

2018 Report to Congress

of the

U.S.-China Economic and Security Review Commission



Executive Summary and Recommendations

One Hundred Fifteenth Congress
Second Session
November 2018

Printed for the use of the
U.S.-China Economic and Security Review Commission
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The Commission was created on October 30, 2000 by the Floyd D. Spence National Defense Authorization Act of 2001, Pub. L. No. 106–398 (codified at 22 U.S.C. § 7002), as amended by: The Treasury and General Government Appropriations Act, 2002, Pub. L. No. 107–67 (Nov. 12, 2001) (regarding employment status of staff and changing annual report due date from March to June); The Consolidated Appropriations Resolution, 2003, Pub. L. No. 108–7 (Feb. 20, 2003) (regarding Commission name change, terms of Commissioners, and responsibilities of the Commission); The Science, State, Justice, Commerce, and Related Agencies Appropriations Act, 2006, Pub. L. No. 109–108 (Nov. 22, 2005) (regarding responsibilities of the Commission and applicability of FACA); The Consolidated Appropriations Act, 2008, Pub. L. No. 110–161 (Dec. 26, 2007) (regarding submission of accounting reports; printing and bindings; compensation for the executive director; changing annual report due date from June to December; and travel by members of the Commission and its staff); The Carl Levin and Howard P. “Buck” McKeon National Defense Authorization Act for Fiscal Year 2015, Pub. L. No. 113–291 (Dec. 19, 2014) (regarding responsibilities of the Commission).

The Commission’s full charter <http://www.uscc.gov/about/uscc-charter> and Statutory Mandate http://www.uscc.gov/about/fact_sheet are available via the World Wide Web.

U.S.-China Economic and Security Review Commission

November 14, 2018

The Honorable Orrin G. Hatch
President Pro Tempore of the U.S. Senate, Washington, DC 20510

The Honorable Paul D. Ryan
Speaker of the U.S. House of Representatives, Washington, DC 20510

Dear Senator Hatch and Speaker Ryan:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the Commission's 2018 Annual Report to Congress. This Report responds to our mandate "to monitor, investigate, and report to Congress on the national security implications of the bilateral trade and economic relationship between the United States and the People's Republic of China (PRC)." The Commission reached a broad and bipartisan consensus on the contents of this Report, with all 11 members (one appointment remains vacant) voting unanimously to approve and submit it to Congress.

In accordance with our mandate, this Report, which is current as of October 9, includes the results and recommendations of our hearings, research, travel, and review of the areas identified by Congress in our mandate, as defined in Public Law No. 106-398 (October 30, 2000), and amended by Public Laws No. 107-67 (November 12, 2001), No. 108-7 (February 20, 2003), No. 109-108 (November 22, 2005), No. 110-161 (December 26, 2007), and No. 113-291 (December 19, 2014). The Commission's charter, which includes the 11 directed research areas of our mandate, is included as Appendix I of the Report.

The Commission conducted six public hearings and one public roundtable, taking testimony from 56 expert witnesses from government, the private sector, academia, think tanks, research institutions, and other backgrounds. For each of these hearings, the Commission produced a transcript (posted on our website at <http://www.uscc.gov>). This year's hearings and roundtable included:

- China's Belt and Road Initiative: Five Years Later;
- China's Military Reforms and Modernization: Implications for the United States;
- China, the United States, and Next Generation Connectivity;
- China's Relations with U.S. Allies and Partners in Europe and the Asia Pacific;
- China's Role in North Korea Contingencies;
- China's Agricultural Policies: Trade, Investment, Safety, and Innovation; and
- U.S. Tools to Address Chinese Market Distortions.

The Commission received a number of briefings by executive branch agencies and the Intelligence Community, including both unclassified and classified briefings on China's military modernization, China's defense and security activities in the Indo-Pacific, China's relations with Northeast Asia, China's cyber activities, Chinese threats to the Department of Defense's supply chain, China's focus on megaprojects, U.S. critical telecommunications infrastructure, and money laundering. The Commission is preparing a classified report to Congress on these and other topics. The Commission also received briefings by foreign diplomatic and military officials as well as U.S. and foreign nongovernmental experts.

Commissioners made official visits to Taiwan and Japan to hear and discuss perspectives on China and its global and regional activities. In these visits, the Commission delegation met with U.S. diplomats, host government officials, business representatives, academics, journalists, and other experts. Since its establishment, the Commission has had productive visits to China. Recently, the PRC government has been unable to support these visits, which affects the Commission's ability to fully assess issues in country.

The Commission also relied substantially on the work of our excellent professional staff and supported outside research (see Appendix IV) in accordance with our mandate (see Appendix I).

The Report includes 26 recommendations for congressional action, which appear at the conclusion of the Executive Summary.

We offer this Report to Congress in the hope that it will be useful for assessing progress and challenges in U.S.-China relations.

Thank you for the opportunity to serve. We look forward to continuing to work with Members of Congress in the upcoming year to address issues of concern in the U.S.-China relationship.

Yours truly,



Robin Cleveland
Chairman



Carolyn Bartholomew
Vice Chairman

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Introduction

Over a quarter century ago, Deng Xiaoping famously instructed his countrymen to “hide your capabilities and bide your time” and to “absolutely not take lead” in world affairs. The last hint of this formulation for a cautious and conservative Chinese role in the world faded into history this year. The China that emerged from last October’s 19th National Congress of the Chinese Communist Party (CCP) could not be more opposite in tone or bearing. Having amassed all titles of authority and successfully removed term limits on himself, Xi Jinping announced a “new era” that sees his China “moving closer to the world’s center stage” and offering a “Chinese approach” to solving problems.

Although the CCP emphasizes China’s peaceful rise and the “shared prosperity” it claims to bring the world, this rhetoric conceals a coordinated, long-term effort to transform China into a dominant global power. As President Xi pursues structural changes in the global order to facilitate Chinese ambitions, how are other countries welcoming the economic or political opportunities it purports to offer? Is China’s attempt to frame its approach as a new alternative compatible with the existing order, or is it creating a new era of persistent competition? While these questions remain open, one answer is clear: many aspects of China’s attempts to seize leadership have undoubtedly put at risk the national security and economic interests of the United States, its allies, and its partners.

In late 2017, China’s 19th Party Congress solidified President Xi’s consolidation of all visible levers of political power. Putting in place his chosen team and setting aside succession planning, President Xi now appears able to focus on personally guiding China’s political, economic, military, and diplomatic policies for the foreseeable future. Under his control, it is already clear that China is growing increasingly authoritarian at home and assertive abroad.

Domestically, the line between the Party and the state has all but vanished under President Xi’s leadership. CCP entities have taken control over aspects of social, economic, foreign, and security policy once shared with the offices of the Chinese state, undoing moves toward institutionalization of the government taken by his predecessors. In President Xi’s words, “Government, the military, society, and schools; north, south, east, and west—the Party leads them all.”

Many of those who supported China’s accession to the World Trade Organization believed economic growth would raise the quality of life for the Chinese people, but hoped it would also deepen reform and perhaps eventually spark political liberalization. The opposite has happened. The CCP has used economic growth—coupled more recently with its anticorruption campaign—to strengthen its own grasp on authority, advance its state-capitalist model, buttress authoritarian governments abroad, leverage its market against other nations, and fund a massive buildup of Chinese military power to intimidate and silence its neighbors.

Economic liberalization has stalled under President Xi, and many reforms have been reversed. Foreign companies hoping to participate

in China’s market must pay a high price for admission, transfer technology, and suffer regulations that tilt the playing field in favor of their Chinese competitors. U.S. companies, inventors, and workers have witnessed the damaging impact of China’s trade-distorting policies in curtailed exports, stolen intellectual property, and dumped products flooding the U.S. market. The U.S. goods trade deficit with China continues to climb to new heights, reaching a record \$375 billion in 2017 and on track to exceed that in 2018.

As President Xi and the CCP have rejected liberal democratic ideals for China’s own political and economic development, they point to Beijing’s model as a viable alternative. The Belt and Road Initiative, President Xi’s signature foreign policy endeavor, is the most visible manifestation of China’s “going out” policy. Beijing often contrasts its so-called no-strings-attached approach to development with the established global norms which condition financing on good governance, sustainability, transparency, and freedom from corruption. In practice, however, accepting an offer of Chinese money often means also agreeing to purchase the services of Chinese companies and the labor of Chinese workers, aligning certain policies with Beijing’s preferences, and possibly ceding sovereign rights over strategic assets or infrastructure.

The CCP views a strong military as essential for supporting its global ambitions. Under President Xi, it has directed the Chinese military to significantly accelerate its modernization timeline with the ultimate goal of becoming a “world-class” force. China’s competitive views and political insecurities have often created more fractious relationships that hinder or limit international cooperation during responses to the common threats of piracy, terrorism, and disaster. Meanwhile, President Xi has called on China’s soldiers and diplomats to carry out a more muscular, self-confident foreign policy. Today, while working to overcome significant military shortcomings, China is already more assertively advancing Beijing’s sovereignty claims throughout the Indo-Pacific, intensifying preparations for combat, and enhancing its capabilities to deter and defeat the U.S. military should it be required to do so in a future conflict.

By 2018, leaders of the U.S. Indo-Pacific Command, U.S. Navy, and U.S. Air Force have all publicly referred to China’s military as a “peer competitor” in certain scenarios. The Commission’s work this year led to a lively, yet unfinished, debate on China’s status as a “peer” to the U.S. military. In the coming year we will explore the accuracy of such claims, the qualifications under which such a title is warranted, and the implications for U.S. national security of facing a “peer competitor” with self-described competing national security interests.

While China is working to project confidence and leadership on the global stage, there are some indications that the unity of purpose presented by President Xi and his loyalists may be intended to draw attention away from dangerous countervailing currents developing at home and abroad. The economy is slowing, bogged down by rising corporate and local government debt, income inequality, and massive environmental pollution. Fearful of unsustainable debt burdens and

China's growing encroachment on their sovereignty, some recipients of Belt and Road Initiative projects are pushing back, renegotiating some deals and canceling others. Some have also criticized China over its influence operations and use of the Belt and Road Initiative to establish a new type of colonialism. There are indications of dissent within China, and potentially even within the CCP.

In word and deed, the CCP has abandoned any inclination for economic and political liberalization. Rather than promoting fair trade and investment, China engages in predatory economic practices. Rather than providing development finance in line with established rules, China provides loans and investment in nontransparent ways on projects that do not always meet global governance standards and pass tests of commercial viability. Rather than respecting other countries' sovereign rights, China is altering the status quo in the Indo-Pacific and has publicly congratulated itself on its militarization of the South China Sea. Rather than promoting the free flow of information and human rights at home and abroad, China is doubling down on censorship and technologically-enabled repression, including against China's Uyghur ethnic minority population.

For several decades, U.S. policy toward China was rooted in hopes that economic, diplomatic, and security engagement would lay the foundation for a more open, liberal, and responsible China. Those hopes have, so far, proven futile. Members of Congress, the Administration, and the business community have already begun taking bipartisan steps to address China's subversion of international order. Washington now appears to be calling with a unified voice for a firmer U.S. response to China's disruptive actions. In many areas, the CCP will be quick to cast any pushback or legitimate criticism as fear, nationalism, protectionism, and racism against the Chinese people. As a new approach takes shape, U.S. policy makers have difficult decisions to make, but one choice is easy: reality, not hope, should drive U.S. policy toward China.

Executive Summary

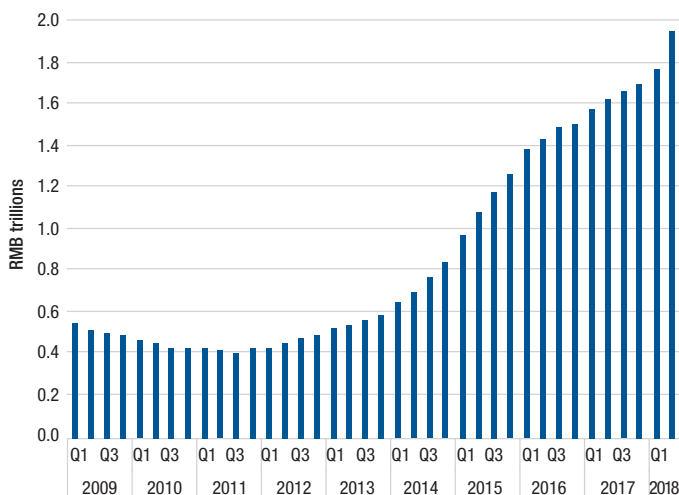
Chapter 1: U.S.-China Economic and Trade Relations

SECTION 1: YEAR IN REVIEW: ECONOMICS AND TRADE

In 2018, the United States announced a series of trade enforcement actions involving China stemming from three investigations conducted by the U.S. government: (1) Section 201 investigations into a surge of washing machines and solar panel imports, (2) Section 232 investigations into the national security risks posed by imports of steel and aluminum, and (3) the Office of the U.S. Trade Representative's Section 301 investigation into "whether acts, policies, and practices of the Government of China related to technology transfer, intellectual property, and innovation are unreasonable or discriminatory and burden or restrict U.S. commerce." In each instance, China retaliated against U.S. enforcement actions with reciprocal tariffs. In total, over \$250 billion worth of U.S. imports from China and \$110 billion worth of U.S. exports to China are subject to tariffs initiated in 2018.

The Chinese government continues to focus on sustaining domestic economic growth, a goal made more difficult by rising trade tensions with the United States and efforts to reduce debt levels. These challenges have already begun to weigh on China's overall economic performance as investment, consumption, and business activity growth fell in the second quarter of 2018. Early indicators suggest China's economy will slow further in the second half of 2018, threatening progress on the Chinese Communist Party (CCP) policy priorities, such as deleveraging, controlling pollution, and reducing poverty. Beijing already appears to be suspending debt reduction efforts in favor of supporting gross domestic product growth, despite rising levels of Chinese banks' nonperforming loans and a growing threat of defaults by local government financing vehicles.

FIGURE 1: NONPERFORMING LOANS HELD BY CHINESE COMMERCIAL BANKS, 2009–Q2 2018



Source: China Banking Regulatory Commission via CEIC database.

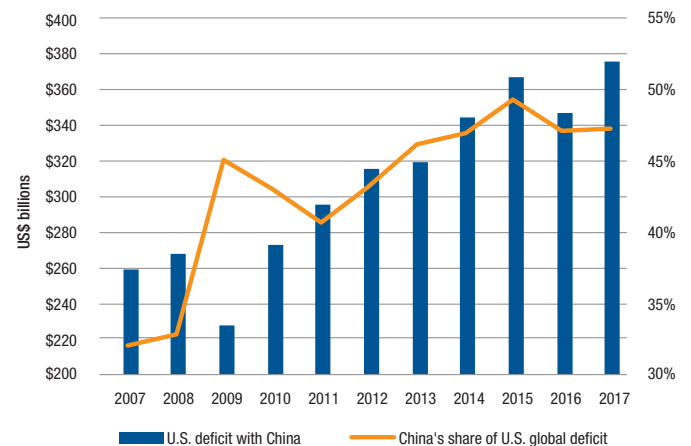
Key Findings

- ▶ China's state-led, market-distorting economic model presents a challenge to U.S. economic and national security interests. The Chinese government, directed by the Chinese Communist Party (CCP) leadership, continues to exercise direct and indirect control over key sectors of the economy and allocate resources based on the perceived strategic value of a given firm or industry. This puts U.S. and other foreign firms at a disadvantage—both in China and globally—when competing against Chinese companies with the financial and political backing of the state.
- ▶ The United States has sought to address unfair Chinese trade practices in part by using mechanisms codified in U.S. trade laws, bringing cases to the World Trade Organization, and threatening additional trade actions. The Trump Administration's trade policies target Chinese technology transfer requirements and insufficient intellectual property protections, the growing U.S. trade deficit, and national security risks posed by an overreliance on steel and aluminum imports, among other factors.
- ▶ The Chinese government continues to resist—and in some cases reverse progress on—many promised reforms of China's state-led economic model. Repeated pledges to permit greater market access for private domestic and foreign firms remain unfulfilled, while the CCP instead enhances state control over the economy and utilizes mercantilist policies to strategically develop domestic industries. Chinese policymakers have stated their intent to, but been largely unsuccessful in, fighting three "battles" to achieve high-quality development in the next three years: cutting corporate and local government debt, controlling pollution, and reducing poverty.
- ▶ Chinese President and General Secretary of the CCP Xi Jinping has prioritized efforts to consolidate control over economic policymaking. However, this strategy may have unintended consequences for China's economic growth. Increased state control over both public and private Chinese companies may ultimately reduce productivity and profits across a range of industries, with firms pursuing CCP—rather than commercial—objectives.
- ▶ China's debt burden poses a growing threat to the country's long-term economic stability. Even as Chinese banks' nonperforming loans rise and unofficial borrowing by local governments comes due, Chinese policymakers continue to spur new credit growth to combat fears of an economic slowdown (see Figure 1).

- ▶ In 2017 and the first half of 2018, the Chinese government reported it exceeded its targets for gross domestic product (GDP) growth. However, economic indicators suggest China's GDP growth may slow in the second half of 2018, with China's drivers of growth stalling amid trade tensions with the United States. Meanwhile, discrepancies between official government data at the national and local levels, and growth figures that remain unusually consistent across months and years, continue to cast doubt on the reliability of China's official data.
- ▶ In the first half of 2018, China posted a current account deficit of \$28.3 billion, or 1.1 percent of GDP, for the first time in 20 years. A declining current account balance could contribute to increased volatility in the exchange rate. It could also lead Beijing to sell foreign assets or increase foreign borrowing to finance government projects, limiting China's ability to insulate itself from financial shocks.
- ▶ The United States posted a record trade deficit in goods with China in 2017 (\$375.6 billion), and is poised to exceed that total in 2018. Through the first eight months of 2018, the U.S. goods deficit was up 9 percent compared to the same period in 2017 (see Figure 3). Services continued to be the one area where the United States had a surplus with China, although the size of the services trade surplus remains dwarfed by the goods trade deficit. In 2017, the U.S. services trade surplus with China increased to a historic high of \$40.2 billion, largely on the strength of Chinese tourism to the United States.
- ▶ Chinese foreign direct investment (FDI) in the United States has dropped over the last 18 months amid Beijing's efforts to tighten both political and regulatory controls on capital outflows and increased uncertainty surrounding U.S. investment review procedures. In 2017, Chinese FDI flows to the United States fell to \$29.4 billion, down from \$45.6 billion in 2016. Chinese venture capital (VC) investments in the United States have accelerated, however, with China representing the largest single foreign VC investor (\$24 billion) in the United States cumulatively between 2015 and 2017, according to a recent U.S. government study. Meanwhile, U.S. investment in China has increased as the Chinese government selectively liberalized foreign investment restrictions in some industries, including banking, automobiles, and agriculture.

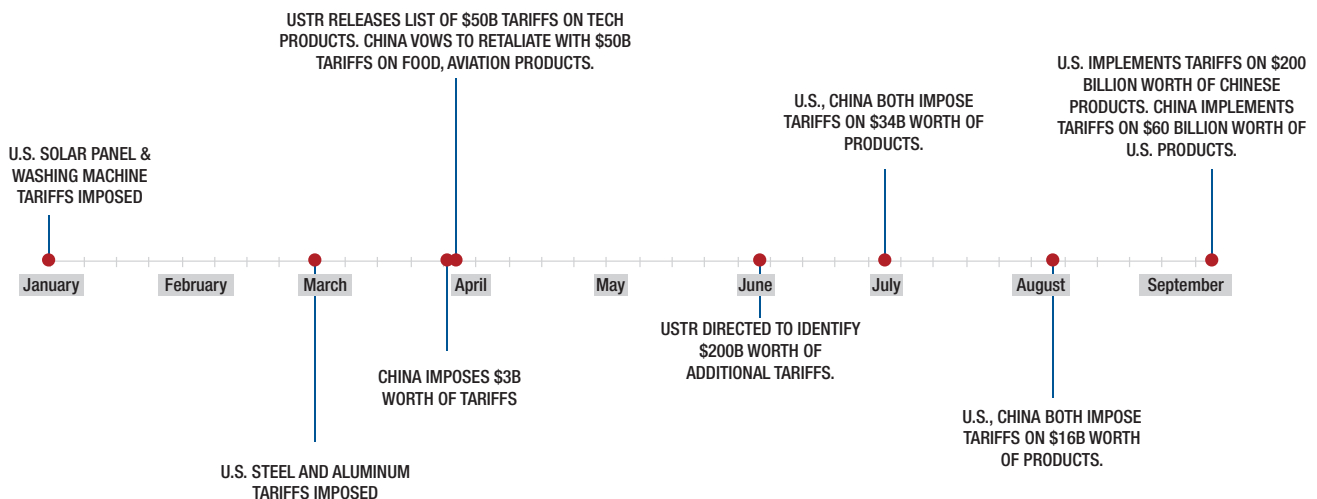
- ▶ The Trump Administration has threatened to impose tariffs on \$517 billion worth of Chinese imports, with tariffs on \$250 billion worth of imports implemented as of October 2018. The initial set of U.S. tariffs primarily targeted Chinese technology products after the Section 301 investigation conducted by the Office of the U.S. Trade Representative concluded that Beijing employs an array of unfair practices against foreign firms primarily designed to advance China's technological capabilities (see Figure 2).
- ▶ In retaliation for U.S. trade enforcement actions, China has implemented tariffs on \$113 billion worth of imports from the United States. Beijing's tariffs primarily target U.S. exports of agriculture products, automobiles, and aviation, among other industries.

FIGURE 3: U.S. GOODS TRADE DEFICIT WITH CHINA, 2007–2017



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

FIGURE 2: U.S.-CHINA TARIFF ACTIONS, 2018



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

SECTION 2: TOOLS TO ADDRESS U.S.-CHINA ECONOMIC CHALLENGES

U.S. policy makers have reached a broad consensus that China's actions negatively impact the multilateral trading system. Chinese industrial policies create market barriers to entry, discriminate against foreign firms, encourage technology transfer as a condition of market access, provide limited protection and recourse for foreign intellectual property holders in strategic industries, and unfairly subsidize local Chinese companies in their development and expansion abroad.

Various tools are available to the United States to address these challenges, including unilateral tools (e.g., trade actions like antidumping and countervailing duties and Section 201 cases, the Committee on Foreign Investment in the United States, and prosecution of economic espionage), bilateral tools (e.g., high-level bilateral dialogues), and multilateral tools (e.g., World Trade Organization [WTO] cases and joint pressure). On the one hand, these tools are often highly targeted or address the symptom, not the source of a concern. On the other hand, practices like technology transfer and localization targets are often relayed and implemented informally, through regulatory processes characterized by Beijing's discretion. Consequently, U.S. actions to address China's trade distorting practices have proven narrow and limited in effectiveness when set against the broad sweep of the government's development strategy, the size of the Chinese market, and the government's willingness to intervene in local firms and markets.

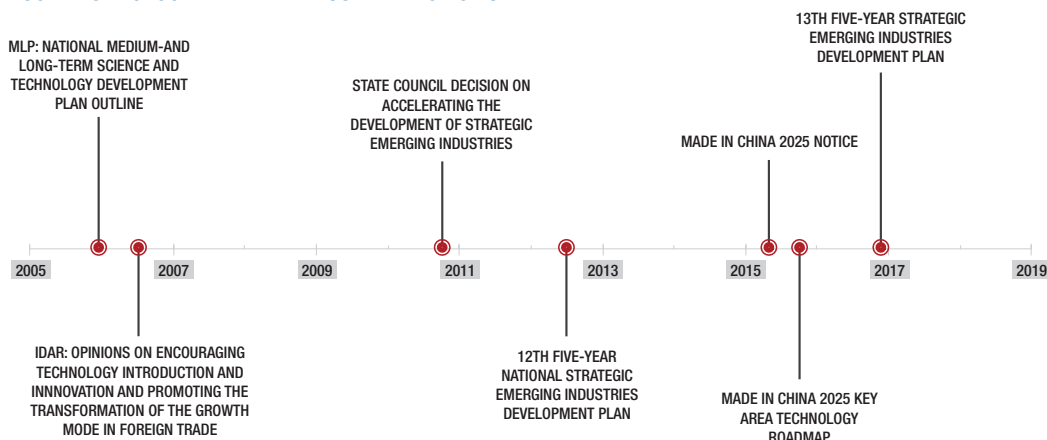
Key Findings

- ▶ The Chinese government structures industrial policies to put foreign firms at a disadvantage and to help Chinese firms. Among the policies the Chinese government uses to achieve its goals are subsidies, tariffs and local content requirements, restrictions on foreign ownership, intellectual property (IP) theft and forced technology transfers, technical standards that promote Chinese technology usage and licensing, and data transfer restrictions (see Figure 4).
- ▶ China has reaped tremendous economic benefits from its accession to the World Trade Organization (WTO), and participation in the rules-based, market-oriented international order. However, more than 15 years after China's accession, the Chinese government's

state-driven industrial policies repeatedly violate its WTO commitments and undermine the multilateral trading system, and China is reversing on numerous commitments.

- ▶ The United States has unilateral, bilateral, and multilateral tools to address the Chinese government's unfair practices. While these tools have been successful at targeting some discrete aspects of China's industrial policies (e.g., a particular subsidy program or tariff), they have been less effective in altering the overall direction of Chinese industrial policy, characterized by greater state influence and control, unfair treatment of foreign companies, and pursuit of technological leadership using legal and illicit means. China leverages the attraction of its large market to induce foreign companies to make concessions (including transferring technology) in exchange for promises of access, while protecting and supporting domestic companies both at home and abroad.
- ▶ **Subsidies:** The United States has a number of tools to counter Chinese subsidies, including antidumping and countervailing duty investigations into the imports' impact on U.S. national security, and analysis of unfair acts, policies, or practices. Many of these tools target narrow concerns, often by imposing duties. The United States also files cases at the WTO and holds negotiations at other multilateral fora. Though WTO members have challenged Chinese subsidies multiple times, the difficulty in identifying subsidy-granting bodies in China—and the Chinese government's unwillingness to stop funding priority sectors—have stymied efforts to halt Chinese subsidies altogether.
- ▶ **Tariffs, local content requirements, and regulatory challenges:** The United States has often addressed Chinese tariffs, local content requirements, and other regulatory challenges in multilateral fora like the WTO; the United States has won most recent WTO cases concerning local content requirements. Despite these successes, many Chinese local content requirements and other regulatory restrictions remain in place, as they often are conveyed informally and difficult to document. Such Chinese policies restrict the ability of U.S. and foreign firms to access the Chinese market and compete on an even footing. In addition, official discretion in regulatory processes can force foreign companies to transfer technology to their Chinese competitors.

FIGURE 4: CHINA'S MAJOR TECHNOLOGY-RELATED INDUSTRIAL POLICIES



Source: Office of the U.S. 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, 10–17. Adapted by Commission staff.

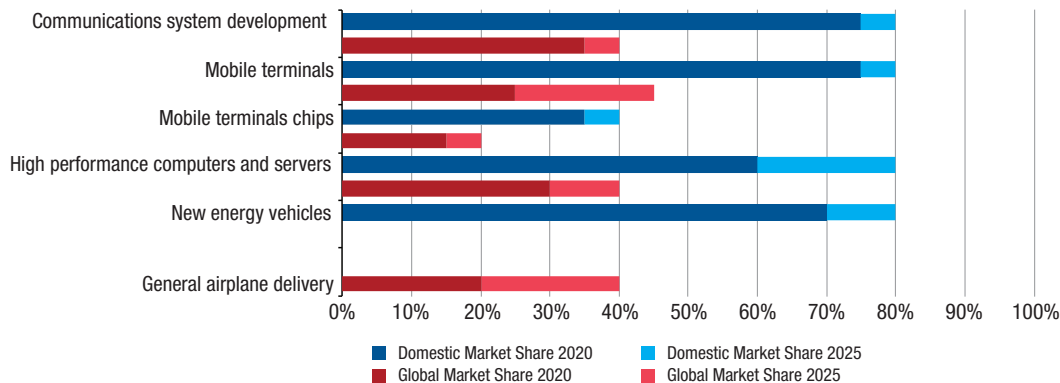
TABLE 1: SELECT NON-VIOLATION NULLIFICATION OR IMPAIRMENT ARGUMENTS AT THE WTO

WTO Case	Date of Panel or Appellate Body Ruling	Case Summary	Non-violation Nullification or Impairment Complaint Result
Japan - Measures Affecting Consumer Photographic Film and Paper	March 1998	The United States alleged Japanese regulations on the distribution and sale of film and paper disadvantaged foreign imports, contrary to GATT Articles 3 and 10; thus these measures nullified or impaired benefits the United States could reasonably expect.	The panel found the United States had not demonstrated the Japanese measures individually or collectively nullified or impaired benefits accruing to the United States.
South Korea - Measures Affecting Government Procurement	May 2000	The United States alleged South Korean procurement practices in airport construction impaired the benefits the United States could reasonably expect to have accrued under the Government Procurement Agreement.	The panel found the United States had not demonstrated that benefits reasonably expected to accrue under the Government Procurement Agreement were nullified or impaired by South Korea's measures.
European Communities - Measures Affecting Asbestos and Products Containing Asbestos	March 2001	Canada alleged nullification and impairment of benefits when France enacted a ban on asbestos and products containing asbestos, as well as violations of Articles 2, 3, and 5 of the Sanitary and Phytosanitary Agreement.	The panel found Canada had not demonstrated it suffered non-violation nullification or impairment of benefits.

Note: See full Annual Report for a detailed discussion of the non-violation nullification or impairment claims at the WTO.

Source: Various. See full Annual Report for a complete list of sources.

FIGURE 5: SELECT CHINESE GOVERNMENT DOMESTIC AND GLOBAL MARKET SHARE TARGETS IN KEY TECHNOLOGIES



Source: Chinese Academy of Engineering, Expert Commission for the Construction of a Manufacturing Superpower, *Made in China 2025 Key Area Technology Roadmap*, October 29, 2015, 14, 48, 101, 105. Translation.

► **Investment restrictions:** U.S. policy options to counter China's foreign investment restrictions in specific sectors have primarily entailed incremental progress through bilateral negotiations. In its 2017 report on China's WTO compliance, the Office of the U.S. Trade Representative characterized this approach as "largely unsuccessful." China's investment restrictions impose barriers on U.S. and other foreign companies seeking access to the Chinese market. These barriers give Chinese regulators and companies leverage to pressure foreign counterparts to transfer proprietary technology or IP in exchange for market access.

► **Intellectual property theft, technology transfer, and economic espionage:** The United States has several regulatory tools available to address Chinese technology transfer requirements and IP theft, including the Committee on Foreign Investment in the United States (CFIUS) and the export control system, as well as deterrents for IP theft and economic espionage through utilization of Section 337 and prosecution by the U.S. Department of Justice. Private companies have proved reluctant to come forward, however, fearing retaliation by the Chinese government.

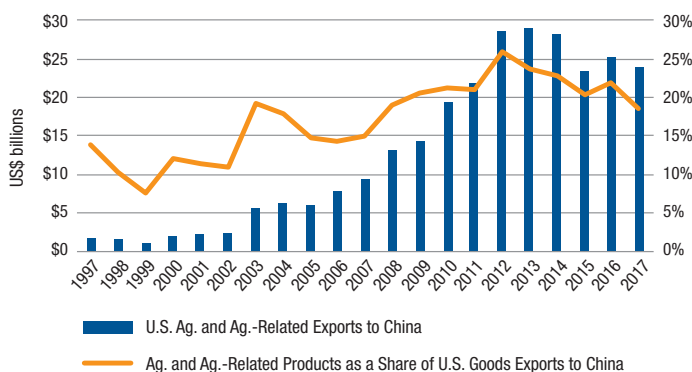
► **Technical standards:** In cases where the Chinese government has released standards discriminating against foreign products, U.S. officials have pressured the Chinese government to drop or delay those standards, a tactic which is only temporarily effective. U.S. and other foreign companies struggle to comply with China's unique technical standards. They could also be disadvantaged in the future given China's increasing participation and leadership in international standards-setting bodies.

► **Data localization and cross-border data transfer restrictions:** China's recent effort to localize and restrict the flow of data across borders poses significant challenges to U.S. and other foreign business, who fear the regulatory burden of duplicating information technology services to separate and store data in China. China's Cybersecurity Law, implemented in 2017, requires personal information held by "critical information infrastructure" to be stored on servers in China, and data deemed important require a "security assessment" before they can be transferred abroad. Given the expense coupled with time delay, IP risk, and operations disruption associated with data review, data localization and cross-border data transfer restrictions will become a formidable barrier to U.S. trade and international digital commerce.

SECTION 3: CHINA'S AGRICULTURAL POLICIES: TRADE, INVESTMENT, SAFETY, AND INNOVATION

While China is the United States' second-biggest market for agricultural goods behind Canada, its large population and dearth of water and arable land suggest U.S. agriculture exports to China should be greater. Unfortunately, U.S. exports have been constrained by Chinese policy for a number of reasons. First, China's longstanding goal of food self-sufficiency disadvantages U.S. farmers through domestic subsidies, in violation of its commitments to the WTO. Second, China frequently retaliates against U.S. trade actions by restricting access for U.S. agricultural products. Third, China's asynchronous review of U.S. genetically modified crops not only prevents their export to China, but also delays their implementation in the United States and around the world. Finally, China uses its system of tariff-rate quotas as a tool to limit imports of U.S. cereals.

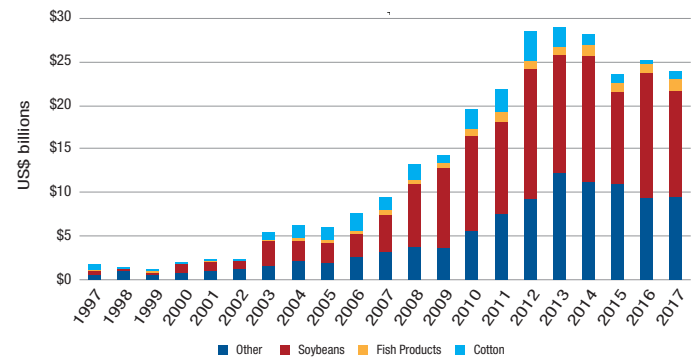
FIGURE 6: U.S. AGRICULTURE AND AGRICULTURE-RELATED EXPORTS TO CHINA, 1997–2017



Source: U.S. Department of Agriculture Foreign Agricultural Service, *Global Agricultural Trade System Online*, October 2, 2018.

In the absence of market restrictions, U.S. agricultural firms, which enjoy a reputation among China's rising middle class for safety and quality, would see higher demand. The U.S. government has engaged in a systematic effort to address China's trade distorting agricultural policies, but success has been limited. During bilateral dialogues, the Chinese government tends to make minor concessions or offer commitments it does not uphold, rather than addressing systemic problems.

FIGURE 7: COMPOSITION OF U.S. AGRICULTURE AND AGRICULTURE-RELATED EXPORTS TO CHINA, 1997–2017



Source: U.S. Department of Agriculture Foreign Agricultural Service, *Global Agricultural Trade System Online*, October 2, 2018.

TABLE 2: SELECT U.S. AGRICULTURE AND AGRICULTURE-RELATED PRODUCTS SUBJECT TO CHINESE RETALIATORY TARIFFS

Product	U.S. Exports to China, 2017 (US\$ millions)	Exports to China as a Share of Total U.S. Exports of This Product, 2017
Sorghum	\$839	81.60%
Wool	\$14	72.50%
Hides, Skins, and Leather	\$899	57.34%
Soy	\$12,253	57.12%
Ginseng	\$22	40.57%
Wood	\$2,130	34.28%
Fish Products	\$1,217	23.18%
Furs	\$45	21.70%
Cotton	\$979	16.58%
Tobacco	\$163	13.47%

Source: Various. See full Annual Report for a complete list of sources.

Key Findings

► Food and agriculture play an important role in the U.S.-China trade relationship. In 2017, U.S. agricultural and agriculture-related exports were the United States' second-largest category of overall U.S. goods exports to China, accounting for roughly \$24 billion; the U.S. agricultural surplus with China reached \$13.3 billion that year (see Figure 6).

- ▶ China has a relative paucity of water and arable land, while the United States has both in abundance, suggesting the United States and China should be natural trading partners in agricultural products. However, U.S. exports are constrained by Chinese restrictions and unfair trade practices.
- ▶ China has repeatedly used duties and unscientific food safety barriers against U.S. agricultural products to protect its domestic farmers, retaliate against U.S. trade actions, or prompt a U.S. concession in a trade negotiation. In particular, Beijing has frequently targeted U.S. products that are highly reliant on China's market for retaliatory duties. Soy and sorghum are especially vulnerable to retaliation; in 2017, 82 percent of U.S. exports of sorghum and 57 percent of U.S. soybean exports went to China (see Figure 7 and Table 2).
- ▶ Under its World Trade Organization (WTO) accession protocol, China agreed to allow quotas of foreign rice, wheat, and corn into the country at a 1 percent tariff (known as tariff-rate quotas, or TRQs). All imports beyond these quotas are subject to a prohibitive 65 percent tariff. However, the Chinese government pursues a policy of self-sufficiency in rice, wheat, and corn, and provides generous subsidies to domestic farmers to the disadvantage of foreign producers. The Chinese government also applies TRQs in an opaque and managed way that ensures the quota is never met, which restricts access for U.S. farmers and violates China's WTO commitments.
- ▶ China appears reluctant to rely on its current agricultural trading partners (such as the United States) for its food imports, and has attempted to diversify its imports to new markets through promotion of foreign agricultural investment and its Belt and Road Initiative. While these efforts have been largely unsuccessful to date, there may be negative long-term effects on U.S. agricultural exports as Beijing gets better at carrying out its diversification strategies.
- ▶ Chinese policies governing genetically modified organisms (GMOs) limit U.S. agriculture export opportunities in two important ways. First, because China broadly closes its borders if it detects unapproved GMO imports and because it is difficult to keep GMOs and conventional crops separate, U.S. firms do not widely release new GMOs in the United States or overseas without Chinese approval. Second, as China lags several years behind the rest of the world in approving GMOs, it holds back new U.S. GMOs long after they are approved in other countries. This slows U.S. agricultural productivity and puts past innovation at risk as pests and weeds acquire immunity to current biotechnology products.
- ▶ Since 2014, the United States has engaged with China on its biotech approval process through multiple rounds of high-level bilateral talks. While the Chinese government made commitments to improve its biotechnology regulatory system, it has either not carried out promised changes or has implemented them in a marginal way that did nothing to reform structural problems.
- ▶ The Chinese government is investing significant resources into boosting Chinese innovative capacity in biotechnology and genomic sequencing. China appears to be particularly competitive with respect to new gene-editing technology such as CRISPR-Cas9 (CRISPR), a new tool for genetic editing that dramatically lowers the cost of genetic modification. The competence of Chinese firms in new genetic tools such as CRISPR and their ability to quickly sequence genomes may help them become more competitive in agricultural research as CRISPR technology is applied to developing new crop strains.
- ▶ U.S. agricultural biotechnology firms have been the target of Chinese corporate espionage, and U.S.-developed GMOs appear to be grown in China without authorization despite Chinese laws banning their cultivation.
- ▶ Since major food safety outbreaks in 2007 and 2008, China's food safety laws have improved. However, implementation of these laws remains a challenge due to shortfalls in China's inspection capacity and the large number of small Chinese agricultural firms.

Chapter 2: U.S.-China Security Relations

SECTION 1: YEAR IN REVIEW: SECURITY AND FOREIGN AFFAIRS

The year 2018 saw Beijing declare its intent to expand China's political, economic, and military presence within its region and on the global stage. At the CCP's 19th National Congress in late 2017, President Xi announced that China had begun a new era of confidence and capability as it moved closer to the "world's center stage." In this new era, President Xi declared China would increase its efforts to change the international order, build a "world-class" military, and act as a political and economic model for others to emulate. In June 2018, he expanded on this foreign policy guidance and repeatedly called for China to lead the construction of a "community of common human destiny"—what could be the CCP's ideological formulation for a revised global order.

Within its region, China took new steps to advance its sovereignty claims over disputed territory as President Xi declared in unusually strong language in his 19th Party Congress address that other countries should not have "the fantasy of forcing China to swallow the bitter fruit of damaging its own interests." At the Party Congress, President Xi proclaimed the success of China's South China Sea island-building efforts, while China's military increased patrols near the Senkaku Islands and continued fortifying its position near the site of a recent military standoff with India. China made new efforts to deepen partnerships with Russia, Iran, and Pakistan—leveraging the relationships to challenge U.S. security and economic interests—and continued taking steps to expand its overseas military presence.

FIGURE 8: PLA AIR FORCE AND NAVY LONG-DISTANCE TRAINING FLIGHTS OVER WATER



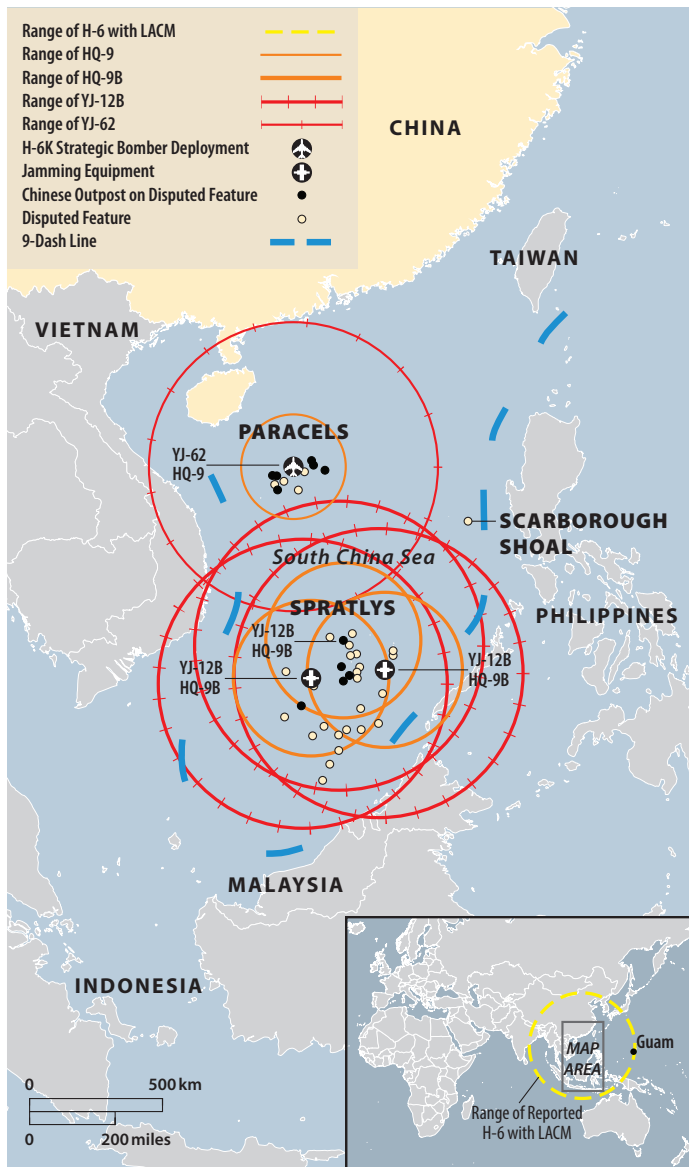
Source: Various. See the full Annual Report for complete list of sources.

But pushback to China's posturing emerged both at home and abroad. In China, prominent intellectual voices expressed concern over the abandonment of term limits for President Xi and the increasing emergence of a surveillance state, questioning whether the CCP was negating the policies that shaped China's reform and opening era. U.S.-China security relations grew more strained, as the Trump Administration disinvented China from a major multilateral exercise over its continued militarization of the South China Sea and imposed sanctions on China for purchasing advanced weapons from Russia. In response, Beijing warned Washington of its resolve to defend its territorial claims.

Key Findings

- ▶ China signaled a decisive end to its more than quarter century-old guidance to “hide your capabilities and bide your time, absolutely not taking the lead” as President Xi issued a series of new foreign affairs and military policy directives calling on China to uncompromisingly defend its interests and actively promote changes to the international order.
- ▶ U.S.-China security relations remain tense due to serious disagreements over issues such as China's continued coercive actions in regional territorial disputes, espionage and cyber activities, and influence operations. The tenor of the relationship was reflected in President Xi's public warning to visiting U.S. Secretary of Defense James Mattis that China would not tolerate the loss of a “single inch” of its territorial claims.
- ▶ The People's Liberation Army continues to extend its presence outside of China's immediate periphery by increasing air and maritime operations farther from its shores, expanding presence operations in disputed areas in the East and South China seas (see Figure 8), maintaining troops and building a pier at China's sole overseas military base in Djibouti, deploying more advanced combat units to UN peacekeeping operations, and conducting more complex bilateral and multilateral overseas exercises.
- ▶ Tensions and the potential for accidents, miscalculation, and escalation between China and Japan intensified in the East China Sea as China sailed a number of naval vessels close to the Senkaku Islands and increased its military presence in the area. Based on the terms of the U.S.-Japan Mutual Defense Treaty, China's increasing military activity near the Senkakus constitutes a challenge to U.S. security guarantees to Japan.
- ▶ China took new steps to consolidate its military posture and improve its ability to project power into the South China Sea, as President Xi proclaimed at the 19th Party Congress the success of China's island-building efforts. Chinese forces are now capable of overpowering any other South China Sea claimant, challenging U.S. presence operations in the region, and presenting a significant obstacle to the U.S. military during a conflict. China deployed advanced antiship and surface-to-air missiles to its Spratly Island outposts for the first time, demonstrating its ability to create a military buffer around the southern reaches of the South China Sea (see Figure 9).
- ▶ Following their land border dispute in 2017, strategic jockeying in 2018 between China and India expanded to include New Delhi's maritime interests in the Indian Ocean.
- ▶ China continued to deepen its partnerships with Russia, Iran, and Pakistan and leveraged the relationships to challenge U.S. security and economic interests. During a high-level visit to Russia, China's defense minister stated that China's visit was intended to demonstrate the depth of China-Russia strategic cooperation to the United States and to the world. China's purchase of advanced weapons systems from Russia resulted in the United States applying sanctions against China's Equipment Development Department, a key military body.
- ▶ China's arms exports continued to grow in volume and sophistication in 2018, although they remain limited to low- and middle-income countries and trail in value compared to U.S. and Russian sales.

FIGURE 9: LOCATION AND EFFECTIVE RANGE OF PLA SOUTH CHINA SEA DEPLOYMENTS



Source: U.S.-China Economic and Security Review Commission, 2018, adapted from Asia Maritime Transparency Initiative and BBC. Asia Maritime Transparency Initiative, "China Power Projection"; BBC, "Why Is the South China Sea Contentious?" July 12, 2016.

SECTION 2: CHINA'S MILITARY REORGANIZATION AND MODERNIZATION: IMPLICATIONS FOR THE UNITED STATES

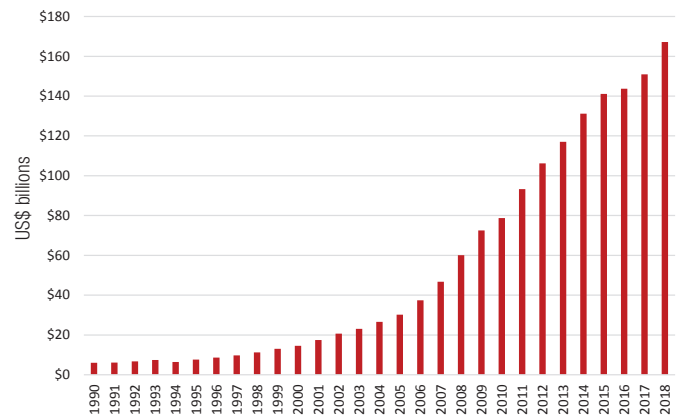
China's reorganization and modernization of the People's Liberation Army (PLA) is intended to constrain the United States and its allies and partners from operating freely in the Indo-Pacific and to restore what China perceives as its historic and rightful place as the dominant power in Asia. New directives from Beijing now significantly accelerate China's military modernization timetable and set the PLA's sights on becoming a "world-class" military on par with the United States by mid-century. In the near term, as the PLA works to achieve its modernization goals, Chinese leaders may use coercive tactics below the threshold of military conflict rather than resort to a highly risky use of military force to achieve its objectives in the region. Over the medium to long term, however, the danger grows that China may not be deterred from using force and that the United States may be unable to retain an operational advantage should a crisis escalate to conflict.

Today, the PLA's modernization has already resulted in a force capable of contesting U.S. operations in the region, presenting challenges to the U.S. military's longstanding assumption of enjoying ground, air, maritime, and information dominance in a conflict in the post-Cold War era. The PLA continues to build capabilities in the following areas:

- ▶ China has declared its goal to build a blue water navy and improved its capability to project force abroad, including expanding the PLA Marines and reconfiguring the force for expeditionary operations. China's maritime forces increasingly outnumber their neighbors in the Indo-Pacific, which challenges U.S. regional security interests while raising the potential for accidents and miscalculation.
- ▶ With the advances made by the PLA Air Force, the United States and its allies and partners can no longer assume achieving air superiority in an Indo-Pacific conflict. PLA efforts to project air power farther from China's coast allow it to increasingly contest the air domain in the region.
- ▶ China's establishment of the PLA Strategic Support Force has improved the PLA's joint capabilities and centralized space, cyber, and electronic warfare operations. As the force advances its own warfighting capabilities, it will challenge the United States' ability to establish information dominance and control over the electromagnetic spectrum.

The United States faces a rising power in China that sees the security structures and political order of the Indo-Pacific as designed to limit its power. The widening gap in military capability between China and the rest of the region also enables Beijing to coerce its neighbors with the increasingly credible implied threat of force. China's ability to threaten its neighbors impedes the United States' ability to maintain a stable regional balance, sustain adherence to international laws and norms, and protect its rights and the rights of its allies and partners.

FIGURE 10: CHINA'S ANNOUNCED DEFENSE SPENDING, 1990–2018



Note: Data not adjusted for inflation.

Source: Various. See the full Annual Report for complete list of sources.

FIGURE 11: PLA THEATER COMMANDS



Source: Various. See the full Annual Report for complete list of sources.

Key Findings

- ▶ President Xi significantly accelerated China's military modernization goals in late 2017, requiring the PLA to become a fully "modern" military by 2035 and a "world-class" military by mid-century. This new guidance moves China's military modernization timeline up nearly 15 years.
- ▶ Beijing is currently capable of contesting U.S. operations in the ground, air, maritime, and information domains within the second island chain, presenting challenges to the U.S. military's longstanding assumption of supremacy in these domains in the post-Cold War era. By 2035, if not before, China will likely be able to contest U.S. operations throughout the entire Indo-Pacific region.

- ▶ China's large-scale investment in next-generation defense technologies presents risks to the U.S. military's technological superiority. China's rapid development and fielding of advanced weapons systems would seriously erode historical U.S. advantages in networked, precision strike warfare during a potential Indo-Pacific conflict.
- ▶ The PLA Strategic Support Force—whose organization and operations reflect the importance Beijing places on information warfare—poses a fundamental challenge to the United States' ability to operate effectively in space, cyberspace, and the electromagnetic spectrum. The new force signals Beijing's intent to build a military capable of dominating these domains of warfare.
- ▶ China's rapid buildup of the PLA Navy as a blue water force through its continued commissioning of highly capable, multimission warships will give Beijing naval expeditionary capabilities deployable around the globe as early as 2025, well ahead of the PLA's broader 2035 modernization goal.

▶ China continues to develop and field medium- and long-range air, sea, and ground-launched missile systems that substantially improve China's capability to strike both fixed and moving targets out to the second island chain. China's ability to threaten U.S. air bases, aircraft carriers, and other surface ships presents serious strategic and operational challenges for the United States and its allies and partners throughout the Indo-Pacific (see Figure 12).

FIGURE 12: FIRST AND SECOND ISLAND CHAINS



Source: U.S. Department of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2012*, May 2012, 4.

▶ Beijing has sought to use its sweeping military reorganization efforts to address the PLA's "peace disease" and persistent weaknesses in its ability to conduct joint combat operations. Much of Chinese leaders' concerns center on the PLA's lack of recent combat experience and the perceived inability of many operational commanders to carry out basic command functions such as leading and directing troops in combat. President Xi's "Strong Military Thought" ideology, promulgated in late 2017, also seeks to overcome perceived shortcomings in the PLA's war preparedness and combat mindset.

▶ Prior to the PLA achieving its objectives of becoming a "modern" and "world-class" military, Beijing may use coercive tactics below the threshold of military conflict rather than resorting to a highly risky use of military force to achieve its goals in the region. However, as military modernization progresses and Beijing's confidence in the PLA increases, the danger grows that deterrence will fail and China will use force in support of its claims to regional hegemony.

▶ The Central Military Commission's assumption of direct control over the People's Armed Police and China Coast Guard in 2018 effectively removed all remaining civilian status from both forces and clarified their military role. The move places added importance on the China Coast Guard as an instrument to police, enforce, and advance China's domestic maritime law.

Chapter 3: China and the World

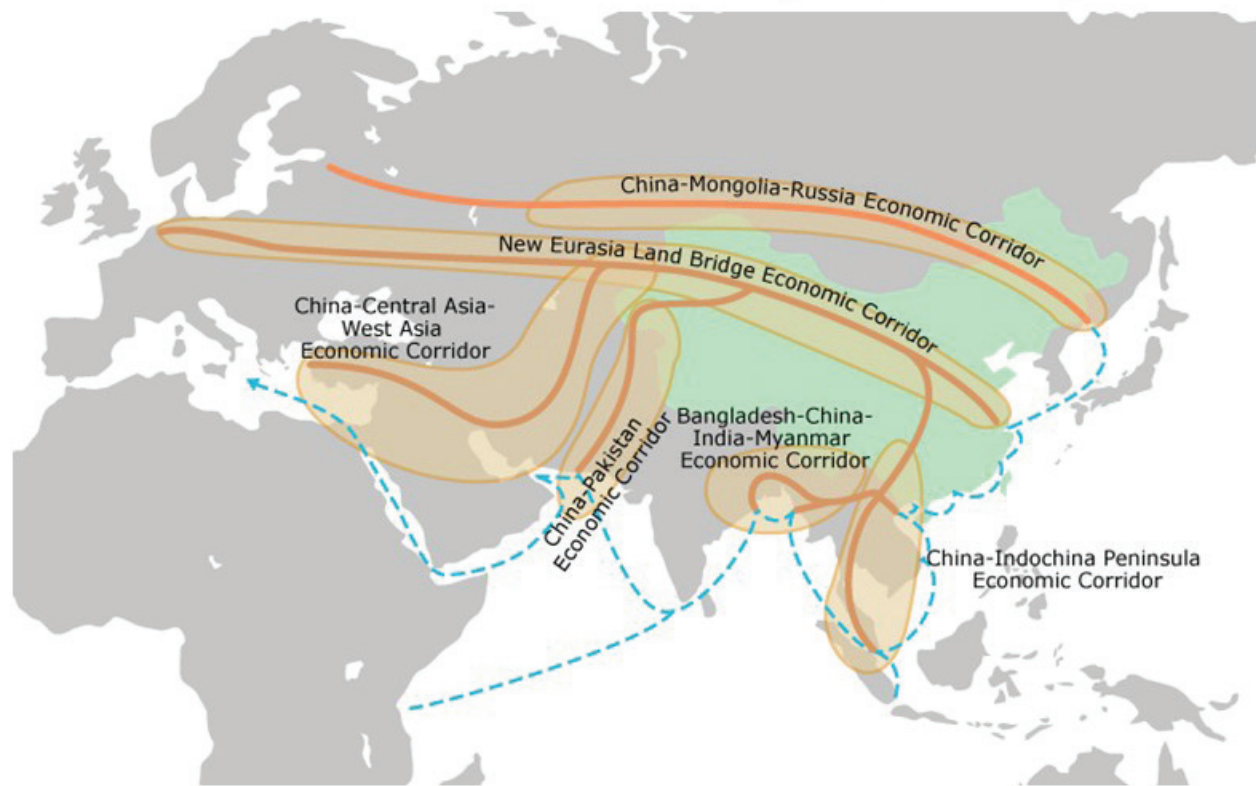
SECTION 1: BELT AND ROAD INITIATIVE

Five years have passed since President Xi inaugurated his trademark foreign policy project, the Belt and Road Initiative (BRI). BRI seeks to expand Chinese influence through financing and building infrastructure around the world, with a focus on Asia, the Middle East, Africa, and Europe (see Figure 13). Beijing has invested hundreds of billions of dollars in BRI projects to date, but a large proportion of projects remain in the planning phase and will take years to complete (see Figure 14). Chinese leaders see BRI as a long-term effort—they call it the "project of the century" and even wrote BRI into China's constitution.

Beijing wants to use BRI to revise the global political and economic order to align with Chinese interests. Official Chinese communiques focus on the initiative's economic objectives—building hard and digital infrastructure, fueling domestic development, and expanding markets and exporting standards. But China also seeks strategic benefits from BRI, despite its insistence to the contrary. Beijing's geopolitical objectives for the project include securing energy supplies, broadening the reach of the PLA, and increasing China's influence over global politics and governance.

Countries around the world are starting to compare their experiences with BRI projects to China's lofty rhetoric and early promises of easy, no-strings-attached infrastructure financing. As a consequence, some participating countries have begun to voice concerns about BRI projects creating unsustainable debt levels, fueling corruption, and undermining sovereignty. Meanwhile, major powers—such as the United States, Japan, India, European states, and Russia—acknowledge BRI as one means for meeting global infrastructure needs. At the same time, these countries are advancing their own plans for financing connectivity that variously compete and collaborate with BRI. In several areas, BRI challenges U.S. interests in a free and open Indo-Pacific. The Trump Administration's Indo-Pacific strategy—particularly the programs aimed at boosting global infrastructure financing—is in part a response to the initiative.

FIGURE 13: MAP OF BRI EURASIAN AND INDIAN OCEAN CORRIDORS



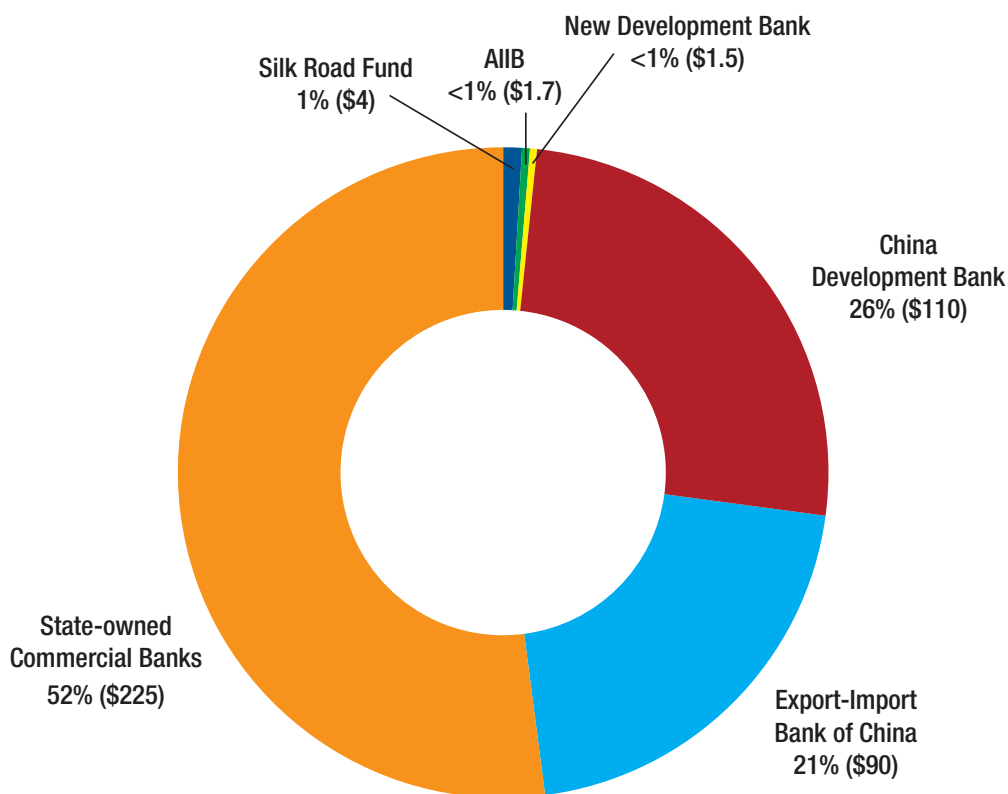
Source: Hong Kong Trade Development Council, "The Belt and Road Initiative," May 3, 2018.

Key Findings

- ▶ In 2013, President Xi inaugurated the Belt and Road Initiative (BRI), his signature economic and foreign policy project designed to finance and build infrastructure and connectivity around the world, with a focus on the Eurasia and the Indo-Pacific region.
- ▶ Although there is no official definition for BRI, after five years, China's objectives for BRI are discernable: fueling domestic development and increasing control in China's outer provinces, expanding markets while exporting technical standards, building hard and digital infrastructure, bolstering energy security, expanding China's military reach, and advancing geopolitical influence by moving China to the center of the global order.
- ▶ Strategic interests are central to BRI, even though the Chinese government denies that BRI advances its geopolitical ambitions. At the same time, BRI will also expose China to major risks, including terrorism and instability, and political fallout in partner countries. BRI could pose a significant challenge for U.S. interests and values because it may enable China to export its model of authoritarian governance and encourages and validates authoritarian actors abroad.
- ▶ Beijing sees BRI in part as an externally oriented development program to boost China's slowing economy and help it move up the global value chain through economic integration with neighboring countries. Chinese planners believe infrastructure development in BRI countries can open new markets and boost foreign demand for Chinese products, particularly in higher-end manufactured goods. Despite Beijing's rhetoric about BRI being open and inclusive, Chinese state-owned enterprises are winning the lion's share of contracts for BRI projects.
- ▶ As China increases its international economic engagement through BRI, Chinese companies are seeking to define and export standards for a broad set of technological applications, including through the so-called Digital Silk Road, which taken together could alter the global competitive landscape. BRI potentially threatens U.S. businesses and market access as well as the broader expansion of free markets and democratic governance across the globe.

- ▶ BRI offers partner countries much-needed infrastructure financing, but also presents significant risks. Chinese engagement with BRI countries has largely been through infrastructure projects financed by Chinese policy and commercial banks rather than direct investment. Chinese lending poses debt sustainability problems for a number of BRI countries while providing Beijing with economic leverage to promote Chinese interests, in some cases threatening the sovereignty of host countries. Beijing's response to problems of debt distress in BRI countries has ranged from offering borrowers additional credit to avoid default to extracting equity in strategically important assets (see Table 3).
- ▶ A growing People's Liberation Army presence overseas, facilitated and justified by BRI, could eventually create security problems for the United States and its allies and partners beyond China's immediate maritime periphery. China is trying to use BRI to bolster its influence and presence in the Indo-Pacific through access to port facilities and other bases to refuel and resupply its navy, while expanding operations and exercises with regional militaries.
- ▶ China does not have a monopoly on plans to facilitate connectivity and spread influence across Eurasia, and BRI is not unfolding in isolation. Other major powers—including the United States, Japan, India, European states, and Russia—are executing their own initiatives that variously compete and collaborate with BRI. More broadly, skepticism of BRI's purposes and methods appears to be growing worldwide as projects are implemented and the initiative's challenges become more apparent.

FIGURE 14: BRI FUNDING BY SOURCE
(OUTSTANDING LOANS OR EQUITY INVESTMENTS AT YEAR-END 2016, US\$ BILLIONS)



Source: Various. See full Annual Report for a complete list of sources.

TABLE 3: LARGEST BRI PROJECTS BY ESTIMATED COST

Country (BRI Corridor)	Project	Companies	Cost (US\$ billions)	Financing	Status
Russia (New Eurasian Land Bridge)	Moscow-Kazan High Speed Railway	Contract not yet awarded	\$21.4	n/a	Construction expected to begin in 2018; to be completed by 2022
Malaysia (China-Indochina Peninsula Economic Corridor [CICPEC])	East Coast Rail Link	China Communications Construction (China)	\$13.6-\$20	China Exim Bank to provide 85% funding through 20-year concessional loan	Contract awarded November 2016; project under review
Malaysia (CICPEC)	Melaka Gateway	PowerChina (China); KAJ Development (Malaysia)	\$11	Privately financed; terms unknown	MOU signed September 2016; to be completed by 2025
Cambodia (CICPEC)	Preah Vihear-Koh Kong Railway	China Railway Group (China)	\$7.5	n/a	MOU signed December 2012; construction delayed due to funding shortages
Pakistan (CPEC)	Karachi-Lahore Peshawar Railway Track Rehabilitation and Upgrade	Contract not yet awarded	\$6.24	China to provide 85% funding; terms unknown	Feasibility study completed July 2018; to be completed by 2022
Laos (CICPEC)	Kunming-Vientiane Railway	China Railway Group (China)	\$6.27	China to fund 70%; Laos to fund remainder	Under construction; to be completed by 2021
Thailand (CICPEC)	Bangkok-Nakhon Ratchasima High-Speed Rail	Contract not yet awarded	\$5.5	Thailand in talks with China for financing	Construction expected to begin in 2019 after repeated delays
Indonesia	Jakarta-Bandung High Speed Rail	China-Indonesia consortium (KCIC)	\$5	China Development Bank to provide 75% of funding; KCIC to raise remainder	Under construction after recurring delays; to be completed by 2019
Bangladesh (Bangladesh-China-India-Myanmar Economic Corridor)	Padma Bridge Rail Link	China Railway Group (China)	\$3.14	China Exim Bank to fund 80% through preferential buyer's credit; Bangladesh to fund remainder	Under construction after repeated delays; to be completed by 2022
Pakistan (CPEC)	Peshawar-Karachi Motorway Multan-Sukkur Section	China State Construction Engineering Corporation (China)	\$2.98	China to provide concessional loan; terms unknown	Under construction; to be completed by 2019

Source: Various. See full Annual Report for a complete list of sources.

SECTION 2: CHINA'S RELATIONS WITH U.S. ALLIES AND PARTNERS

Over the last few years, concerns have grown sharply within the governments and societies of a number of U.S. allied and partner countries in the Indo-Pacific—but also in Europe and elsewhere—over Beijing's efforts to influence their policies and perceptions to be more favorable to China's interests. As China's power and international influence have grown, Beijing has intensified its influence efforts using an expanding array of tools, often to the detriment of the United States and its relationships with important allied and partner countries. Beijing's preferred tactics include large-scale, targeted investment; focused diplomatic engagement; economic punishment; "sharp power" and perception management; and other influence operations such as "United Front" work that seeks to co-opt, subvert, and neutralize opponents. At its core, Beijing's use of these influence instruments aims to weaken opposition to China's policies and undermine and subvert U.S. alliances and partnerships. If successful, these efforts could fundamentally weaken the United States' ability to support democracy and international law.

U.S. allies and partners can offer important insights to the United States and each other into the nature of the challenges presented by Beijing's use of its influence toolbox, how those challenges might evolve, and how the U.S. government might best respond on its own or in concert with partners. It is important for U.S. policymakers to both be aware of Beijing's efforts to influence policies and perceptions and to precisely frame this issue, differentiating illegitimate influence and coercion from legitimate forms of engagement. As China attempts to spread its influence around the globe, a nuanced and comprehensive policy to push back against negative aspects of this influence while welcoming legitimate contributions will become increasingly important to protecting democratic processes and ensuring the durability of the liberal international order.

Key Findings

- ▶ Beijing seeks to undermine U.S. alliances and partnerships in the Indo-Pacific to reorder the region to its advantage. China seeks a dominant role in Asia and views U.S. military alliances and influence as the primary obstacle to achieving this objective.
- ▶ China's relations with European countries have affected European unity with regard to China policy. On several occasions in recent years, the EU was unable to reach a consensus on human rights in China or take a firm stance regarding Beijing's activities and claims in the South China Sea when certain governments deferred to Beijing's sensitivities on those issues. This trend could make transatlantic cooperation on China more difficult.

- ▶ Australia and New Zealand have been targets of extensive Chinese Communist Party (CCP) influence operations, which have included political donations and the establishment of near-monopolies over local Chinese-language media. Canberra has responded vigorously with attention from then Prime Minister Turnbull and the passage or debate of several pieces of legislation regarding subversive foreign influence. There has been less high-level response from Wellington to these challenges, but there have been signs from the New Zealand government that concern regarding China is growing.
- ▶ Countries in Western Europe have been more resilient in the face of Beijing's efforts to influence policies and perceptions due to the strength of their democratic institutions and economies. However, some Central, Eastern, and Southern European countries have been more susceptible to Beijing's influence due to the relative weakness of their democratic institutions, economic challenges, and focused efforts by Beijing to divide them from the rest of the EU.

SECTION 3: CHINA AND TAIWAN

Over the past several years, Beijing has dramatically increased its coercive activities targeting Taiwan as it seeks to advance its broader goal of eventual cross-Strait unification. These actions have altered the status quo across the Strait as Beijing has employed diplomatic, economic, and military levers to intimidate Taiwan and undermine its legitimate efforts to participate in the international community. To fortify Taiwan's economy and respond to Beijing's increasing pressure, Taiwan President Tsai Ing-wen is continuing her efforts to pursue new markets and trade partnerships, support the development of new innovative and job-creating industries, and strengthen ties with the United States and other like-minded countries.

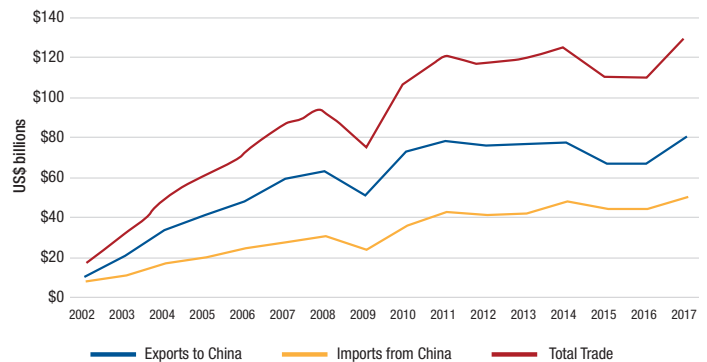
Taiwan's vibrant democracy, robust civil society and technology sector, and strategic location make it a natural partner for the United States and its free and open Indo-Pacific strategy. Taiwan's deepening engagement with Japan, India, and other countries throughout the region further reflects the importance of a strong, democratic, and economically-resilient Taiwan to the security and prosperity of U.S. treaty allies and partners. Given Taiwan's expertise in disaster response and relief, environmental protection, and combating infectious diseases, pushing back against Beijing's efforts to exclude Taipei from organizations such as the World Health Organization and the UN Convention Framework on Climate Change benefits both the United States and the broader international community.

Key Findings

- ▶ Taiwan President Tsai Ing-wen continues to pursue a cross-Strait policy of maintaining the status quo in the face of actions by Beijing that have increased pressure on Taiwan and instability in the Strait. Over the past year, Beijing increased actions to pressure and isolate Taiwan, while advancing unilateral efforts to deepen cross-Strait economic and social integration, including actions that Taiwan viewed as threatening to its sovereignty. To these ends, Beijing enticed three of Taiwan's diplomatic partners to terminate official relations with Taiwan, pressured U.S. and other foreign companies to identify Taiwan as part of the People's Republic of China (PRC) on their websites, and treated Taiwan as PRC-governed territory by unilaterally activating new flight routes near the island.
- ▶ China is also intensifying its political warfare activities in Taiwan. Beijing has employed a variety of tactics seeking to undermine Taiwan's democracy, and the Tsai Administration in particular, including supporting opposition political parties and spreading disinformation using social media and other online tools.
- ▶ The threat to Taiwan from China's military posture and modernization continues to grow, and Beijing has increased coercive military activities to intimidate Taipei. In response, Taiwan has taken initial, but significant, steps to enhance its defensive capabilities by adopting a new defense strategy, increasing its emphasis on asymmetric capabilities, and increasing procurement from its domestic defense industries and the United States. It also continues its decade-long transition to an all-volunteer force.
- ▶ As part of a strategy of "resolute defense, multi-layered deterrence" introduced by the Tsai Administration, Taiwan's new Overall Defense Concept aims to exploit Chinese military vulnerabilities and capitalize on Taiwan's defensive strengths by focusing on three areas: (1) preservation of warfighting capability, (2) pursuing decisive victory in the littoral area, and (3) annihilating the enemy on the beach. However, the success of the new strategy faces a major challenge from the scale and speed of China's People's Liberation Army's continued growth.
- ▶ Taiwan remains reliant on China as its largest trading partner and destination for foreign investment, making it vulnerable to economic coercion and political pressure from Beijing (see Figure 15). President Tsai has prioritized several domestic initiatives—including the "5+2" Innovative Industries program and Forward-looking Infrastructure Program—to strengthen key engines of Taiwan's economy and spur innovation and job creation. Meanwhile, Taiwan continues to pursue the New Southbound Policy to diversify its economic ties in South and Southeast Asia and reduce its reliance on the Chinese economy (see Table 4).

- ▶ U.S.-Taiwan relations are strong, with the unanimous passage and presidential signing of the Taiwan Travel Act, a public visit to Taiwan by a senior official from the U.S. Department of State's Bureau of East Asian and Pacific Affairs, and the dedication of the American Institute in Taiwan's new office complex in Taipei. Although Taiwan continues to prioritize economic relations with the United States, discussions over longstanding issues in the relationship (such as beef and pork market access restrictions) remain stalled.

FIGURE 15: TAIWAN'S TRADE WITH CHINA, 2002–2016



Source: Taiwan's Bureau of Foreign Trade, *Trade Statistics*. <http://cus93.trade.gov.tw/ENGLISH/FSC3/FSC3050F.ASPX>.

TABLE 4: TAIWAN SHARE OF GLOBAL TRADE AND INVESTMENT TIES WITH SELECT PARTNERS, 2010–JULY 2018

	Total Trade		Investment	
	With China	With Select Partners	Outbound to China	Outbound to Select Partners
2010	21%	17%	84%	6%
2011	21%	18%	80%	7%
2012	21%	19%	61%	29%
2013	21%	19%	64%	24%
2014	22%	19%	58%	7%
2015	23%	18%	51%	16%
2016	23%	18%	44%	10%
2017	24%	19%	44%	17%
2018	24%	18%	44%	11%

Note: Select partners include Australia, India, Indonesia, Malaysia, New Zealand, the Philippines, Singapore, Thailand, and Vietnam.

Source: Taiwan's Bureau of Foreign Trade, *Trade Statistics*; Taiwan's Ministry of Economic Affairs, Investment Commission, *Monthly Report*, July 2018.

SECTION 4: CHINA AND HONG KONG

Beijing's encroachment on Hong Kong's political system, rule of law, and freedom of expression is moving the territory closer to becoming more like any other Chinese city, a trend that serves as a cautionary example for Taiwan and the Indo-Pacific region. During the 19th National Congress of the CCP in October 2017, Beijing emphasized the CCP's control over the territory, leading to further curbs on Hong Kong's promised "high degree of autonomy" and freedoms guaranteed under the "one country, two systems" policy and the Basic Law, Hong Kong's mini constitution. President Xi's maneuver to end presidential term limits alarmed the territory's prodemocracy advocates due to the steady erosion of Hong Kong's autonomy under his watch. China's failure to abide by its commitments in Hong Kong sends a strong message to Taiwan that Beijing would do the same in a similar arrangement with Taipei.

In light of China's increasing reach into Hong Kong, some observers argue the territory is losing the unique characteristics and legal protections that make it important to U.S. interests. As Beijing continues to increase its control over Hong Kong, the territory also faces growing economic competition from mainland cities, which receive increasing investment and incentives. Over the long term these trends could diminish Hong Kong's standing as a global business center. The preservation of Hong Kong's way of life and maintenance of its status as a global financial and business hub help facilitate U.S. interests. Considerations regarding the export of sensitive U.S. technology to Hong Kong are also predicated on the territory's separation from the Mainland. In this light, the ongoing decline in rule of law and freedom of expression is a troubling trend.

Key Findings

- ▶ Beijing's statements and legislative actions continue to run counter to China's promise to uphold Hong Kong's "high degree of autonomy." At the 13th National People's Congress in March 2018, China's legislative body passed an amendment to its constitution waiving presidential term limits, allowing President Xi to serve beyond two five-year terms. Given the steady erosion of Hong Kong's autonomy under President Xi's leadership, the move has alarmed the territory's prodemocracy legislators, civil society groups, and legal community.
- ▶ In a troubling case of Beijing's direct involvement in U.S.-Hong Kong affairs that went against Beijing's commitments under the "one country, two systems" policy, the Hong Kong government rejected a U.S. fugitive surrender request at Beijing's insistence for the first time since the 1997 handover of Hong Kong from the United Kingdom. Beijing also denied a U.S. Navy ship a routine port call in Hong Kong for the first time in two years.
- ▶ In 2018, challenges to freedom of speech and assembly in Hong Kong continue to increase as Beijing and the Hong Kong government closed down the political space for prodemocracy activists to express discontent. For the first time, the Hong Kong government banned a political party (the Hong Kong National Party, which advocates for Hong Kong's independence from China), raising concerns that it may lead to the passage of national security legislation that would allow the government to further silence prodemocracy organizations and supporters. The Hong Kong government also denied a visa renewal to the vice president of the Hong Kong Foreign Correspondents' Club without explanation; observers believe the denial was in retaliation for the club's August 2018 event hosting the head of the Hong Kong National Party. Self-censorship has become increasingly prevalent in Hong Kong among journalists and media organizations due to mainland China's rising presence in the territory.
- ▶ China's central government took additional steps toward undermining Hong Kong's legal autonomy. For example, Beijing facilitated a controversial rail terminal project that for the first time institutes mainland law in a small portion of the territory. Beijing also passed a National Anthem Law that makes disrespecting China's national anthem a criminal offense, and compelled Hong Kong to pass similar legislation.
- ▶ Beijing and the Hong Kong government's harsh criticism and attempted silencing of a prominent Hong Kong academic for expressing his views on potential futures for the territory marked an expanded effort to prevent the open discussion of ideas. The response also raised fears among prodemocracy advocates and academics that freedom of speech is increasingly at risk.
- ▶ Hong Kong continues on the path of greater economic integration with the Mainland. The Hong Kong government has sought to position Hong Kong as a regional hub for China's Belt and Road Initiative and a key node of the Guangdong-Hong Kong-Macau Greater Bay Area integration project, Beijing's plan to establish a globally competitive advanced manufacturing, finance, and technology center.

SECTION 5: CHINA'S EVOLVING NORTH KOREA STRATEGY

China and North Korea share a complicated relationship marked by both pragmatic coordination and deep strategic mistrust. Sino-North Korean relations appeared to thaw beginning in March 2018 after hitting a historic low over the deteriorating security situation on the Korean Peninsula and tensions between President Xi and North Korean Chairman of the State Affairs Commission Kim Jong-un. China seeks a central role in international negotiations over North Korea's nuclear and missile programs, and is wary of being isolated in the process. In its talks with the United States and South Korea, North Korea values China's support.

Beijing's priorities for nuclear talks with Pyongyang differ in places from those of Washington and Seoul. China values stability, avoiding war, and undermining the U.S.-South Korean alliance, and considers North Korean denuclearization a lower priority. As negotiations proceed, China will continue its efforts to influence the format, substance, and implementation of diplomacy with North Korea. China could also link the North Korea problem to other issues in U.S.-China relations. Beijing appears to have already started to loosen enforcement of sanctions on North Korea, undermining the U.S. "maximum pressure" campaign.

A return to nuclear brinkmanship or another precipitating event could trigger a military contingency in North Korea, which China worries could result in refugee flows across the Sino-North Korean border, loose weapons of mass destruction, or a South Korean-led unification of the Peninsula. Beijing has prepared to move decisively to advance its interests during such a crisis, including through military intervention. Chinese forces crossing into North Korea would complicate the operational environment and raise the potential for clashes with South Korean or U.S. forces, and could also result in a post-conflict Chinese occupation of North Korean territory. Bilateral talks with China on these questions remain underdeveloped considering the importance of the issues at stake.

FIGURE 16: CHINESE MILITARY AND PEOPLE'S ARMED POLICE FORCES NEAR THE BORDER WITH NORTH KOREA



Source: James Griffiths and Serenitie Wang, "Is China Reinforcing Its Border with North Korea?" CNN, July 26, 2017. <https://www.cnn.com/2017/07/25/asia/china-north-korea-border/index.html>, Jamestown Foundation.

Key Findings

- ▶ China considers the disposition of North Korea to be vital to its national security interests, despite a complicated and often antagonistic history between the two countries. Tense relations between President Xi and North Korean Chairman of the State Affairs Commission Kim Jong-un shifted into warming ties amid North Korea's broader diplomatic outreach campaign in 2018.
- ▶ China supports U.S. and South Korean diplomatic engagement with North Korea, although Beijing is wary of being isolated in the process or losing out if North Korea commits to a full-scale strategic realignment with the United States and South Korea. More immediately, China sees the potential to advance its geopolitical goals on the Korean Peninsula. Those goals include avoiding war or instability in North Korea and, eventually, rolling back the U.S.-South Korea alliance. Beijing sees ending North Korea's nuclear and long-range missile programs as a worthwhile but secondary goal. China is aiming to achieve these goals by advocating for a peace treaty to formally end the Korean War, seeking the suspension of joint U.S.-South Korean military exercises, and pushing for a reduction of U.S. forces in South Korea.
- ▶ Beijing will continue efforts to ensure its participation in or influence over the diplomatic process surrounding North Korea's nuclear and missile programs. China will try to shape the negotiating format, terms of an agreement, timing and sequencing for implementation, and whether the North Korea issue is tied to other dimensions of U.S.-China relations.
- ▶ China's preparations for contingencies in North Korea indicate that Beijing has the capability to respond forcefully in a crisis to manage refugee flows and lock down the border, seize weapons of mass destruction and associated sites, and occupy territory to gain leverage over the future disposition of the Korean Peninsula. Relations between China's People's Liberation Army and North Korea's military, the Korean People's Army (KPA), have been strained for many years. How the KPA might respond to a Chinese intervention is unknown (see Figures 16 and 17).
- ▶ The United States and China have conducted basic talks for North Korea contingencies during high-level visits and major dialogues, but there is no evidence the U.S. and Chinese theater and combatant commands who would be directly involved have discussed operational planning for any contingency. It is likely these discussions have not yet delved into the level of detail necessary to avoid miscommunication and unwanted escalation in a crisis. Continuing and expanding those talks could help manage the massive risks associated with a potential crisis in North Korea.

FIGURE 17: POTENTIAL CHINESE BUFFER ZONES IN NORTH KOREA



Note: These demarcation lines show potential Chinese buffer zones in North Korea. The top line is 31 miles (50 km) from the Sino-North Korean border, the middle line runs north of Pyongyang approximately 84 miles (135 km) from the border, and the bottom line splits the major North Korean cities of Pyongyang and Wonsan—about 115 miles (185 km) from the border.

Source: Adapted from Bruce W. Bennett, "Preparing for the Possibility of a North Korean Collapse," *RAND Corporation*, 275, 2013. https://www.rand.org/content/dam/rand/pubs/research_reports/RR300/RR331/RAND_RR331.pdf.

Chapter 4: China's High-Tech Development

SECTION 1: NEXT GENERATION CONNECTIVITY

The Internet of Things (IoT) and fifth-generation wireless technology (5G) will transform how countries conduct business, fight wars, and interact as a society. The Chinese government seeks to overtake the United States in these industries to gain a higher share of the economic benefits and technological innovation. The scale of Chinese state support for the IoT and 5G, the close supply chain integration between the United States and China, and China's role as an economic and military competitor to the United States create enormous economic, security, supply chain, and data privacy risks for the United States (see Table 5).

Chinese firms have already leveraged strong state support to become global leaders in information technology and network equipment manufacturing, and have strengthened their roles in international standards-setting and deployment of 5G. The scale of Chinese state support undermines the ability of U.S. firms to fairly compete either within China or in third country markets. It also enables the dominance of Chinese firms and China-based manufacturing in global network equipment, information technology, and IoT devices. U.S. telecommunications providers' reliance on imports from China raises serious supply chain concerns about the secure deployment of U.S. critical next generation telecommunications infrastructure.

Rapid advances in the number and capabilities of IoT devices and 5G networks are strengthening China's strategic deterrent, warfare, and intelligence capabilities, and eroding the ability of the United States to operate freely in the region. In addition, the rapid proliferation of unsecure IoT devices is increasing the avenues Chinese actors could exploit to deny service, collect intelligence, or launch a cyber attack. The large amount of data collected by the ever growing number of IoT devices, the value of such data to criminal and state actors such as China, and lax U.S. security and legal protections are worsening privacy, safety, and security risks for U.S. citizens, businesses, and democracy. China's leadership is not a foregone conclusion. U.S. companies remain market leaders in these industries, and their continued innovation will extend the United States' technological edge.

Key Findings

- ▶ The Chinese government has strengthened its strategic support for the Internet of Things (IoT) (physical devices embedded with sensors that can collect data and connect to each other and the broader internet) and fifth-generation wireless technology (5G) networks. The government has laid out comprehensive industrial plans to create globally competitive firms and reduce China's dependence on foreign technology through: significant state funding for domestic firms and 5G deployment, limited market access for foreign competitors, China-specific technical standards, increased participation in global standards bodies, localization targets, and alleged cyber espionage and intellectual property theft. This state-directed approach limits market opportunities for foreign firms in China and raises concerns about the ability of U.S. and other foreign firms to compete fairly both in China's domestic market and abroad.
- ▶ 5G networks are expected to quicken data speeds by 100 times, support up to 100 times more IoT devices, and provide near-instant universal coverage and availability. U.S. and Chinese companies are engaged in a fierce competition to secure first mover advantage and benefit from the trillions in economic benefits 5G and subsequent technologies are expected to create (see Table 6).
- ▶ IoT devices collect enormous amounts of user information; when aggregated and combined with greater computing power and massive amounts of publicly available information, these data can reveal information the user did not intend to share. U.S. data could be exposed through unsecure IoT devices, or when Chinese IoT products and services transfer U.S. customer data back to China, where the government retains expansive powers to access personal and corporate data.

TABLE 5: POTENTIAL VULNERABILITIES OF IOT TECHNOLOGIES

	Device	Communication Network	Data
Types of Vulnerabilities	<ul style="list-style-type: none"> • Hardware • Firmware • Software • Sensor failure • Default passwords • Denial-of-service attack 	<ul style="list-style-type: none"> • Compromised or fake communication network (e.g., Wi-Fi or cellular) • Denial-of-service attack 	<ul style="list-style-type: none"> • Software • Unsecure or compromised communication network
Risks	<ul style="list-style-type: none"> • Modification of firmware, hardware, or software without authorization • Unauthorized access to information or services • Loss of service 	<ul style="list-style-type: none"> • Loss of service • Physical tracking of user • Unauthorized access to information or services 	<ul style="list-style-type: none"> • Unauthorized access to information • Physical tracking of user • Modification of data without authorization • Impersonating a device, user, or recipient

Source: Adapted from Zubair A. Baig, "Future Challenges for Smart Cities: Cyber-Security and Digital Forensics," *Digital Investigation*, August 15, 2017; U.S. Department of Homeland Security and the National Institute of Standards and Technology, *Study on Mobile Device Security*, April 2017, 18

- ▶ The Chinese government is leveraging its comparative advantage in manufacturing and state-led industrial policies to secure an edge in the IoT's wide-ranging commercial and military applications. U.S. firms and the U.S. government rely on global supply chains that in many cases are dominated by China. While not all products designed, manufactured, or assembled in China are inherently risky, the U.S. government lacks essential tools to conduct rigorous supply chain risk assessments. Federal procurement laws and regulations are often contradictory, and are inconsistently applied.
- ▶ International 5G standards will be set by 2019, facilitating large-scale commercial deployment expected by 2020. The Chinese government is encouraging its companies to play a greater role in international 5G standards organizations to ensure they set global standards; such leadership may result in higher revenues and exports from internationally accepted intellectual property and technology and more global influence over future wireless technology and standards development.
- ▶ China's central role in manufacturing global information technology, IoT devices, and network equipment may allow the Chinese government—which exerts strong influence over its firms—opportunities to force Chinese suppliers or manufacturers to modify products to perform below expectations or fail, facilitate state or corporate espionage, or otherwise compromise the confidentiality, integrity, or availability of IoT devices or 5G network equipment.
- ▶ The lax security protections and universal connectivity of IoT devices create numerous points of vulnerability that hackers or malicious state actors can exploit to hold U.S. critical infrastructure, businesses, and individuals at risk. These types of risks will grow as IoT devices become more complex, more numerous, and embedded within existing physical structures. The size, speed, and impact of malicious cyber attacks against and using IoT devices will intensify with the deployment of 5G.

TABLE 6: COMPARISON OF 4G AND FUTURE 5G CAPABILITIES

	Definition	4G	5G (Expected 2020)
Latency	the amount of time it takes data to travel from one point to another	25 milliseconds	1 millisecond
Peak Data Rates	maximum achievable rate of data transfer in bits per second	100 megabits per second	10,000 megabytes per second
Number of Devices	total number of devices that can be supported while maintaining quality of service	10,000 devices per square kilometer	1,000,000 devices per square kilometer
Mobility	maximum speed at which a user or device can be moving while maintaining quality of service	350 kilometers per hour	500 kilometers per hour

Source: Various. See full Annual Report for a complete list of sources

The Commission's Key Recommendations

The Commission considers 10 of its 26 recommendations to Congress to be of particular significance. The complete list of recommendations appears on page 22.

The Commission recommends:

1. Congress require the Office of Management and Budget's Federal Chief Information Security Officer Council to prepare an annual report to Congress to ensure supply chain vulnerabilities from China are adequately addressed. This report should collect and assess:
 - ▶ Each agency's plans for supply chain risk management and assessments;
 - ▶ Existing departmental procurement and security policies and guidance on cybersecurity, operations security, physical security, information security and data security that may affect information and communications technology, 5G networks, and Internet of Things devices; and
 - ▶ Areas where new policies and guidance may be needed—including for specific information and communications technology, 5G networks, and Internet of Things devices, applications, or procedures—and where existing security policies and guidance can be updated to address supply chain, cyber, operations, physical, information, and data security vulnerabilities.
2. Congress examine whether the Office of the U.S. Trade Representative should bring, in coordination with U.S. allies and partners, a "non-violation nullification or impairment" case—alongside violations of specific commitments—against China at the World Trade Organization under Article 23(b) of the General Agreement on Tariffs and Trade.
3. Congress direct the U.S. Department of Justice to:
 - ▶ Examine the application of current U.S. laws, including the "Conspiracy against Rights" law, to prosecuting Chinese Communist Party affiliates who threaten, coerce, or otherwise intimidate U.S. residents.
 - ▶ Clarify that labels required by the Foreign Agents Registration Act on informational materials disseminated on behalf of foreign principals, such as China Daily, must appear prominently at the top of the first page of such materials.
4. Congress require the Director of National Intelligence to produce a National Intelligence Estimate (NIE), with a classified annex, that details the impact of existing and potential Chinese access and basing facilities along the Belt and Road on freedom of navigation and sea control, both in peacetime and during a conflict. The NIE should cover the impact on U.S., allied, and regional political and security interests.
5. Congress direct the National Counterintelligence and Security Center to produce an unclassified annual report, with a classified annex, on the Chinese Communist Party's influence and propaganda activities in the United States.
6. Congress direct the U.S. Department of Defense and U.S. Department of Homeland Security to provide to provide to the relevant committees of jurisdiction a report, with a classified annex, assessing how the change in the China Coast Guard's command structure affects its status as a law enforcement entity now that it reports to the Central Military Commission. The report should discuss the implications of this new structure for China's use of the coast guard as a coercive tool in "gray zone" activity in the East and South China seas. This report should also determine how this change may affect U.S. Navy and U.S. Coast Guard interactions with the China Coast Guard, and whether the latter should be designated as a military force.
7. Congress direct the National Telecommunications and Information Administration and Federal Communications Commission to identify (1) steps to ensure the rapid and secure deployment of a 5G network, with a particular focus on the threat posed by equipment and services designed or manufactured in China; and (2) whether any new statutory authorities are required to ensure the security of domestic 5G networks.
8. Congress direct the Government Accountability Office to conduct an assessment of U.S.-China collaborative initiatives in technical cooperation. This assessment should describe the nature of collaboration, including funding, participation, and reporting on the outcomes; detail the licensing and regulatory regime under which the initiatives occur; consider whether the intellectual property rights of U.S. researchers and companies are being adequately protected; examine whether Chinese state-owned enterprises or the military are benefitting from U.S. taxpayer-funded research; investigate if any Chinese researchers participating in the collaboration have ties to the Chinese government or military; investigate if any U.S. companies, universities, or labs participating in U.S. government-led collaboration with China have been subject to cyber penetration originating in China; and evaluate the benefits of this collaboration for the United States. Further, this assessment should examine redundancies, if any, among various U.S.-China government-led collaborative programs, and make suggestions for improving collaboration.
9. Congress direct the U.S. Department of the Treasury to provide a report within 180 days on the current state of Chinese enforcement of sanctions on North Korea. A classified annex should provide a list of Chinese financial institutions, businesses, and officials involved in trading with North Korea that could be subject to future sanctions and should explain the potential broader impacts of sanctioning those entities.
10. Congress direct the Office of the U.S. Trade Representative to identify the trade-distorting practices of Chinese state-owned enterprises and develop policies to counteract their anticompetitive impact.

Comprehensive List of the Commission's Recommendations

Chapter 1: U.S.-China Economic and Trade Relations

SECTION 2: TOOLS TO ADDRESS U.S.-CHINA ECONOMIC CHALLENGES

The Commission recommends:

- ▶ Congress examine whether the Office of the U.S. Trade Representative should bring, in coordination with U.S. allies and partners, a “non-violation nullification or impairment” case—alongside violations of specific commitments—against China at the World Trade Organization under Article 23(b) of the General Agreement on Tariffs and Trade.
- ▶ Congress direct the Office of the U.S. Trade Representative to identify the trade-distorting practices of Chinese state-owned enterprises and develop policies to counteract their anticompetitive impact.
- ▶ Congress direct the Government Accountability Office to conduct an assessment of U.S.-China collaborative initiatives in technical cooperation. This assessment should describe the nature of collaboration, including funding, participation, and reporting on the outcomes; detail the licensing and regulatory regime under which the initiatives occur; consider whether the intellectual property rights of U.S. researchers and companies are being adequately protected; examine whether Chinese state-owned enterprises or the military are benefitting from U.S. taxpayer-funded research; investigate if any Chinese researchers participating in the collaboration have ties to the Chinese government or military; investigate if any U.S. companies, universities, or labs participating in U.S. government-led collaboration with China have been subject to cyber penetration originating in China; and evaluate the benefits of this collaboration for the United States. Further, this assessment should examine redundancies, if any, among various U.S.-China government-led collaborative programs, and make suggestions for improving collaboration.

SECTION 3: CHINA'S AGRICULTURAL POLICIES: TRADE, INVESTMENT, SAFETY, AND INNOVATION

The Commission recommends:

- ▶ Congress direct the U.S. Department of Agriculture to identify the extent to which China's asynchronous biotech review and approval system for agricultural products adversely impacts U.S. industry. As part of its review, the U.S. Department of Agriculture should work with the Office of the U.S. Trade Representative to seek bilateral or multilateral measures, as appropriate, to address these impacts.
- ▶ Congress direct the U.S. Department of Agriculture, in collaboration with the U.S. Food and Drug Administration, to prepare an annual report on its technical engagement with China on food safety, inspection, mechanisms for addressing sanitary and phytosanitary problems, and any technical assistance provided to China to improve its food safety inspection regime.

Chapter 2: U.S.-China Security Relations

SECTION 2: CHINA'S MILITARY REORGANIZATION AND MODERNIZATION: IMPLICATIONS FOR THE UNITED STATES

The Commission recommends:

- ▶ Congress direct the U.S. Department of Defense and U.S. Department of Homeland Security to provide to the relevant committees of jurisdiction a report, with a classified annex, assessing how the change in the China Coast Guard's command structure affects its status as a law enforcement entity now that it reports to the Central Military Commission. The report should discuss the implications of this new structure for China's use of the coast guard as a coercive tool in “gray zone” activity in the East and South China seas. This report should also determine how this change may affect U.S. Navy and U.S. Coast Guard interactions with the China Coast Guard, and whether the latter should be designated as a military force.
- ▶ Congress consider imposing sanctions on key Chinese state-owned enterprises and individuals involved in China's ongoing militarization of the South China Sea.

Chapter 3: China and the World

SECTION 1: BELT AND ROAD INITIATIVE

- ▶ Congress create a fund to provide additional bilateral assistance for countries that are a target of or vulnerable to Chinese economic or diplomatic pressure, especially in the Indo-Pacific region. The fund should be used to promote digital connectivity, infrastructure, and energy access. The fund could also be used to promote sustainable development, combat corruption, promote transparency, improve rule of law, respond to humanitarian crises, and build the capacity of civil society and the media.
- ▶ Congress require the U.S. Department of State to prepare a report to Congress on the actions it is taking to provide an alternative, fact-based narrative to counter Chinese messaging on the Belt and Road Initiative (BRI). Such a report should also examine where BRI projects fail to meet international standards and highlight the links between BRI and China's attempts to suppress information about and misrepresent reporting of its human rights abuses of Uyghurs in Xinjiang.
- ▶ Congress require the Director of National Intelligence to produce a National Intelligence Estimate (NIE), with a classified annex, that details the impact of existing and potential Chinese access and basing facilities along the Belt and Road on freedom of navigation and sea control, both in peacetime and during a conflict. The NIE should cover the impact on U.S., allied, and regional political and security interests.

SECTION 2: CHINA'S RELATIONS WITH U.S. ALLIES AND PARTNERS

The Commission recommends:

- ▶ Congress direct the Administration to strengthen cooperation between the United States and its allies and partners in Europe and the Indo-Pacific on shared economic and security interests and policies pertaining to China, including through the following measures:
 - ▷ Urge the Administration to engage in regular information sharing and joint monitoring of Chinese investment activities and to share best practices regarding screening of foreign investments with national security implications, including development of common standards for screening mechanisms.
 - ▷ Enhance consultations on mitigating the export of dual-use technology to China and identifying other foundational technologies essential for national security.
- ▶ Congress direct the U.S. Department of Justice to:
 - ▷ Examine the application of current U.S. laws, including the "Conspiracy against Rights" law, to prosecuting Chinese Communist Party affiliates who threaten, coerce, or otherwise intimidate U.S. residents.

- ▷ Clarify that labels required by the Foreign Agents Registration Act on informational materials disseminated on behalf of foreign principals, such as *China Daily*, must appear prominently at the top of the first page of such materials.

- ▶ Congress direct the National Counterintelligence and Security Center to produce an unclassified annual report, with a classified annex, on the Chinese Communist Party's influence and propaganda activities in the United States.
- ▶ Congress direct the Administration to discuss in its engagements with the EU and NATO the implications of China's increasingly close military ties with Russia and growing importance to transatlantic security interests. Such discussions would include how Europe and NATO can promote the exchange of information on common defense and other challenges posed by China and Russia, including both countries' influence operations.

SECTION 3: CHINA AND TAIWAN

The Commission recommends:

- ▶ Congress direct the Office of the U.S. Trade Representative to resume meetings under the U.S.-Taiwan Trade and Investment Framework Agreement in 2019 and to identify enhanced negotiating procedures to resolve outstanding issues.
- ▶ Congress direct the Administration to produce an interagency report on a whole-of-government strategy for supporting Taiwan's engagement with the international community, including consideration of, but not limited to, the following actions:
 - ▷ Explore opportunities for providing proactive development and security assistance to Taiwan's diplomatic partners in an effort to encourage them to maintain ties with Taipei.
 - ▷ Identify adjustments the United States could take in its relations with Taiwan in response to Beijing altering the cross-Strait status quo and taking coercive action to pressure Taipei.
 - ▷ Discuss cross-Strait relations and U.S. policy regarding Taiwan in meetings with U.S. allied and partner governments and support an expansion of commercial, cultural, and other exchanges between Taiwan and those countries.
 - ▷ Establish a high-level bilateral U.S.-Taiwan development dialogue to encourage Taiwan's role in promoting sustainable global development.
 - ▷ Identify key international organizations that would benefit from Taiwan's expertise and participation, and focus high-level U.S. advocacy efforts to secure Taiwan's membership or participation in these organizations.
- ▶ Congress consider amending antiboycott laws under the Export Administration Act or pass new legislation to prohibit U.S. companies from complying with China's efforts to apply pressure on Taiwan. Such legislation could include measures authorizing reciprocal sanctions on Chinese entities in the event of Chinese government retaliation against U.S. companies.

- ▶ Congress direct the U.S. Department of Defense to support the implementation of Taiwan’s new Overall Defense Concept and take actions that support Taiwan’s ability to maintain a sufficient self-defense capability by including Taiwan military personnel as participants or observers in U.S. and U.S.-led multilateral military exercises; conducting regular high-level exchanges of military planning and other advisory personnel pursuant to the Taiwan Travel Act; and considering the potential for assisting Taiwan with the creative acquisition of critical defense articles, including through coproduction of defense technology between U.S. and Taiwan companies.
- ▶ Congress consider raising the threshold of congressional notification on sales of defense articles and services to Taiwan to those set for major U.S. allies and terminating any requirement to provide notification of maintenance and sustainment of Taiwan’s existing capabilities.
- ▶ Congress express support for the Tsai Administration’s approach to maintaining the status quo in the Taiwan Strait.

SECTION 4: CHINA AND HONG KONG

The Commission recommends:

- ▶ Congress direct the U.S. Department of Commerce and other relevant government agencies to prepare an unclassified public report, with a classified annex, examining and assessing the adequacy of U.S. export control policy for dual-use technology as it relates to U.S. treatment of Hong Kong and China as separate customs areas.
- ▶ Congressional interparliamentary groups engage parliamentarians from the United Kingdom, EU, and Taiwan in a biennial review of China’s adherence to the Basic Law, with specific attention to rule of law, freedom of speech and assembly, and press freedom, and issue a report based on its findings after each review.
- ▶ Members of Congress participate in congressional delegations to Hong Kong and meet with Hong Kong officials, prodemocracy legislators, civil society, and business representatives in the territory and when they visit the United States. In meetings with Hong Kong and Chinese officials, they should raise concerns about Beijing’s adherence to the “one country, two systems” policy and China’s promise to allow Hong Kong a “high degree of autonomy.” They should also continue to express support for freedom of expression and rule of law in Hong Kong.

SECTION 5: CHINA’S EVOLVING NORTH KOREA STRATEGY

The Commission recommends:

- ▶ Congress direct the U.S. Department of the Treasury to provide a report within 180 days on the current state of Chinese enforcement of sanctions on North Korea. A classified annex should provide a list of Chinese financial institutions, businesses, and officials involved in trading with North Korea that could be subject to future sanctions and should explain the potential broader impacts of sanctioning those entities.

Chapter 4: China’s High-Tech Development

SECTION 1: NEXT GENERATION CONNECTIVITY

The Commission recommends:

- ▶ Congress require the Office of Management and Budget’s Federal Chief Information Security Officer Council to prepare an annual report to Congress to ensure supply chain vulnerabilities from China are adequately addressed. This report should collect and assess:
 - ▷ Each agency’s plans for supply chain risk management and assessments;
 - ▷ Existing departmental procurement and security policies and guidance on cybersecurity, operations security, physical security, information security and data security that may affect information and communications technology, 5G networks, and Internet of Things devices; and
 - ▷ Areas where new policies and guidance may be needed—including for specific information and communications technology, 5G networks, and Internet of Things devices, applications, or procedures—and where existing security policies and guidance can be updated to address supply chain, cyber, operations, physical, information, and data security vulnerabilities.
- ▶ Congress direct the National Telecommunications and Information Administration and Federal Communications Commission to identify (1) steps to ensure the rapid and secure deployment of a 5G network, with a particular focus on the threat posed by equipment and services designed or manufactured in China; and (2) whether any new statutory authorities are required to ensure the security of domestic 5G networks.



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of the
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Executive Summary and Recommendations