi Internationalization," *Center for Strategic and International Studies*, April 18, 2023.

333. Gerard DiPippo and Andrea Leonard Palazzi, "It's All about Networking: The Limits of Renminbi Internationalization," *Center for Strategic and International Studies*, April 18, 2023; Emily Jin, "Why China's CIPS Matters (and Not for the Reasons You Think)," *Lawfare*, April 5, 2022.

334. Phil Rosen, "Russia and China's trade relationship has become increasingly lopsided," *Business Insider*, July 19, 2023; Joe McDonald, "Russia's Reliance on China Rises amid Ukraine Sanctions," *Associated Press News*, March 21, 2023.

335. Chen Aizhu, "Vast China-Russia Resources Trade Shifts to Yuan from Dollars in Ukraine Fallout," *Reuters*, May 10, 2023.

336. Samuel Shen and Tom Westbrook, "Chinese Banks Seize on Russia, Oil Trade to Internationalise Yuan," *Reuters*, April 28, 2023.

337. Alexander Marrow and Jake Cordell, "Russian Finance Ministry to Treble FX Sales in Coming Month," *Reuters*, February 3, 2023.

338. Benjamin Harvey and Wenjin Lv, "China's Yuan Replaces Dollar as Most Traded in Russia," *Bloomberg*, April 3, 2023; Chelsey Dulaney, Evan Gershkovich, and Victoria Simanovskaya, "Russia Turns to China's Yuan in Effort to Ditch the Dollar," *Wall Street Journal*, February 28, 2023.

339. *Bloomberg News*, "China's Yuan Replaces Dollar as Most Traded in Russia," April 2, 2023.

340. Maha El Dahan and Aziz El Yaakoubi, "China's Xi Calls for Oil Trade in Yuan at Gulf Summit in Riyadh," *Reuters*, December 10, 2022; Xi Jinping, "Building on Past Achievements and Jointly Creating a Brighter Future of China-GCC Relations," China-GCC Summit, Riyahd, Saudi Arabia, December 9, 2022. *https://webcache.googleusercontent.com/search?q=cache:LDjJHDl4BDoJ:https://www.fmprc.gov.cn/eng/wjdt_665385/zyjh_665391/202212/t20221210_10988408.html&cd=9&hl=en&ct=clnk&gl=us&client=firefox-b-1-d*.

341. Salim A. Essaid, "China Settles First LNG Trade in Yuan with UAE Deal," *Al-Monitor*, March 30, 2023.

342. Erika Na, "Iraq's Trade with China May Be Settled in Yuan, but Oil Exclusion Seen Trivializing the Move," *South China Morning Post*, February 23, 2023; Nayera Abdallah and Ahmed Rasheed, "Iraq to Allow Trade with China in Yuan—State Media," *Reuters*, February 22, 2023.

343. Summer Said and Stephen Kalin, "Saudi Arabia Considers Accepting Yuan Instead of Dollars for Chinese Oil Sales," *Wall Street Journal*, March 15, 2022.

344. European Central Bank, "What Are Currency Swap Lines?" September 27, 2016; Sebastian Horn et al., "China as an International Lender of Last Resort," *National Bureau of Economic Research*, April 2023.

345. Sebastian Horn et al., "China as an International Lender of Last Resort," *National Bureau of Economic Research*, April 2023.

346. Hector Perez-Saiz and Longmei Zhang, "Renminbi Usage in Cross-Border Payments: Regional Patterns and the Role of Swaps Lines and Offshore Clearing Banks,"

IMF Work Paper, March 31, 2023, 9; Michael Perks et al., “Evolution of Bilateral Swap Lines,” *IMF Working Paper*, August 2021.

347. Hector Perez-Saiz and Longmei Zhang, “Renminbi Usage in Cross-Border Payments: Regional Patterns and the Role of Swaps Lines and Offshore Clearing Banks,” *IMF Working Paper*, March 31, 2023, 11.

348. Maria Siow, “What Next for Cambodia’s U.S. Ties, China Trade Deals after Hun Sen’s Certain Electoral Win?” *South China Morning Post*, July 15, 2023; Prak Chan Thul, “China, Cambodia Clinch Free Trade Pact in under a Year,” *Reuters*, October 12, 2020.

349. China General Administration of Customs, “CN: Export: Cambodia; CN: Import: Cambodia,” via CEIC database.

350. Maria Siow, “What Next for Cambodia’s U.S. Ties, China Trade Deals after Hun Sen’s Certain Electoral Win?” *South China Morning Post*, July 15, 2023.

351. May Kunmakara, “Cambodia Looks to Join China’s CIPS Payment System,” *Asia News Network*, February 16, 2023.

352. Brad Setser, “How to Hide Your Foreign Exchange Reserves—A User’s Guide,” *Follow the Money*, June 29, 2023; Alain Naef et al., “The Renminbi’s Unconventional Route to Reserve Currency Status,” *Center for Economic Policy Research*, October 31, 2022; Barry Eichengreen, “Sanctions, SWIFT, and China’s Cross-Border Interbank Payments System,” *Center for Strategic and International Studies*, May 20, 2022.

353. AidData, “China as an International Lender of Last Resort Dataset, Version 1.0,” 2023.

354. Paula Diosquez-Rice, “Argentina’s Balance between Debt and Fiscal Management and Electoral Objectives in 2023,” *S&P Global*, March 20, 2023; Rebecca Ray and Margaret Myers, “China-Latin America Finance Databases,” *Inter-American Dialogue*, 2023.

355. Maximillian Heath, “Argentina Inflation Seen Hitting 149% This Year, Up from Previous Poll,” *Reuters*, June 9, 2023; Walter Bianchi, “Argentina to Pay for Chinese Imports in Yuan Rather than Dollars,” *Reuters*, April 26, 2023.

356. Walter Bianchi, “Analysis: Argentina’s Economic Crisis Whack-a-Mole Goes into Overdrive,” *Reuters*, June 28, 2022; Rebecca M. Nelson, “Argentina’s Economic Crisis and Default,” *Congressional Research Service IF10991*, June 15, 2020.

357. Walter Bianchi, “Argentina to Pay for Chinese Imports in Yuan Rather than Dollars,” *Reuters*, April 26, 2023.

358. Eliana Raszewski, “Argentina Doubles China Currency Swap Access to $10 Billion,” *Reuters*, June 2, 2023.

359. Ryan C. Berg and Carlos Baena, “The Great Balancing Act: Lula in China and the Future of U.S.-Brazil Relations,” *Center for Strategic and International Studies*, April 19, 2023.

360. *Reuters*, “Yuan Tops Euro as Brazil’s Second Currency in Foreign Reserves,” March 31, 2023.

361. Anna Fleck, “Brazil’s Rare Trade Surplus with China,” *Statista*, April 13, 2023; UN Comtrade Database, “Trade Data.”

362. Salim Hammad, “Brazil: Current Trade Patterns with China Threaten the Promise of Re-Industrialization,” *BNP Paribas*, April 5, 2023.

363. *Agence-France Presse*, “China, Brazil Strike Deal to Ditch Dollar for Trade,” *Barron’s*, March 29, 2023.

364. Joe Leahy and Hudson Lockett, “Brazil’s Lula Calls for End to Dollar Trade Dominance,” *Financial Times*, April 13, 2023.

365. Rachel Savage and Marcela Ayres, “Brazil Proposes Yuan Guarantees for Exports to Argentina, Finance Minister Says,” *Reuters*, August 23, 2023.

366. Maryelle Demongeot, “China’s Oil Demand Hits Another New High,” *Energy Intelligence*, May 26, 2023.

367. Hubert Thieriot et al., “The Laundromat: How the Price Cap Coalition Whitewashes Russian Oil in Third Countries,” *Center for Research on Energy and Clean Air*, April 19, 2023.

368. Clyde Russell, “Column: China Imports More LNG but Not Enough to Drive Spot Prices,” *Reuters*, July 6, 2023; Eamon Akil Farhat, “China Gas Demand to Surge in 2023 as Europe Slumps, IEA Says,” *Bloomberg*, May 4, 2023.

369. Yew Lun Tian, “China’s Xi Calls for Greater Cooperation with Turkmenistan on Natural Gas,” *Reuters*, January 6, 2023.

370. Chan Aizhu and Marat Gurt, “China Prioritizing Turkmenistan over Russia in Next Big Pipeline Project,” *Reuters*, May 24, 2023; *Reuters*, “China’s Xi Calls for Greater Cooperation with Turkmenistan on Natural Gas,” January 6, 2023.

371. Chan Aizhu and Marat Gurt, “China Prioritizing Turkmenistan over Russia in Next Big Pipeline Project,” *Reuters*, May 24, 2023; Laura Zhou, “How Energy Is

Powering China's Relationships with Central Asia," *South China Morning Post*, May 17, 2023.
372. Chan Aizhu and Marat Gurt, "China Prioritizing Turkmenistan over Russia in Next Big Pipeline Project," *Reuters*, May 24, 2023.
373. *Bloomberg*, "Gas-Rich Turkmenistan Is Running Out of Time to Feed Europe's Fuel Appetite," July 31, 2023; U.S. Central Intelligence Agency, *The World Factbook: Turkmenistan*, July 7, 2023.
374. Justin Dargin, "What's at Stake in the Massive China-Qatar Gas Deal," *Carnegie Endowment for International Peace*, December 29, 2022.
375. Justin Dargin, "What's at Stake in the Massive China-Qatar Gas Deal," *Carnegie Endowment for International Peace*, December 29, 2022.
376. Saeed Shah, "China Pursues Afghanistan's Mineral Wealth after U.S. Exit," *Wall Street Journal*, March 13, 2022.
377. Mohammad Yunus Yawar, "Afghanistan's Taliban Administration in Oil Extraction Deal with Chinese Company," *Reuters*, January 5, 2023.
378. Fergus Hunter et al., "Countering China's Coercive Diplomacy," *Australian Strategic Policy Institute*, February 22, 2023.
379. Fergus Hunter et al., "Countering China's Coercive Diplomacy," *Australian Strategic Policy Institute*, February 22, 2023, 8.
380. Philip Blenkinsop, "EU Backs Retaliation against Economic Coercion," *Reuters*, March 28, 2023.
381. Tim Kelly and Chang-Ran Kim, "G7 Leaders Agree to New Initiative to Fight Economic Coercion," *Reuters*, May 20, 2023; White House, *G7 Leaders' Statement on Economic Resilience and Economic Security*, May 20, 2023.
382. Office of the United States Trade Representative, *Joint Declaration against Trade-Related Economic Coercion and Non-Market Policies and Practices*, June 9, 2023.
383. Jeff Mason, "With Eye on China, U.S. and Five Allies Condemn Trade-Related 'Economic Coercion,'" *Reuters*, June 9, 2023; Tim Kelly and Chang-Ran Kim, "G7 Leaders Agree to New Initiative to Fight Economic Coercion," *Reuters*, May 20, 2023.
384. Fergus Hunter et al., "Countering China's Coercive Diplomacy," *Australian Strategic Policy Institute*, February 22, 2023, 1–2; Aya Adachi, Alexander Brown, and Max J. Zenglein, "Fasten Your Seatbelts: How to Manage China's Economic Coercion," *Mercator Institute for China Studies*, August 25, 2022, 6–7.
385. Fergus Hunter et al., "Countering China's Coercive Diplomacy," *Australian Strategic Policy Institute*, February 22, 2023, 1–2.
386. Fergus Hunter et al., "Countering China's Coercive Diplomacy," *Australian Strategic Policy Institute*, February 22, 2023, 1–2; Aya Adachi, Alexander Brown, and Max J. Zenglein, "Fasten Your Seatbelts: How to Manage China's Economic Coercion," *Mercator Institute for China Studies*, August 25, 2022, 6–7.
387. Aya Adachi, Alexander Brown, and Max J. Zenglein, "Fasten Your Seatbelts: How to Manage China's Economic Coercion," *Mercator Institute for China Studies*, August 25, 2022, 6–7.
388. Fergus Hunter et al., "Countering China's Coercive Diplomacy," *Australian Strategic Policy Institute*, February 22, 2023, 5; Aya Adachi, Alexander Brown, and Max J. Zenglein, "Fasten Your Seatbelts: How to Manage China's Economic Coercion," *Mercator Institute for China Studies*, August 25, 2022, 6–7.
389. Fergus Hunter et al., "Countering China's Coercive Diplomacy," *Australian Strategic Policy Institute*, February 22, 2023, 3; Aya Adachi, Alexander Brown, and Max J. Zenglein, "Fasten Your Seatbelts: How to Manage China's Economic Coercion," *Mercator Institute for China Studies*, August 25, 2022, 5.
390. Aya Adachi, Alexander Brown, and Max J. Zenglein, "Fasten Your Seatbelts: How to Manage China's Economic Coercion," *Mercator Institute for China Studies*, August 25, 2022, 5.
391. Aya Adachi, Alexander Brown, and Max J. Zenglein, "Fasten Your Seatbelts: How to Manage China's Economic Coercion," *Mercator Institute for China Studies*, August 25, 2022, 5.
392. Joshua Kurlantzick, "China's Collapsing Global Image," *Council on Foreign Relations*, July 2022.
393. Muyu Xu, "China Boosts Coal Output, Eases Australia Ban to Bolster Energy Security," *Reuters*, January 9, 2023; Suyash Pande and Sambit Mohanty, "Amid China Vacuum, Australian Coal Finds New Homes in India, Japan," *S&P Global*, December 16, 2021; Su-Lin Tan, "China Weights Price Caps on Coal as Supply Shortages Sends Energy Prices Soaring," *South China Morning Post*, June 9, 2021; Weizheng Tan and Evelyn Cheng, "Chinese Cities Reportedly Go Dark as Country Faces Shortage of Coal, a Major Australian Export," *CNBC*, January 4, 2021.

394. Minxin Pei, "China Can't Charm the World on the Cheap," *Bloomberg*, April 9, 2023; Michel Rose and James Pomfret, "With Lavish Treatment of Macron, China's Xi Woos France to 'Counter' U.S.," *Reuters*, April 7, 2023; Clea Caulcutt et al., "The Warm Embrace and the Cold Shoulder: China Mines Europe's Fractures during Joint Visit," *Politico*, April 6, 2023; *Associated Press*, "China's Xi Invites Spanish PM on State Visit Next Week," March 23, 2023; *Reuters*, "Spain's PM Sanchez to Go on State Visit to China," March 23, 2023; Esme Nicholson, "Why Western Leaders Are Warily Watching the German Leader's Trip to China," *NPR*, November 3, 2022; Yukio Tajima and Takayuki Tanaka, "Xi's Call with Zelenskyy Seen as Attempt to Blunt European Criticism," *Nikkei Asia*, April 28, 2023; Nishant Dahiya et al., "China's Xi Calls Ukraine's Zelenskyy, after Weeks of Intensifying Pressure to Do So," *NPR*, April 26, 2023; Stuart Lau, "Von der Leyen Warns Xi Not to Arm Russia with Chinese Weapons," *Politico*, April 6, 2023.

395. Nishant Dahiya et al., "China's Xi Calls Ukraine's Zelenskyy, after Weeks of Intensifying Pressure to Do So," *NPR*, April 26, 2023.

396. Daniel Hurst, "Penny Wong Raises Human Rights and Trade with Chinese Counterpart during Historic Talks," *Guardian*, December 21, 2022.

397. Jason Rogers and Ailing Tan, "China Buys More Australian Coal as Appetite for Quality Builds," *Bloomberg*, May 22, 2023; Ben Westcott, "Australia, China Trade Ministers Hold First Talks since 2019," *Bloomberg*, February 5, 2023; Daniel Hurst, "Penny Wong Raises Human Rights and Trade with Chinese Counterpart during Historic Talks," *Guardian*, December 21, 2022.

398. Ben Westcott, "Australia, China Trade Ministers Hold First Talks since 2019," *Bloomberg*, February 5, 2023.

399. Jason Rogers and Ailing Tan, "China Buys More Australian Coal as Appetite for Quality Builds," *Bloomberg*, May 22, 2023; Claire Fu and Daisuke Wakabayashi, "China Wine Tariff Pushes Australia's Grape Growers into Crisis," *New York Times*, March 16, 2023; Jianli Yang, "China-Australia Trade War Shows No Sign of Abating," *Diplomat*, February 15, 2023.

400. Zachary Torrey, "China's Anti-Foreign Sanctions Law: Concerns and Uncertainty Abound," *China Project*, July 2, 2021; Katja Drinhausen and Helena Legarda, "China's Anti-Foreign Sanctions Law: A Warning to the World," *Mercator Institute for China Studies*, June 24, 2021.

401. Simone McCarthy, "China Unveils Sweeping Foreign Policy Law as Xi Consolidates Power—and Aims to Counter the U.S.," *CNN*, June 29, 2023.

402. Bo Gu, "Chinese Legislation Takes Aim at U.S. Trade Sanctions," *Voice of America*, July 11, 2023.

403. David Shepardson, "U.S. Raises Concerns by Micron, Intel with China," *Reuters*, August 28, 2023; U.S. Department of Commerce, *Readout of Secretary Raimondo's Meeting with Minister of Commerce of the People's Republic of China Wang Wentao*, August 28, 2023.

404. Dave Lawler, "The 53 Countries Supporting China's Crackdown on Hong Kong," *Axios*, July 3, 2020; Joshua Eisenman and David H. Shinn, "Evolving Principles and Guiding Concepts: How China Gains African Support for Its Core National Interests," *Orbis* 64:2 (2020): 271–288; Permanent Mission of the People's Republic of China to the UN, "Joint Statement on Xinjiang at Third Committee Made by Belarus on Behalf of 54 Countries," October 29, 2019; Aggrey Mutambo, "China Seeks Support from Africa on Uyghur Policy," *Daily Nation*, October 13, 2019; Catherine Putz, "Which Countries Are For or Against China's Xinjiang Policies?" *Diplomat*, July 15, 2019; Embassy of the People's Republic of China in the United Republic of Tanzania, "Tanzanian Government Supports Chinese Government's Position on the Issue of Hong Kong," October 4, 2019; *Observer*, "Uganda Sides with China on Hong Kong Protests," October 4, 2019; Wang Wen and Chen Xiaochen, "Who Supports China in the South China Sea and Why," *Diplomat*, July 27, 2016; IMF, "Debt Relief Under the Heavily Indebted Poor Countries (HIPC) Initiative."; World Bank, "Highly Indebted Poor Country (HIPC) Initiative."