

U.S.-China Economic and Security Review Commission

Economics and Trade Bulletin



October 10, 2018

Highlights of This Month's Edition

- **Bilateral trade:** In August 2018, the U.S. goods deficit with China hit \$38.6 billion, an increase of 10.5 percent year-on-year, and the highest monthly deficit with China on record.
- **Bilateral policy issues:** On September 24, the second and most recent round of tariffs went into effect: the United States imposed a 10 percent tariff on \$200 billion of U.S. imports from China; Beijing responded by imposing a 5 to 10 percent tariff on \$60 billion of U.S. exports to China, releasing a white paper criticizing the Trump Administration; tariffs increase manufacturing costs and hurt U.S. farmers and automakers, but niche manufacturers and metal producers reap benefits, labor groups offer qualified support.
- **Policy trends in China's economy:** At the 2018 Forum on China-Africa Cooperation, an official forum between China and its 53 diplomatic partners in Africa, Beijing pledged \$60 billion in financing commitments.
- **In Focus – U.S. Supply Chain Risks from China:** Increased reliance on China-based manufacturing and strategic materials worsens U.S. vulnerabilities to a supply disruption and Chinese government tampering of products and services.

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Bilateral Trade

U.S. Monthly Goods Trade Deficit with China Reaches \$38.6 Billion in August 2018

In August 2018, the U.S. goods deficit with China hit \$38.6 billion, an increase of 10.5 percent year-on-year, and the highest monthly deficit with China on record. U.S. exports to China were \$9.3 billion in August 2018, down 14.9 percent year-on-year, and imports from China reached \$47.9 billion, up 4.5 percent year-on-year.¹

In the first eight months of 2018, the U.S. goods deficit with China totaled \$261.1 billion, up 9.2 percent over the same period in 2017 (see Figure 1).

Figure 1: U.S. Goods Trade with China, January–August, 2012–2018



Source: U.S. Census Bureau, *Trade in Goods with China*, October 5, 2018. <https://www.census.gov/foreign-trade/balance/c5700.html>.

The continued growth in U.S. goods imports from China, despite significant tariffs, reflects reports that U.S. businesses rushed to purchase as many goods from China as possible before tariffs hit.² U.S. exports to China, on the other hand, saw a significant decline. Exports of U.S. soybeans, one of the key U.S. exports to China, dropped to only \$24 million in August 2018 down from \$455 million in August 2017.³ U.S. soybean growers are heavily dependent on the China market: In 2017, China accounted for 57 percent of all U.S. soybean exports to the world; roughly one-third of all soybeans grown in the United States were exported to China by value.⁴

Bilateral Policy Issues

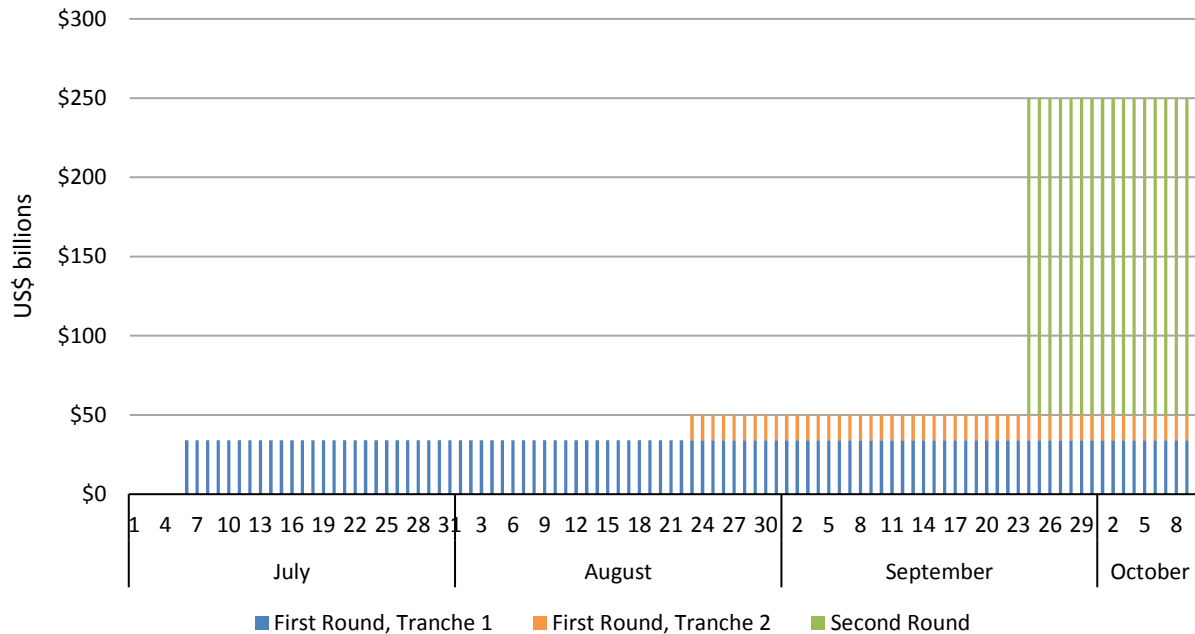
Latest Round of Tariffs on Chinese Imports Goes into Effect

On September 24, the United States placed a 10 percent tariff on about \$200 billion of U.S. imports from China.⁵ This round of tariffs was implemented shortly after the list of affected products was finalized on September 17⁶ and incorporated exclusions following six days of hearings in August, where over 350 people had been scheduled to testify.⁷ The final list includes 5,745 tariff lines, reduced from 6,031 lines in the original list.⁸ The Office of the U.S. Trade Representative (USTR) has stated these tariffs will be raised from 10 to 25 percent in January 2019.⁹ In retaliation, China placed a 5 to 10 percent tariff on \$60 billion of U.S. exports to China.¹⁰

The United States has now put two rounds of tariffs on approximately \$250 billion of imports from China, the first on \$50 billion of imports—in two tranches—and the second on \$200 billion of imports (see Figure 2).¹¹ For reference, the United States imported about \$505.5 billion of goods from China in 2017.¹² With the second round,

tariffs have begun to impact a wider array of products, including consumer goods. According to Chad Bown, Euijin Jung, and Zhiyao Lu of the Peterson Institute for International Economics, about 24 percent of goods in the second round represent consumer-facing products.¹³

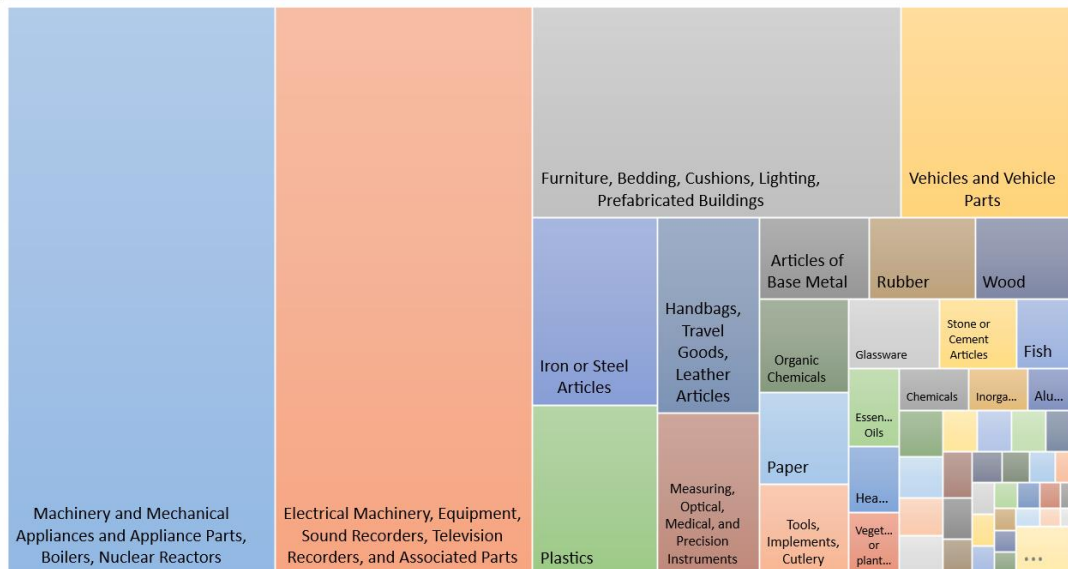
Figure 2: Import Value of Chinese Goods Impacted by Two Rounds of U.S. Tariffs July 1–October 10, 2018



Source: Created by Commission staff.

Analyzing both U.S. tariff rounds on Chinese products together, intermediate goods—goods consumed by businesses in the production process—account for more than half of affected imports.¹⁴ As seen in Figure 3, \$55.5 billion (or 25 percent of affected products)—is classified as machinery and mechanical appliances like engine parts, air conditioning units, and automated processing machines, and \$53.3 billion (24 percent of affected products) is classified as electrical machinery, equipment, and parts, like static converters, electric conductors, and voice recognition machines.¹⁵ Furniture and motor vehicle parts make up an additional \$28.4 billion and \$13.7 billion, respectively (13 percent and 6 percent of affected products).¹⁶ All remaining product categories comprise no more than about 4 percent of the total from the two rounds of U.S. tariffs on imports from China.¹⁷ The largest single products affected thus far by U.S. tariffs include printed circuit assemblies (a circuit board with electronic components); switching and routing machines for transmitting voice, image, or other data; processing units; and metal furniture.¹⁸

Figure 3: Product Categories Covered by First Two Rounds of U.S. Tariffs on Chinese Imports (2017 trade value)



Note: Peterson Institute for International Economics data on U.S. import value from China in 2017—originally taken from the U.S. International Trade Commission Dataweb—have been grouped at the HS2 code level.

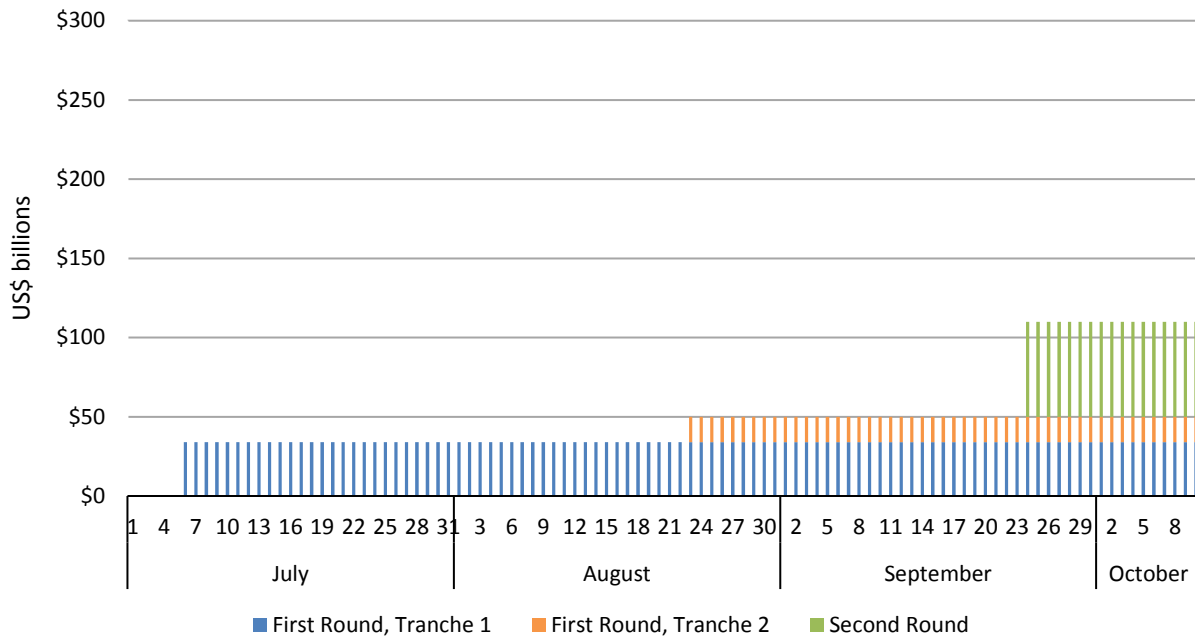
Source: Created by Commission staff. Data from Chad P. Bown, Euijin Jung, and Zhiyao (Lucy) Lu, “Trump and China Formalize Tariffs on \$260 Billion of Imports and Look ahead to Next Phase,” *Peterson Institute for International Economics*, September 20, 2018. <https://piie.com/blogs/trade-investment-policy-watch/trump-and-china-formalize-tariffs-260-billion-imports-and-look>.

Bilateral trade negotiations between the United States and China were cancelled as the second round of tariffs went into effect, which China’s Ministry of Commerce said created “new uncertainty.”¹⁹ Lawrence Kudlow, director of the National Economic Council, has suggested trade negotiations may be resumed at the December meeting of the Group of 20.²⁰ Potential discussions could be disrupted by a further round of tariffs. The Trump Administration has stated its intention to implement a third round of tariffs on \$267 billion of Chinese imports “if China takes retaliatory action.”²¹

Chinese Government Responds to U.S. Tariffs with Reciprocal Tariffs, White Paper, and Global Tariff Reductions on Other Goods

After the United States imposed tariffs on September 24, China retaliated with new tariffs on \$60 billion of U.S. goods exported to China.²² These tariffs range from 5 to 10 percent and cover 5,207 items.²³ The most recent round of Chinese tariffs primarily impacts intermediate goods (67 percent) and capital equipment (26 percent).²⁴ This contrasts with China’s first round of tariffs, which targeted U.S. agricultural exports.²⁵ In total, since July 2018 China has imposed new tariffs on approximately \$110 billion of goods imported from the United States (see Figure 4).²⁶ For reference, China imported \$129.9 billion in goods from the United States in 2017.²⁷

**Figure 4: Import Value of U.S. Goods Impacted by Two Rounds of Chinese Tariffs
July 1, 2018–October 10, 2018**

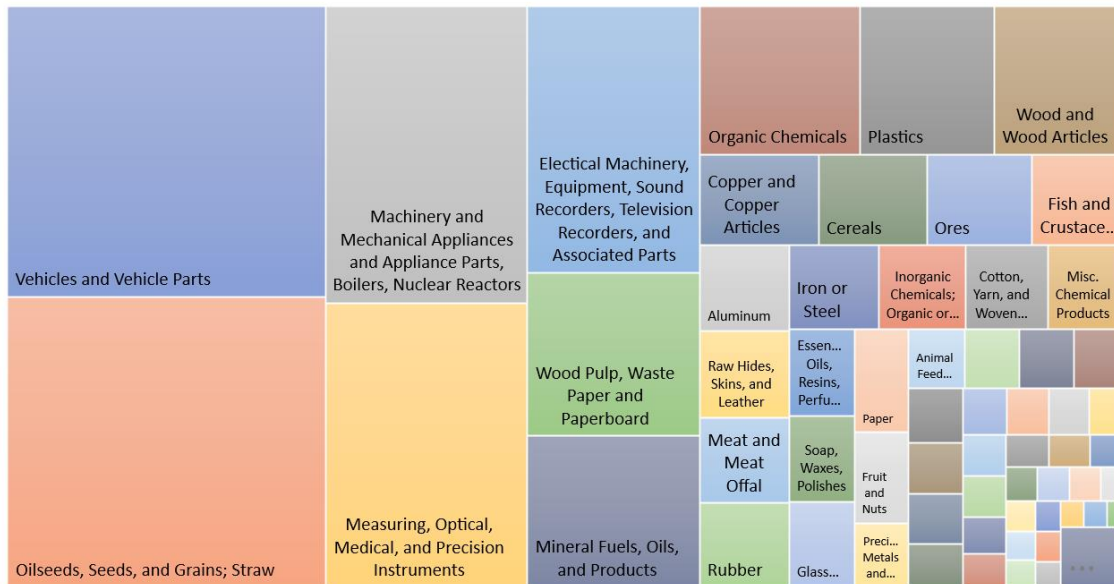


Source: Created by Commission staff.

Taken together, the two rounds of Chinese tariffs hit a wide array of product categories (see Figure 5): about \$14.4 billion (14 percent of affected trade value) represent vehicles and vehicle parts; another \$14.4 billion (14 percent of affected trade value) represents oilseeds, seeds, and grains; and about \$9.3 billion (9 percent of affected value) represents machinery and mechanical appliances like engines and pumps.²⁸ The largest single products affected by Chinese tariffs thus far are soybeans (categorized under oilseeds, seeds, and grains), liquefied propane, cross-country cars, electric cars, and scrap copper and scrap paper.²⁹

As the United States imports more goods from China than China imports from the United States—the U.S. trade deficit in goods with China stood at \$375.6 billion in 2017—China cannot match U.S. tariff actions dollar for dollar.³⁰ However, some U.S. exports to China have not been impacted by the two rounds of tariffs.³¹ These unaffected U.S. products fall into broad categories of machinery and mechanical appliances, electrical equipment, transportation (including most aircraft), and chemicals.³² *Wall Street Journal* Chinese finance reporter Lingling Wei and technology reporter Yoko Kubota noted Beijing removed aircraft from the tariff list, a sector where local companies “[lack] both the money and the know-how.”³³

Figure 5: Product Categories Covered by Two Rounds of Chinese Tariffs on U.S. Imports (2017 value)



Note: Peterson Institute for International Economics data on U.S. export value to China from 2017—originally taken from Trademap.org—have been grouped at the HS2 code level.

Source: Created by Commission staff. Data from 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.

<https://piie.com/blogs/trade-investment-policy-watch/trump-and-china-formalize-tariffs-260-billion-imports-and-look>.

On September 24, 2018, China’s State Council issued a white paper on trade frictions with the United States in response to the Trump Administration’s decision to impose tariffs on more than \$250 billion of imports from China.³⁴ The report, published by Xinhua shortly after the U.S. tariffs on \$200 billion of goods imports from China went into effect, criticized the United States for “going back on its word” and attempting to intimidate China through trade.³⁵ The report also sought to signal Beijing’s willingness to restart trade negotiations as long as the talks are “based on mutual respect and equality.”³⁶

China has also lowered tariff rates on consumer goods in an effort to reduce prices and encourage domestic consumption. Effective July 1, 2018, Beijing announced it would be cutting import tariffs on 1,449 categories of goods, its fourth round of tariff cuts since 2015.³⁷ That month, Beijing also announced a decision to lower tariffs on global automobile imports to 15 percent, down from 25 percent.³⁸ In comparison, the U.S. tariff on global auto imports is 2.5 percent.³⁹ Effective November 1, 2018, tariffs will be cut for 1,585 additional product categories, including machinery (with tariffs reduced to 8.8 percent from 12.2 percent), textiles (to 8.4 percent from 11.5 percent), and paper products (to 5.4 percent from 6.6 percent).⁴⁰

Tariffs Impact U.S. Companies in China and the United States

The American Chamber of Commerce (AmCham) China and AmCham Shanghai released a joint survey of 430 companies on the impact of tariffs imposed over the course of 2018 by China and the United States. The survey focused on three main issues: the severity and nature of the impact the tariffs had on firms, the increase in nontariff barriers amid the trade tensions, and the extent to which firms are considering shifting supply chains.

Over 60 percent of survey respondents reported the latest rounds of tariffs having a negative impact on their companies.⁴¹ According to the survey, the industries most impacted are machinery, electronics, automotive, agribusiness, chemicals, healthcare, and aerospace.⁴² Respondents indicated the most common types of impact were

reduced profits (50.8 percent), increased manufacturing costs (47.1 percent), decreased demand for products (41.8 percent), reduced revenue (37.3 percent), and increased sale prices of products (37.1 percent).⁴³ Of those reporting reduced profit, roughly half reported profit losses of 10 percent or greater.⁴⁴

A slight majority of respondents (52.1 percent) also reported an increase in qualitative retaliations by the Chinese government, the most prevalent of which were increased inspections (27.1 percent), slower customs clearance (23.1 percent), and slower regulatory approval for licenses and other applications (14.8 percent).⁴⁵ An additional 19.2 percent reported other complications stemming from increased regulatory scrutiny or bureaucratic oversight.⁴⁶ In a separate member survey conducted by the U.S.-China Business Council, 28 percent of roughly 100 respondents similarly reported greater regulatory scrutiny as a direct result of trade tensions.⁴⁷

The AmCham survey also discussed changes to business strategy, the most common of which were delaying or canceling investment decisions (31.1 percent), and adjusting supply chains to source components or assembly outside of the United States (30.9 percent) and China (30.2 percent).⁴⁸ According to the survey, 64.6 percent of respondents have no plans to relocate China-based manufacturing facilities to other countries because of worsening U.S.-China economic relations in general or the tariffs in particular.⁴⁹ Despite uncertainty from escalating trade tensions as well as rising labor costs in China, some firms are reluctant to relocate due to alternative countries' less developed infrastructure and supply chains.⁵⁰

According to analysis by Dan Ikenson, director of the Cato Institute's Herbert A. Stiefel Center for Trade Policy Studies, transportation, construction, and manufacturing sectors are most impacted by the U.S. tariffs, with 31.1 percent, 28.6 percent, and 25.7 percent of intermediary goods used in those industries subject to tariffs under the USTR's first two lists.⁵¹ Manufacturing is most burdened, Dr. Ikenson finds, as every U.S. industry with more than 50 percent of their intermediate inputs subject to the tariffs is in the manufacturing sector.⁵²

Because the U.S. tariffs home in on intermediate goods instead of finished products, U.S. manufacturers may be more disadvantaged relative to importers of end goods.⁵³ Some manufacturers are considering ending certain product lines, as they will no longer be viable given the higher cost of production, while others are contemplating relocating manufacturing facilities overseas to avoid the tariffs.⁵⁴ In turn, retailers of goods manufactured in the United States are also facing cost increases for their inventory.⁵⁵

Chinese tariffs have chiefly affected agricultural exporters, scrap yards, automakers, and plastics and chemical makers.⁵⁶ The tariffs have caused commodity prices to drop across impacted industries, and some farms or firms that export to China have had contracts canceled as a result of the tariffs.⁵⁷ In some cases where China is one of the largest markets for a particular export, such as North Carolina tobacco or Maine lobster, exporters fear China will find other sources, eliminating the opportunity for business even if tariffs are later reduced.⁵⁸

In some circumstances, tariffs in particular or uncertainty in the market have benefited U.S. businesses. Niche manufacturers that are less vulnerable to material costs have seen domestic orders increase, while U.S. aluminum and steel producers have also had orders increase, likely out of anticipation of future price hikes.⁵⁹ Firms that manufacture or sell goods for which there are no immediate substitutes or which consumers will continue to purchase despite increased prices also report little concern over higher input costs, as their competitors will face the same conditions.⁶⁰

Labor unions have also offered qualified support of the tariffs on China. Richard Trumka, president of the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO), praised the tariffs as an enforcement mechanism and argued that the benefits of strengthening trade agreement enforcement far outweighed any immediate losses within the agricultural sector due to retaliatory tariffs.⁶¹ Holly Hart, legislative director and assistant to the president of the United Steelworkers also praised the tariffs on Chinese imports, citing early evidence of job creation.⁶² Representatives from both the AFL-CIO and the United Automobile Workers have stressed that tariffs are an effective tool for helping U.S. workers if they are strategically applied with other mechanisms to prevent outflow of jobs from the United States.⁶³

Policy Trends in China's Economy

2018 Forum on China-Africa Cooperation

The Forum on China-Africa Cooperation (FOCAC), an official forum between China and its diplomatic partners in Africa,* held its seventh summit in Beijing on September 3–4. Established in 2000 by China and its African partners and held every three years, FOCAC covers economic cooperation, cultural exchanges, and military cooperation, and results in a three-year action plan containing major policy announcements and financing pledges.⁶⁴

In his keynote speech at FOCAC, Chinese President and General Secretary of the Chinese Communist Party Xi Jinping appeared to be responding to criticism from Western leaders that Beijing has been engaging in “debt-trap diplomacy” in stressing that China was not seeking “selfish political gains in investment and financing cooperation with Africa” and that Chinese assistance comes without “political strings attached.”⁶⁵ “Ultimately, it is for the peoples of China and Africa to judge the performance of China-Africa cooperation,” he said.⁶⁶ President Xi committed to deepening China-Africa cooperation in eight priority areas—industrialization, infrastructure, green development, capacity building, healthcare, people-to-people exchanges, and peace and security—and pledged \$60 billion in financing commitments.⁶⁷ While previous summits saw the doubling or even tripling of financial pledges, Beijing’s pledge remained the same as the amount pledged at the last FOCAC summit in 2015.[†] The stagnation in Beijing’s pledge in part reflects China’s caution in the face of a deteriorating debt landscape in Africa.⁶⁸ Although the headline number was unchanged, there was a notable shift in the composition of Beijing’s pledge toward less concessionality in lending and a greater emphasis on investment (see Table 1).

- *Less concessionality in lending:* In 2015, China pledged \$40 billion in grants, zero-interest loans, concessional loans, and export credit lines, compared to \$35 billion in 2018.⁶⁹ Concessional loans—which were separated out from grants and zero-interest loans in 2015—are now lumped in the same category with grants and zero-interest loans, so it is unclear whether the \$5 billion pledged in grants and zero-interest loans in 2015 will be matched. The \$20 billion pledge in credit lines is not explicitly linked to export credit lines as was the case in 2015, and there is no mention of whether the credits will be extended on preferential terms. According to Yun Sun, director of the China program at the Stimson Center, this shift is “indicative of China’s heightened concerns about the returns and commercial viability of the Chinese financing.”⁷⁰
- *Greater emphasis on investment:* The 2018 pledge includes a new commitment to “encourage Chinese companies to make at least \$10 billion of investment in Africa in the next three years,” reflecting the Chinese government’s push to encourage more Chinese companies to invest in Africa.⁷¹ However, that goal may be difficult to realize. The brunt of China’s financing in Africa has come in the form of loans, not investment: in 2017, China’s foreign direct investment in Africa was \$3.1 billion, 2.5 percent of China’s global foreign direct investment.⁷²

* China has diplomatic relations with 53 out of 54 African countries. eSwatini, formerly Swaziland, maintains formal diplomatic ties with Taiwan.

† China pledged \$5 billion in financing commitments at the 2006 FOCAC summit, \$10 billion at FOCAC 2009, \$20 billion at FOCAC 2012, and \$60 billion at FOCAC 2015. Yun Sun, “China’s 2018 Financial Commitments to Africa and Recalibration,” *Brookings Institution*, September 5, 2018. <https://www.brookings.edu/blog/africa-in-focus/2018/09/05/chinas-2018-financial-commitments-to-africa-adjustment-and-recalibration>.

Table 1: 2015 and 2018 FOCAC Commitments

2015	2018
\$60 billion in financing to Africa	\$60 billion in financing to Africa
<ul style="list-style-type: none"> • \$35 billion in preferential and concessional loans and export credit lines • \$5 billion in grants and zero-interest loans • Expand China-Africa Development Fund by \$5 billion to \$10 billion • Expand special loans to support African small and medium enterprises by \$5 billion to \$6 billion • \$10 billion China-Africa Industrial Capacity Cooperation Fund 	<ul style="list-style-type: none"> • \$20 billion in credit lines • \$15 billion in grants, zero-interest loans, and concessional loans • \$10 billion special fund for development financing • \$5 billion special fund for financing imports from Africa • \$10 billion in investment from Chinese companies over the next three years

Source: Ministry of Foreign Affairs of the People's Republic of China, *Forum on China-Africa Cooperation Beijing Action Plan (2019-2021)*, September 5, 2018. https://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1593683.shtml; Ministry of Foreign Affairs of the People's Republic of China, *The Forum on China-Africa Cooperation Johannesburg Action Plan (2016-2018)*, December 10, 2015. https://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1323159.shtml.

Trade: At the summit, African leaders emphasized that China and Africa should work toward a more balanced trade relationship, which was a recurring theme from previous summits. China is the largest trading partner of most African countries, but many of these countries run large trade deficits with Beijing.⁷³ Addressing the summit, South African President Cyril Ramaphosa said, “Much of what is exported from Africa are raw materials and primary products; much of what is imported from China are finished goods.... This obviously limits the ability of African countries to extract the full value for their abundant natural resources and to create work for their people.”⁷⁴ China declared its intent to “increase imports, particularly non-resource products, from Africa, with a focus on value-added agriculture and industrial products” and announced a \$5 billion special fund for financing African imports.⁷⁵

Debt: The issue of debt sustainability, while not on the FOCAC agenda, loomed large. International criticism of the Belt and Road Initiative's (BRI) effects on debt levels in participating countries has grown, along with scrutiny over China's role in Africa's emerging debt crisis. In May 2018, the International Monetary Fund warned that sub-Saharan African nations are at growing risk of debt distress due to heavy borrowing and widening deficits, despite a modest pickup in economic growth, with around 40 percent of low-income countries now rated as being in debt distress or at high risk of it.⁷⁶ The median level of government debt in sub-Saharan Africa has increased from 34 percent of gross domestic product in 2013 to an estimated 53 percent in 2017.⁷⁷

According to research from the China-Africa Research Institute at the John Hopkins University's School of Advanced International Studies, Chinese loans are not yet a major contributor to debt distress in most African countries.⁷⁸ Chinese loans are the most significant contributor to debt distress in only three African countries—Congo, Djibouti, and Zambia.⁷⁹ At the FOCAC summit, China pledged to provide debt relief for the continent's “least-developed countries, heavily indebted and poor countries, landlocked developing countries and small island developing countries.”⁸⁰ However, Deborah Brautigam, director of the China-Africa Research Initiative, notes that China's debt relief has always been “limited to interest-free Chinese government loans maturing at the end of the year,” which comprise a “relatively modest part of Chinese finance in Africa.”⁸¹

In recent months, several major recipients of BRI projects, including Pakistan and Malaysia, have voiced concerns about the terms of Chinese lending and are seeking to review or renegotiate the terms of major BRI infrastructure projects.⁸² During his visit to Beijing in August 2018, Malaysian Prime Minister Mahathir Mohamed warned against “a new version of colonialism” while expressing hope that China would help Malaysia with its debt burden.⁸³ “I

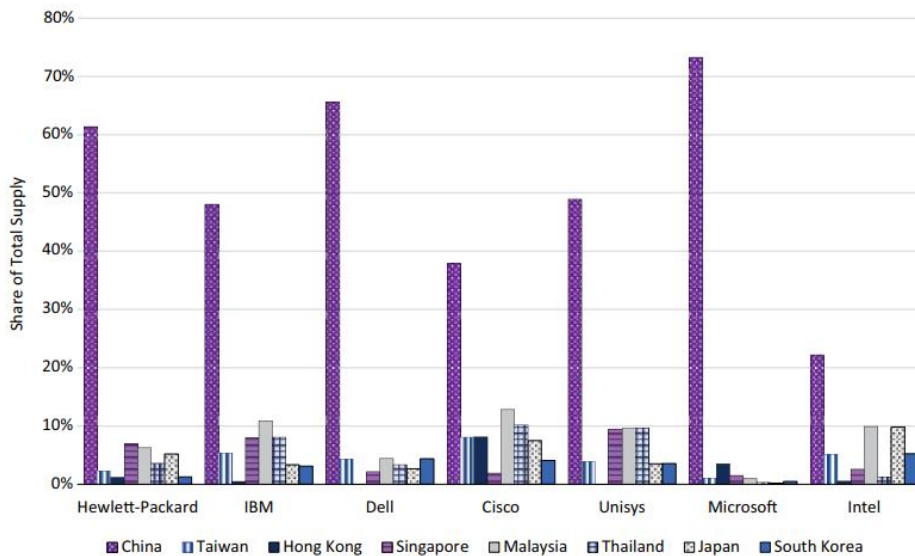
believe and hope China will look sympathetically towards the problems we have to resolve and perhaps help us to resolve some of our internal fiscal problems,” he said.⁸⁴

In Focus: U.S. Supply Chain Risks from China

The United States relies on complex, globalized, and dynamic supply chains, with China factoring in at multiple points within a single supply chain.⁸⁵ Since the 1990s, the U.S. government has shifted away from government-developed or government-customized products to commercial-off-the-shelf (COTS) products in order to lower cost and accelerate product availability.⁸⁶ COTS products comprise over 95 percent of U.S. government electronics components and information technology (IT) systems.⁸⁷ A growing share of COTS products is manufactured in China: In 2015, China was the world’s largest electronics manufacturer accounting for over 30 percent of global information technology and communications manufacturing exports; China comprised for around 40 percent of global manufacturing for mobile phones, computers, and consumer electronics.⁸⁸

In an April 2018 report prepared for the Commission, Interos found that from 2012 to 2017, around 51 percent of total shipments made by leading U.S. IT firms HP, IBM, Dell, Cisco, Unisys, Microsoft, and Intel originated in China (see Figure 6).^{*} Sean Kanuck, director of future conflict and cyber security for the research institute International Institute for Strategic Studies, noted that “capable cyber actors—like the Chinese intelligence and security services—can access the IT supply chain at multiple points to create advanced and persistent subversions.”⁸⁹

Figure 6: China’s Share of Total Supply for Major Federal IT Providers, 2012–2017



Source: Tara Beeny et al., “Supply Chain Vulnerabilities from China in U.S. Federal Information Communications Technology,” *Interos* (prepared for the U.S.-China Economic and Security Review Commission), April 19, 2018. https://www.uscc.gov/sites/default/files/Research/Interos_Supply%20Chain%20Vulnerabilities%20from%20China%20in%20U.S.%20Federal%20ICT_final.pdf.

^{*} For an analysis of federal information and communications technology vulnerabilities from China, see Tara Beeny et al., “Supply Chain Vulnerabilities from China in U.S. Federal Information Communications Technology,” *Interos* (prepared for the U.S.-China Economic and Security Review Commission), April 19, 2018. https://www.uscc.gov/sites/default/files/Research/Interos_Supply%20Chain%20Vulnerabilities%20from%20China%20in%20U.S.%20Federal%20ICT_final.pdf.

U.S. reliance on China-based manufacturing and the degree of Chinese government influence over its business and legal systems could provide opportunities for the Chinese government to force Chinese suppliers or manufacturers to modify products, facilitate espionage, or otherwise compromise equipment.⁹⁰ A September 2018 report by the Interagency Task Force led by the U.S. Department of Defense found that “China represents a significant and growing risk to the supply of materials and technologies deemed strategic and critical to U.S. national security” that can diminish U.S. manufacturing and defense industrial base capabilities and military readiness.⁹¹ For example, in 2010, after a territorial dispute, the Chinese government halted exports of critical rare earths to Japan.⁹² The United States relies on imports to all its domestic consumption* and is vulnerable to a similar halt in exports; approximately 78 percent of U.S. rare earth imports came from China between 2013 and 2016; if rare earths processed outside of China but using Chinese mineral concentrates are included in the estimate, U.S. reliance on Chinese rare earths goes up to nearly 100 percent.⁹³ Rare earths are critical in major U.S. weapons systems including lasers, radar, sonar, night vision systems, missile guidance, jet engines, and alloys for armored cars.⁹⁴

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This report is the product of professional research performed by the staff of the U.S.-China Economic and Security Review Commission, and was prepared at the request of the Commission to support its deliberations. Posting of the report to the Commission’s website is intended to promote greater public understanding of the issues addressed by the Commission in its ongoing assessment of U.S.-China economic relations and their implications for U.S. security, as mandated by Public Law 106-398 and Public Law 113-291. However, it does not necessarily imply an endorsement by the Commission, any individual Commissioner, or the Commission’s other professional staff, of the views or conclusions expressed in this staff research report.

* Since 2016, the United States has not mined rare earth domestically and relied on imports to meet 100 percent of domestic consumption. Major sources of rare earth imports include China (78 percent), Estonia (6 percent), France (4 percent), Japan (4 percent), and others (8 percent). Estonia, France, and Japan depend on mineral concentrates from China for their rare earth exports. U.S. Department of Interior, U.S. Geological Survey, *Mineral Commodity Summaries 2018*, January 31, 2018, 132. <https://minerals.usgs.gov/minerals/pubs/mcs/2018/mcs2018.pdf>.

- ¹ U.S. Census Bureau, *Trade in Goods with China*, October 5, 2018. <https://www.census.gov/foreign-trade/balance/c5700.html>.
- ² Jeff Daniels, “Trump Trade War with China Leads to ‘Off the Charts’ Rush of Imports at Nation’s Busiest Port, and More Demand for Warehouse Space.” *CNBC*, August 15, 2018; “China Races to Get Goods to the U.S. before Tariffs Hit,” *Bloomberg*, September 21, 2018; “Record U.S. Imports Drive Goods Trade Deficit with China to High in August,” *Agence France-Presse*, October 5, 2018.
- ³ U.S. Department of Agriculture, Foreign Agricultural Service, “Global Agricultural Trade System,” October 9, 2018. <https://apps.fas.usda.gov/gats/>.
- ⁴ U.S. Department of Agriculture Economic Research Service, *Cash Receipts by Commodity State Ranking*; U.S. Department of Agriculture Foreign Agricultural Service, *Global Agricultural Trade System Online*, June 4, 2018.
- ⁵ Office of the U.S. Trade Representative, *USTR Finalizes Tariffs on \$200 Billion of Chinese Imports in Response to China’s Unfair Trade Practices*, September 2018. <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2018/september/ustr-finalizes-tariffs-200>.
- ⁶ Office of the U.S. Trade Representative, *Tariff List – September 17, 2018*, September 17, 2018. https://ustr.gov/sites/default/files/enforcement/301Investigations/Tariff%20List_09.17.18.pdf.
- ⁷ *Marketplace*, “It’s Opening Day for Public Hearings on the Next Round of Tariffs,” August 20, 2018. <https://www.marketplace.org/2018/08/20/economy/trade-showdown/it-s-opening-day-public-hearings-next-round-tariffs>.
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