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2013

REPORT TO CONGRESS

of the

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

ONE HUNDRED THIRTEENTH CONGRESS

FIRST SESSION

NOVEMBER 2013

Printed for the use of the
U.S.-China Economic and Security Review Commission
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U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

NOVEMBER 13, 2013

The Honorable Patrick Leahy,
President Pro Tempore of the U.S. Senate, Washington, DC 20510
The Honorable John Boehner,
Speaker of the U.S. House of Representatives, Washington, DC 20510

DEAR SENATOR LEAHY AND SPEAKER BOEHNER:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the Commission's 2013 Annual Report to the Congress—the eleventh major Report presented to Congress by the Commission—pursuant to Public Law 106–398 (October 30, 2000), as amended by Public Law No. 109–108 (November 22, 2005). This report responds to the mandate for the Commission "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." In this Report, the Commission reached a broad and bipartisan consensus, approving the Report by a vote of 11 ayes to 1 nay.

In accordance with our mandate, this Report, which is current as of November 13, includes detailed treatment of our investigations of the areas identified by Congress for our examination and recommendation. These areas are:

- PROLIFERATION PRACTICES—The role of the People's Republic of China in the proliferation of weapons of mass destruction and other weapons (including dual-use technologies), including actions the United States might take to encourage the People's Republic of China to cease such practices;
- ECONOMIC TRANSFERS—The qualitative and quantitative nature of the transfer of United States production activities to the People's Republic of China, including the relocation of high technology, manufacturing, and research and development facilities, the impact of such transfers on United States national security, the adequacy of United States export control laws, and the effect of such transfers on United States economic security and employment;
- ENERGY—The effect of the large and growing economy of the People's Republic of China on world energy supplies and the role the United States can play (including joint research and development efforts and technological assistance), in influencing the energy policy of the People's Republic of China;
- UNITED STATES CAPITAL MARKETS—The extent of access to and use of United States capital markets by the People's Republic of China, including whether or not existing disclosure and transparency rules are adequate to identify People's Republic of China companies engaged in harmful activities;
- REGIONAL ECONOMIC AND SECURITY IMPACTS—The triangular economic and security relationship among the United States, [Taiwan] and the People's Republic of China (including the military modernization and force deployments of the People's

Republic of China aimed at [Taiwan]), the national budget of the People's Republic of China, and the fiscal strength of the People's Republic of China in relation to internal instability in the People's Republic of China and the likelihood of the externalization of problems arising from such internal instability;

- UNITED STATES–CHINA BILATERAL PROGRAMS—Science and technology programs, the degree of noncompliance by the People's Republic of China with agreements between the United States and the People's Republic of China on prison labor imports and intellectual property rights, and United States enforcement policies with respect to such agreements;
- WORLD TRADE ORGANIZATION COMPLIANCE—The compliance of the People's Republic of China with its accession agreement to the World Trade Organization (WTO); and
- FREEDOM OF EXPRESSION—The implications of restrictions on speech and access to information in the People's Republic of China for its relations with the United States in the areas of economic and security policy.

The Commission conducted its work through a comprehensive set of seven public hearings and one public roundtable, taking testimony from 57 witnesses from the executive branch, industry, academia, policy groups, and other experts. For each of its hearings, the Commission produced a transcript (posted on its Web site—*www.uscc.gov*). The Commission also received a number of briefings by officials of executive branch agencies, intelligence community agencies, and the armed services, including classified briefings on Chinese investment, China's cyber operations, China's foreign policy, and China's navy. The Commission is preparing a classified report to Congress on these and other topics.

Commissioners also made an official delegation visit to Taiwan, Japan, China, and Hong Kong to hear and discuss perspectives on China and its global and regional activities. In these visits, the Commission delegations met with U.S. diplomats, host government officials, representatives of the U.S. and foreign business communities, and local experts.

The Commission also relied substantially on the work of its excellent professional staff, and supported outside research in accordance with our mandate.

The Report includes 41 recommendations for Congressional action. Our 10 most important recommendations appear on page 27 at the conclusion of the Executive Summary.

We offer this Report to the Congress in the hope that it will be useful as an updated baseline 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 you in the upcoming year to address issues of concern in the U.S.-China relationship.

Yours truly,

William A. Reinsch
Chairman

Dennis C. Shea
Vice Chairman

Commissioners Approving the 2013 Report

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U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

EXECUTIVE SUMMARY

Chapter 1: The U.S.-China Trade and Economic Relationship

Trade and Economics Year in Review

China's economy grew at a 7.66 percent annualized rate in the first three quarters of 2013, continuing a three-year trend of decelerating output. This marked a significant decline from the three decades of growth in the 1980s, 1990s, and 2000s averaging 10 percent annually. Demand for China's exports stalled, and the domestic economy adjusted to a drop in government spending on massive infrastructure projects—undermining the two main pillars of China's economic surge over the previous decade.

China underwent a leadership change with a new president and premier and several new members of the Politburo and Standing Committee. No prominent political or economic reformers were elevated to the Politburo Standing Committee, China's highest decision-making body, though the backgrounds of Wang Qishan and Zhang Gaoli suggest that they might be open to further economic reform. There is uncertainty over the prospects for economic reform as a result of contradictory statements and actions by the new leadership. While there are signs that President Xi Jinping and Premier Li Keqiang are preparing a package of reforms to be unveiled at the Third Plenary Session of the 18th Central Committee, expected to take place in November 2013, President Xi has also been reaffirming the role of the state in the economy and introducing Maoist-style ideological campaigns aimed at stamping out political liberalization. In recent months, the government has introduced some important initiatives aimed at addressing some of the country's growing inequalities of wealth and opportunity. One initiative has been a focus on urbanization. The hope is that urbanization will become the next growth engine, initiating a new wave of investment, adding to the consumer class, and creating a surge in demand for housing and infrastructure. The urbanization drive may also boost Chinese efforts to make more land available for agriculture and improve farming efficiency.

Growing demand from China has supported exporters in certain sectors of the U.S. economy, such as aerospace, the auto industry, and agricultural products. However, the U.S. trade deficit with China continues to widen. In July 2013, the monthly deficit exceeded $30 billion for the first time. Moreover, the Chinese government policies driving economic growth have resulted in what the International Monetary Fund (IMF) calls a "pattern of growth [that] has become too reliant on investment and an unsustainable surge in credit, resulting in rising domestic vulnerabilities." The most important—and most challenging—element of domestic rebalancing is increasing household consumption as a share of gross domestic product (GDP), which has declined as a share of China's GDP for decades while the share of fixed-asset investment has grown.

China continues to intervene in foreign exchange markets to keep its currency undervalued. Such interventions, combined with China's subsidies to exporting industries, have helped China accumulate the world's largest foreign currency reserves—$3.66 trillion by the end of September 2013. While maintaining a preference for government securities, China continues to diversify its foreign exchange assets. China's nonfinancial outbound foreign direct investment (FDI) for the first half of 2013 totaled $45.6 billion, up 29 percent from the prior year. China rapidly accumulated foreign currency in 2013, but the pace of currency inflows varied during the course of the year. In the first quarter, currency inflows surged, followed by outflows in the second quarter as the country's banks encountered a liquidity crisis. These movements caused volatility in China's external accounts that carried over into the domestic financial sector.

Trends in Chinese Investment in the United States

China has amassed the world's largest trove of dollar-denominated assets. Although the true composition of China's foreign exchange reserves, valued at $3.66 trillion, is a state secret, outside observers estimate that about 70 percent is in dollars. In recent years, China has become less risk averse and more willing to invest directly in U.S. land, factories, and businesses. This trend appears to be accelerating. In June 2013, China announced its largest purchase of a U.S. asset to date: a $7.1 billion acquisition of Virginia-based Smithfield Foods, Inc. Given China's large holdings of U.S. dollars, China has a huge potential for FDI, particularly if China should substitute or abandon portfolio investment for direct investment.

The 12th Five-Year Plan (2011–2016) called for a three-pronged approach for increasing China's investment abroad. First, Chinese manufacturing companies should invest overseas in order to establish international networks and globally recognized brands. Second, Chinese companies should invest in research and development outside of China. Lastly, the plan set goals for shifting acquisitions toward sectors that promote a high-tech economy. This policy focused on investment goals in which domestic state-owned or state-controlled firms were already intended to be dominant by policy. These sectors included energy, machinery, construction, and information technology. The Chinese government wields many tools to drive these goals, including requiring permission for overseas investments by Chinese firms.

Despite China's large holdings of portfolio investment, China's FDI is still relatively modest. According to the U.S. Bureau of Economic Analysis, in 2012, the United States attracted $174.7 billion of global FDI, of which only $219 million came from China. Official estimates of Chinese FDI in the United States are too low, because they do not account for flows of FDI though Hong Kong and other offshore financial centers, among other things. Chinese FDI in the United States has emphasized services, energy, and technology and is notable for its focus on brand acquisition.

State-owned enterprises (SOEs) have dominated Chinese FDI in the United States, making investments that follow the industrial policies of the Chinese government. Chinese SOEs receive substantial benefits from the central and provincial governments that are not available to their foreign competitors, including preferential policies and low cost of capital. Furthermore, SOEs investing in the United States may engage in particular predatory or anticompetitive behavior that U.S. trade remedies cannot address.

Trade-related aspects of foreign investments often intersect with national security concerns. For example, foreign intelligence collection efforts and espionage that target U.S. technology, intellectual property, trade secrets, and other proprietary information can be concealed under the pretext of foreign investment in cleared government contractors. The United States has a limited screening process for determining the potential national security threat from a specific foreign investment. The Committee on Foreign Investment in the United States (CFIUS) is an interagency committee that reviews certain mergers, acquisitions, and takeovers of U.S. businesses by foreign persons, corporations, or governments for national security risks. China presents new challenges for CFIUS, because investment by SOEs can blur the line between national security and economic security. The possibility of government intent or coordinated strategy behind Chinese investments raises national security concerns. For example, Chinese companies' attempts to acquire technology track closely the government's plan to move up the value-added chain. There is also an inherent tension among state and federal agencies in the United States regarding FDI from China. The federal government tends to be concerned with maintaining national security and protecting a rules-based, nondiscriminatory investment regime. The state governments are more concerned with local economic benefits, such as an expanded tax base and increased local employment, rather than national strategic issues, especially as job growth has stagnated.

Governance and Accountability in China's Financial System

China's 12th Five-Year Plan calls for less dependence on exports and state-funded infrastructure projects and more domestic consumption to support China's economy. A shift from government-led to private-led growth requires that Chinese families and private sector businesses have sufficient access to credit and capital. Bank lending, the traditional source of credit for entrepreneurs and startups in most countries, is largely inaccessible to Chinese individuals and small- to medium-sized enterprises (SMEs), because China's financial system is dominated by large, state-owned banks that mainly service government-directed projects.

Banks hold a unique position in China and are even more important to the national economy than banks in Europe or North America, where alternate sources of financing are available. China's financial sector is dominated by five massive, state-owned commercial banks that account collectively for about 50 percent of all deposits and loans. Additionally, three policy banks were established in 1994 to take over government-directed spending functions like financing of major development projects. China's policy banks are funded primarily by selling bonds to the big commercial banks, and all are ultimately back-stopped by the Chinese government. The incestuous relationship between the government; the large, state-owned policy banks; and their state-owned commercial cousins provides borrowers a considerable benefit: artificially low interest rates. The banks' depositors, meanwhile, are paid very low rates, sometimes below the rate of inflation, to help hold down the rates charged to borrowers. Thus, the state-owned corporate sector receives a subsidy from the bank's depositors (Chinese households) in the form of low interest rates.

A "shadow banking system" of unofficial credit has sprung up to fill the gaps left by the big banks' lending practices. China's shadow banking system can broadly be defined as lending that falls outside of the official banking system. It can involve both traditional and nontraditional institutions and is best understood not in terms of the institutions engaged in the system but in terms of the activities that they undertake. Because shadow banking activity occurs outside of formal banking channels, it does not appear on bank balance sheets and is far less transparent than official lending activity. Chinese demand for shadow banking is largely driven by the growth of China's private sector, a sector with limited access to official bank credit; and the Chinese government's tolerance of shadow banking in recent years has been tied to the reality that the private sector is the increasingly dominant source of the nation's employment.

Demand for credit has led Chinese companies to seek capital overseas even as its shadow banking system has expanded. In the late 1990s, Chinese companies began raising capital on major international stock exchanges. This trend has been driven by large Chinese companies, many state owned, that have sought to broaden their shareholder base, increase the liquidity of their shares, and enhance the visibility of their brand names. U.S. stock markets are among the most popular global exchange destinations for Chinese firms.

Initially, U.S. investors purchased stock in U.S.-listed Chinese companies in hopes of profiting from China's rapid growth rate. However, investors in U.S.-listed Chinese companies have increasingly found that insufficient corporate governance standards make these companies high-risk investments. Many have been implicated in frauds and accounting scandals, and U.S. regulators have deregistered about 50 Chinese companies in the past two years following fraud probes. During recent probes, the Securities and Exchange Commission (SEC) has sought audit work papers from Chinese branches of multinational accounting firms that service U.S.-listed Chinese companies, a common request during fraud investigations. To date, the firms have refused to produce these documents, arguing that doing so would put them in violation of Chinese state secrets laws and subject them to criminal liability in China. In December 2012, the SEC charged five firms with breaking U.S. securities laws by refusing to turn over the requested audit work papers.

In May 2013, the United States and China announced a deal for limited information-sharing between their regulatory agencies when there are questions regarding audits of U.S.-listed Chinese companies. In July, Chinese regulators agreed to turn over certain requested documents of some listed Chinese companies to assist the SEC in ongoing investigations. No agreement has yet been reached that would grant more general direct access to documents for U.S. regulators conducting investigations or inspections. Although it is considered a last resort option, if an agreement is not reached, the SEC and the Public Company Accounting Oversight Board could choose to ban Chinese accounting firms and Chinese branches of multinational accounting firms from auditing U.S.-listed Chinese companies, which could in turn lead to these companies being delisted from U.S. exchanges.

China's Agriculture Policy, Food Regulation, and the U.S.-China Agriculture Trade

China's World Trade Organization (WTO) accession in 2001 was a watershed event for U.S. agriculture. China is now the primary export market for U.S. agriculture products. While the United States ran a $315 billion trade deficit in goods with China in 2012, it achieved a $21 billion surplus in agriculture. Since full implementation of the WTO accession in 2005, China's agriculture imports from the United States have risen by an average of $2.5 billion each year, exceeding the U.S. Department of Agriculture's (USDA) initial estimate of $2 billion. China must feed a fifth of the world's population with less than a tenth of its arable land and potable water. As China transforms into an urban society with a growing middle class, per capita food consumption is rising and, with it, the demand for higher-protein diets—a demand that U.S. farmers are well positioned to fill.

There remain serious problems within the U.S.-China bilateral agriculture trade relationship, however. Many in the U.S. agriculture industry lobbied Congress in 2000 to grant China permanent normal trade relations, because they expected China to become a major purchaser of U.S. food products once it joined the WTO. But farm belt advocates have been disappointed that China has concentrated its purchases on bulk commodities, such as soybeans used as animal feed for China's outsized livestock industry. China's agriculture policy favors domestic production, even when it is unsustainable and nonessential to food security. In trade, China has used nontariff barriers to restrict imports of higher value-added products from the United States, including excessive subsidies; government control over import quotas; discriminatory taxes; and sanitary and phytosanitary restrictions that are not based on proper scientific analysis. These measures have contributed to an imbalanced food trade that has been particularly damaging to U.S. meat producers, who enjoy a comparative advantage over China in terms of resources, quality, and efficiency.

China's agribusinesses have pursued outbound investment in several countries and sectors in recent years. In the United States, this trend came into focus in June 2013, when Shuanghui International Holdings Limited, a subsidiary of Shuanghui Group, proposed to acquire the U.S. pork producer Smithfield Foods, Inc. As the largest U.S. pork producer, Smithfield is a strategic node in the U.S. food industry.

China's WTO accession was primarily envisaged as an opportunity for U.S. exporters. But U.S. consumer food imports from

China have surged as well, part of a greater reliance on imported food by U.S. consumers. The bulk of U.S. food imports from China consists of farm-raised fish and fruits and vegetables. China also supplies ingredients for U.S.-processed foods, as well as organic foods that are USDA-approved through third-party certifiers. For the United States, these imports from China present significant food safety risks. Over the past decade, China's major trade partners have repeatedly banned its food shipments on the basis of food safety. Current regulation of food entering the United States from China is insufficient. For one, the Chinese government's own food safety regulation is inadequate. The Chinese government in 2009 introduced a comprehensive Food Safety Law to establish a modern framework for food safety regulation and in 2013 created a China Food and Drug Administration to consolidate regulatory authority. However, it is uncertain whether these and other reforms will improve oversight of China's large and fragmented food industry.

In the absence of effective regulation by the Chinese government, U.S. consumers depend on U.S. food safety inspectors to provide protection against the importation of unsafe food products. The Food and Drug Administration (FDA), which is in charge of inspecting all nonmeat imports, is making substantial efforts to dedicate more staff and funding to China, to modernize its regulatory system, and to propose useful policies, such as foreign supplier verification. And yet, there are numerous problems with U.S. food regulation. The FDA still inspects only a fraction of the food that enters through U.S. borders. The agency has also found it difficult to increase on-the-ground inspections on the Mainland, in part because Chinese authorities have delayed visas for FDA inspectors and restricted access to food production sites.

Conclusions

Trade and Economics Year in Review

- China underwent a once-a-decade leadership change with a new president and premier and several new members of the Politburo and Standing Committee. The leadership indicated that China's overall economic policy goal—to transition from an export and investment-led growth model to a greater reliance on domestic consumption, remained the same. In reality, this change proved difficult to implement by a new government concerned about a slowing economy, real estate speculation, stagnating wages, and unemployment. The incoming government issued statements supporting a large and powerful state-owned sector in the economy, disappointing advocates of a larger private sector.
- The new Chinese leadership introduced initiatives aimed at reducing inequality, cracking down on corruption, and promoting urbanization. There are significant impediments to the government's ability to implement these reforms. For example, corruption is endemic at all levels of government, while local governments oppose urbanization due to fear that they will be overwhelmed by a flood of new migrants.

- China's progress in external rebalancing following the financial crisis was only temporary and largely driven by a weak global demand that reduced the relative size of China's export sector. Trade data for 2012–13 show that Chinese exports are again growing at a higher rate than imports, signaling a continued reliance on exports to fuel economic growth and a reversal in reducing China's massive trade surplus. As a result of failed measures to rebalance its economy, China has continued to expand its already record foreign currency reserves, reaching $3.66 trillion by the end of September 2013.
- China's trade surplus with the United States in goods in 2012 was $315 billion, a record. For the first seven months of 2013, China's trade surplus with the United States was $178 billion, also a record. China continues to manipulate the value of its currency, the RMB, to achieve a competitive advantage with the United States. China also continues to follow mercantilist policies to foster a trade surplus with the United States.
- China has had little success transitioning toward a consumption-led growth model and reducing its reliance on massive infrastructure projects to boost economic growth. Consequently, China's high investment levels have led to overcapacity in multiple industries, including steelmaking, shipbuilding, and solar panel manufacturing. A slowdown in urban household disposable income growth and an increase in the household savings rate have cut into consumer purchasing power and contributed to a decline in total retail sales growth.
- Chinese officials have played down the significance of lower growth, saying the slowdown is partly due to economic rebalancing. However, the government continues to stimulate the economy through a variety of small steps. For example, the State Council, China's cabinet, instituted a temporary tax cut (scraping all value-added and operating taxes) for more than 6 million small- and medium-sized enterprises; reduced approval procedures and administrative costs for exporting companies; and provided more investment in railway construction in China's central and western regions. In a similar vein, securities regulators and the central bank issued record amounts of investment approvals to the Qualified Foreign Institutional Investors program.
- Due to its restrictive monetary policy, China's central bank has accumulated the world's largest foreign exchange reserves. The bulk of these reserves are invested in U.S. Treasury securities, so that Chinese ownership accounts for nearly one-quarter of foreign-owned U.S Treasuries. In addition, China's two largest sovereign wealth funds, China Investment Corporation and SAFE Investment Company, have expanded their equity and real estate investments in the United States.
- The People's Republic of China (PRC) has concluded 13 trade agreements, the latest with Iceland and Switzerland this year—the first signed with European governments. China is in the process of negotiating six additional trade agreements, which include the ASEAN-led Regional Comprehensive Eco-

nomic Partnership, an initiative to link ASEAN member states and preferential trade agreement partners to form the world's largest trading bloc. The Regional Comprehensive Economic Partnership, which excludes the United States, is competing with the U.S.-led Trans-Pacific Partnership, which excludes China. Formal negotiations of the Regional Comprehensive Economic Partnership began in May 2013 and are scheduled to conclude by the end of 2015.

- China's attempts to keep the value of the RMB artificially low while strictly limiting the flow of RMB from the country, coupled with its efforts to control a large state banking sector, led to a banking crisis. The collapse in liquidity threatened economic growth in China and demonstrated the difficulty of conducting a monetary policy so at odds with its trading partners and international norms.
- The fifth round of the U.S.-China Strategic and Economic dialogue was held on July 10–11, 2013, in Washington, DC. There were no significant achievements in the strategic track. On the economic front, the most relevant announcements were (1) resumption of bilateral investment treaty talks; (2) the launch of the Shanghai Free Trade Zone; and (3) new measures to liberalize China's financial sector. In the multilateral arena, the United States successfully challenged China's improper imposition of antidumping and countervailing duties at the WTO.
- China continues to take incremental steps toward RMB internationalization, but the goal of making the RMB a major international currency remains out of reach as the government continues to maintain strict controls on cross-border capital flows.
- Beijing's efforts to reform the financial system continue to be hampered by risky off-balance-sheet lending by banks and nonbank financial institutions. Beijing has undertaken efforts to curb these risky lending practices, removing the floor on lending rates and imposing a short-term credit crunch in a clumsy effort to send a strong signal to the financial sector. However, there is little evidence so far that these efforts have succeeded. The ceiling on rates paid to depositors remains low, and some risky lending actually increased during the credit crunch.

Trends in Chinese Investment in the United States

- Chinese foreign direct investment (FDI) in the United States continues to grow, though from a very low base. According to official U.S. statistics, in 2012 the United States attracted $174.7 billion of global FDI, of which $219 million came from China. An estimate by country of ultimate beneficiary owner, which better tracks actual investors, put stock of Chinese FDI in the United States at $9.5 billion at the end of 2011. For the same year, China's Ministry of Commerce put the flows of Chinese FDI to the United States at $1.8 billion, with stock of FDI estimated at around $9 billion.

- Official statistics underestimate the true volume of Chinese investment, because they do not account for flows of FDI through Hong Kong and other offshore financial centers, which are likely transit points for Chinese money on the way to the real investment destination. Official data are also provided after a significant delay, which hinders analysis.
- To date, state-owned enterprises (SOEs) have dominated Chinese FDI in the United States measured by the value of deals, though private companies lead by the number of deals. One reason is that the biggest investments so far have been made in the oil and energy fields, which are dominated by Chinese state-owned giants.
- Chinese investors have primarily targeted those sectors where China lacks know-how and technology, particularly in the Strategic and Emerging Industries identified in the 12th Five-Year Plan. Energy and services (in particular real estate and financial services) have received the most investment. High-end manufacturing is another important destination for China's investments, particularly when measured in terms of the number rather than the value of deals.
- Due to the considerable government ownership of the Chinese economy, provision by Chinese companies of critical infrastructure to U.S. government or acquisition by Chinese companies of U.S. firms with sensitive technology or intellectual property could be harmful to U.S. national interests. The Committee on Foreign Investment in the United States (CFIUS) investigates the national security implications of mergers and acquisitions by foreign investors of U.S. assets.
- Investigations by CFIUS and other national security review and mitigation mechanisms may be hampered by limited resources or limited statutory authority.
- Investments made by Chinese state-owned or -controlled companies can also pose economic security threats. The Chinese government provides significant financial and logistical support. This puts U.S. firms, which receive no such support, at a competitive disadvantage. When Chinese SOEs invest abroad, they do not necessarily seek profit and may instead pursue government goals such as resource acquisition or technology transfer.
- Chinese investments in the United States are subject to the same set of rules and regulations as investment from other foreign countries in the areas of foreign corrupt practices, export administration, sanctions, and antitrust. If Chinese firms run afoul of these rules, they will be subject to legal sanction. But gaps exist in the U.S. government's ability to address the competitive challenges posed by SOEs.
- In areas where there are no national security considerations, and when the investment is driven by economic rather than strategic rationale, Chinese FDI can benefit the U.S. economy through creation of jobs and other positive spillovers.

Governance and Accountability in China's Financial System

- The Chinese economy weathered the first few years of the global economic downturn by doubling down on its time-tested strategy of funneling capital into domestic development projects. But five years on, global demand for Chinese exports remains too weak to sustain the country's factories, much less new ones, and the merits of massive infrastructure projects have more than run their course. The policy decisions that kept the Chinese economy chugging over the last few years have also sped it closer to a reckoning that economists have long forecast would eventually be necessary. If a rebalancing of the U.S.-China economic relationship is to be achieved, China must reform its financial system to support newer, nonstate sources of economic growth, which will require that China's banks better service its private sector.
- As long as China's official, regulated channels of credit do not possess the flexibility to meet the needs of the Chinese economy's main job creators, China will be at risk of depressed economic growth, which in turn may limit the growth of U.S. exports to China and the prosperity of U.S. investments in China, slowing economic recovery here at home. The shadow banking system that Beijing has allowed to step into this credit gap is insufficiently regulated and, if left unchecked, will pose an increasingly serious threat to Chinese and global economic stability.
- The opacity of Chinese corporate governance and accountability policies, as well as conflicts with U.S. securities laws and regulations, hurts investor confidence in Chinese companies trading on U.S. exchanges. The current situation threatens U.S. investors with unforeseeable and unmanageable losses and may lead to a broad delisting of Chinese companies. China's lack of sophisticated banking, corporate governance, and auditing policies and practices also hinders much-needed growth and opportunity for the very U.S. financial services firms that could help China to restructure its system if they were allowed greater access to the Chinese market.
- Insufficient transparency and accountability in China's financial sector put U.S. firms at risk of violating laws in both China and the United States; pose unreasonable hazards for U.S. investors with shares in Chinese companies; and render some U.S. laws and regulations unenforceable. Without greater regulatory transparency and assurance of China's regulatory, oversight and enforcement capabilities, Chinese firms also risk curtailment or even revocation of access to the U.S. market.

China's Agriculture Policy, Food Regulation, and the U.S.-China Agriculture Trade

- For the past three years, China has been the largest export market for U.S. agricultural goods. However, trade is far from free, and enormous opportunities are being withheld. China's WTO accession has not been as productive to the United States as initially expected. In contrast to U.S. agricultural exports to the rest of the world, most U.S. exports to China are bulk commodities, particularly raw soybeans that supply China's outsized livestock sector. Conversely, processed commodities, meat products, consumer foods, and other higher value-added products have not kept pace with the overall growth in bilateral trade.

- Since the 1980s, China has developed into the world's largest agricultural economy, producing a fifth of the world's grains, a quarter of its meat, and half of its vegetables. But demand in China is beginning to outstrip supply. As more people move to cities and earn higher incomes, China's population is demanding safer food and a more diverse, protein-rich diet at an affordable cost. The United States is well-positioned to meet that demand. U.S. farmers enjoy a comparative advantage in resources, productivity, and quality, particularly in meat production.
- China's agriculture policy favors domestic production over imports. China maintains ambitious self-sufficiency targets that are unsustainable and unjustifiable in terms of food security. This policy is now being challenged by the decline in China's farm labor surplus, deteriorating land and resource endowments, and fragmented producer and land use systems. A related problem is that efforts to modernize agriculture conflict with rural welfare aims. Millions of rural migrants continue to rely on farmland and smallholder agriculture for insurance in the absence of a functioning welfare state.
- China has failed to fully perform its obligations under the WTO. It has erected a series of nontariff barriers that include state trading; excessive domestic subsidies and stockpiling of commodities; discriminatory taxes; uncalled-for antidumping duties; and slow approvals of biotechnology applications for U.S. crops. Damaging to U.S. interests as well are sanitary and phytosanitary restrictions, especially BSE-based bans on beef and zero tolerance for ractopamine in pork. Although China has significantly lowered its tariffs and increased its agricultural imports since accession, numerous trade restrictions remain in place.
- U.S. companies, universities, and government agencies are helping China to improve the quantity and quality of its food output. In a sign of deepening bilateral ties, the United States and China signed the first U.S.-China Plan of Strategic Cooperation in Agriculture (2012–2017) in February 2012, and in March of that year the largest-ever U.S. agricultural trade mission visited China. However, U.S. companies operating in China are hamstrung by regulatory uncertainty, restricted market access, and weak intellectual property enforcement.
- China is fostering globally competitive agribusinesses, in the process becoming an active acquirer of agricultural assets overseas. In June 2013, China's largest pork producer, Shuanghui, proposed a $7.1 billion acquisition of Smithfield, the leading pork producer in the United States. While the deal has been approved by CFIUS and Smithfield's shareholders, it raises

critical issues regarding net economic benefits, intellectual property, reciprocal market access, and the treatment of quasi-private Chinese companies that maintain links to the Chinese government.

- China accounts for a large share of the fruits, vegetables, fish, and processed foods that Americans consume, but the United States has little assurance that the food imports coming into the United States from China are safe. China's own food safety regulation is still ineffective, in spite of recent efforts to consolidate agencies and improve legislation. U.S. consumers rely on U.S. food safety inspectors to do their jobs, but U.S. regulation is also fragmented and underfunded. U.S. regulators have increased their presence within China but have struggled to obtain work visas and to gain access to food production facilities. Although the United States does not permit raw meat imports from China, the USDA has granted equivalence status to Chinese poultry processors, which will permit them to process poultry raised in the United States and Canada and ship it to the United States.

Chapter 2: China's Impact on U.S. Security Interests

Military and Security Year in Review

China's late 2012 leadership transition brought the largest turnover to the Central Military Commission (CMC) in a decade. Xi Jinping assumed the position of both CMC chairman and Chinese Communist Party (CCP) general secretary at the CCP's 18th Party Congress on November 15, 2012. President Xi then completed his accession as China's senior leader by becoming the People's Republic of China (PRC) president on March 14, 2013. Although President Xi was widely expected to eventually assume all three of China's top leadership posts, many observers were surprised by the speed of his elevation to CMC chairman. Mr. Hu broke with the pattern established by his two predecessors, who retained the CMC chairmanship for two years after finishing their terms as CCP general secretary.

Since becoming CMC chairman, President Xi has used public speeches and visits to People's Liberation Army (PLA) units to reaffirm China's long-term military modernization goals; emphasize the importance of a strong military to the fulfillment of the "China Dream," his new political slogan and party campaign; and signal his intent to focus on increasing combat readiness and reducing corruption in the PLA.

In November 2012, President Xi introduced the "China Dream" concept, which envisions the "great renewal of the Chinese nation" and the advancement of an international system in which China's successful rise provides an attractive alternate political model to Western ones. Achieving the dream means building a "moderately prosperous society" by 2021 and a "modern socialist society that is strong, democratic, cultured, and harmonious" by 2049. Although President Xi emphasizes that "peaceful development" and a stable regional environment are essential to create the conditions for this vision, he linked its fulfillment to a strong military in a

December 2012 speech while aboard a PLA Navy destroyer. In June 2013, official PLA media explained, “To the armed forces, the China dream is the strong-army dream, the China dream leads the strong-army dream, and the strong-army dream supports the China dream.”

During his first reported visit to a PLA base as CMC chairman in December 2012, President Xi called for the PLA to increase “combat readiness” through “realistic training.” Combat readiness has been a central theme of subsequent speeches to the military by President Xi and now features prominently in official PLA statements and documents. For example, official PLA media in January 2013 said the military needs to prevent and overcome the “harmful” practice of training “for show.” Furthermore, describing the PLA’s 2013 training priorities, a PLA official said: “The ‘scent of gunpowder’ in the ‘fighting’ will be stronger. The entire military will make ‘training like real war’ . . . the main theme of the entire year’s training, powerfully strengthening training of mission topics, ensuring that as soon as there is a situation, the military will be able to go forward and fight to victory.”

In a meeting shortly after becoming the CMC chairman, President Xi urged senior PLA officers “to take a firm stand against corruption” and to maintain a “strict work style” and “iron discipline.” Since then, reducing corruption and waste in the PLA has been one of President Xi’s most consistent messages in his public speeches to the military. In addition to rhetoric, President Xi has announced stronger anticorruption regulations for the PLA, including restrictions on military personnel holding banquets, drinking excessive amounts of alcohol, and using luxury hotels.

In March 2013, China announced its official defense budget for 2013 rose 10.7 percent to 720.168 billion RMB (approximately $117.39 billion), signaling the new leadership’s support for the PLA’s ongoing modernization efforts. This figure represents 5.3 percent of total government outlays and approximately 1.3 percent of estimated GDP. China’s official annual defense budget now has increased for 22 consecutive years and more than doubled since 2006. The Institute of International Strategic Studies assesses China’s actual defense spending is 40 to 50 percent higher than the official figure. The U.S. Department of Defense (DoD) estimated China’s actual defense spending in 2012 fell between $135 and $215 billion, which was approximately 20 to 90 percent higher than China’s announced defense budget.

In April 2013, China released the latest version of its biennial defense white paper. This is the first defense white paper published since President Xi became CMC chairman. Although Chinese military leaders likely began to draft the document before President Xi assumed the position, official Chinese press suggests it contains strategic priorities specific to him. Official Chinese media hailed the 2012 defense white paper as a milestone in transparency, citing the “declassification” of military information. However, most of this was widely-known information that Beijing had never officially acknowledged. Furthermore, as in previous iterations, the 2012 defense white paper offers no substantive information on important defense issues.

Since commissioning its first aircraft carrier, the *Liaoning*, in September 2012, the PLA Navy has continued to develop a fixed-wing carrier aviation capability for air defense and offensive strike missions. China plans to follow the *Liaoning* with at least two indigenously built carriers. The first likely will enter service by 2020 and the second by 2025. China's Julang-2 (JL–2) submarine-launched ballistic missile (SLBM) is expected to reach initial operations capability by late 2013. The JL–2, when mated with the PLA Navy's JIN-class nuclear ballistic missile submarine (SSBN), will give China its first credible sea-based nuclear deterrent. The SLBN/SSBN weapon system will be able to target the continental United States from China's littoral waters.

The PLA Navy continues to steadily increase its inventory of modern submarines and surface combatants. China is known to be building seven classes of ships simultaneously but may be constructing additional classes. China also recently began developing its first sea-based land attack capability. Modern submarines and surface combatants equipped with land attack cruise missiles (LACMs) will enhance Beijing's flexibility for attacking land targets throughout the Western Pacific, including U.S. facilities in Guam.

China also continues to pursue new space and counterspace capabilities. In May 2013, China fired a missile into nearly geosynchronous Earth orbit, marking the highest known suborbital launch since the U.S. Gravity Probe A in 1976 and China's highest known suborbital launch to date. Although Beijing claims the launch was part of a high-altitude scientific experiment, available data suggest it was intended to test at least the launch vehicle component of a new high-altitude antisatellite (ASAT) capability. If the launch is part of China's ASAT program, Beijing's attempt to disguise it as a scientific experiment would demonstrate a lack of transparency about its objectives and activities in space. Furthermore, such a test would signal China's intent to develop an ASAT capability to target satellites in an altitude range that includes U.S. Global Positioning System (GPS) and many U.S. military and intelligence satellites. Throughout 2013, China also made significant advances in its manned space and regional satellite navigation programs. The PLA's extensive role in China's civilian space programs suggests these activities support the development of PLA space, counterspace, and conventional capabilities in addition to serving China's overall development strategy.

In late January 2013, China conducted the first test flight of its indigenously developed cargo transport aircraft, the Yun-20 (Y–20). China previously was unable to build heavy transports, so it has relied on a handful of Russian aircraft for strategic airlift since the 1990s. Once large-scale deliveries of the new plane begin, the Y–20 aircraft will be able to support a variety of domestic and international military operations. The Y–20 will enhance the PLA's ability to respond to internal security crises and border contingencies, support international peacekeeping and humanitarian assistance operations, and project power in a regional conflict.

In June 2013, the PLA Air Force began to receive new Hongzha-6K (H–6K) bomber aircraft. The H–6K has an extended range and can carry China's new long-range LACM. The bomber/LACM weapon system provides the PLA Air Force with the ability to conduct conventional strikes against regional targets throughout the Western Pacific, including U.S. facilities in Guam. Although the H–6K airframe could be modified to carry a nuclear-tipped air-launched LACM, and China's LACMs likely have the ability to carry a nuclear warhead, there is no evidence to confirm China is deploying nuclear warheads on any of its air-launched LACMs.

In July 2013, the PLA began to deploy peacekeepers to the United Nations (UN) Multidimensional Integrated Stabilization Mission in Mali (MINUSMA). The PLA contingent includes what Beijing calls a "security force" from a PLA group army. This marks the first time Beijing has deployed infantry to support a peacekeeping operation since it began participating in UN missions in 1990. China previously had limited the PLA's participation in peacekeeping operations to noncombat troops.

China's Cyber Activities

In 2013, strong evidence emerged that the Chinese government is directing and executing a large-scale cyber espionage campaign against the United States. Mandiant, a private U.S. cybersecurity firm, issued a report that provides evidence that the PLA since 2006 has penetrated the networks of at least 141 organizations, including companies, international organizations, and foreign governments. These organizations are either located or have headquarters in 15 countries and represent 20 sectors, from information technology to financial services. Of the organizations penetrated, 81 percent were either located in the United States or had U.S.-based headquarters.

The Mandiant report was followed by DoD's first direct accusation that the Chinese government and military are conducting cyber espionage against U.S. networks. DoD's 2013 annual report to Congress on China's military stated: "In 2012, numerous computer systems around the world, including those owned by the U.S. government, continued to be targeted for intrusions, some of which appear to be attributable directly to the Chinese government and military." Previously, DoD had stopped short of attributing cyber espionage to the Chinese government or military, instead merely acknowledging cyber espionage "originated" in China.

There are no indications the public exposure of Chinese cyber espionage in technical detail throughout 2013 has led China to change its attitude toward the use of cyber espionage to steal intellectual property and proprietary information. It is clear naming and attempting to shame will not be sufficient to deter entities in China from engaging in cyber espionage against U.S. companies. Mitigating the problem will require a multifaceted approach. Many potential actions to address the problem are being discussed by Congress, the Obama Administration, and outside experts. These actions include linking economic cyber espionage to trade restrictions, prohibiting Chinese firms using stolen U.S. intellectual property from accessing U.S. banks, and banning U.S. travel for Chinese organizations that are involved with cyber espionage. To date, Washington has not implemented a comprehensive framework for addressing China's ongoing cyber espionage.

China's Maritime Disputes

Although sovereignty disputes in the East and South China Seas are not new, China's growing diplomatic, economic, and military clout is improving China's ability to assert its interests. It is increasingly clear that China does not intend to resolve the disputes through multilateral negotiations or the application of international laws and adjudicative processes but instead will use its growing power in support of coercive tactics that pressure its neighbors to concede to China's claims. Viewing a public defense of its maritime claims as central to political legitimacy, leaders in Beijing exploit deep-seated popular nationalism to support foreign policy aims in the East and South China Seas. China also views sovereignty over the East and South China Seas as critical to its national security, territorial integrity, and economic development. China has been more assertive since the publication of the Commission's 2012 Report, offering counterclaimants the choice of either facing the brunt of Chinese power as a result of challenging Chinese claims or benefitting from economic and political rewards for moderating their positions or even acquiescing to China's claims. Chinese official statements and use of maritime law enforcement rather than military forces suggest Beijing prefers to avoid direct military conflict over its maritime disputes and rely on the shift in the balance of regional power in its favor to resolve its maritime disputes in the long term.

The East China Sea dispute involves China, Japan, and Taiwan. The dispute can be divided into two distinct issues: territorial sovereignty over the Senkaku Islands (known as the Diaoyu Dao in China, and Diaoyutai in Taiwan), and demarcation of maritime zones that have implications for natural resource rights. Given the historical animosity between China and Japan and the strong nationalist sentiment on both sides regarding the sovereignty of the islands, the Senkaku Islands dispute is especially intense. The Japanese government's September 2012 purchase of three of the islands from a private Japanese owner angered China, sparking an escalation in tensions between China and Japan. PLA Navy and Chinese maritime law enforcement activity near the Senkaku Islands, previously irregular and sporadic, increased to a robust and near-persistent presence following Japsn's purchase of the islands. Tensions continued to simmer throughout 2013 as both sides enhanced their naval and maritime law enforcement presence in the disputed waters to assert their claims.

The South China Sea dispute involves China, Taiwan, Vietnam, the Philippines, Malaysia, and Brunei. Beijing denotes its claim on its South China Sea maps using a nine-dash line, with an additional dash off the coast of Taiwan to demonstrate its sovereignty over Taiwan. China's diplomatic preference on the South China Sea is to "divide and conquer" by negotiating the issue on a bilateral basis rather than under the auspices of multilateral forums such as ASEAN.

In addition to boosting its presence in the East and South China Seas, Beijing has taken a number of steps since mid-2012 to address shortcomings in its coordination of maritime policy to better align China's maritime activity with national policy. In an effort to streamline its maritime policy-making bureaucracies to manage its maritime disputes more effectively, China created a high-level policy advisory group on maritime security issues in mid-2012 and consolidated multiple maritime law enforcement agencies into a single China Coast Guard in mid-2013.

Beijing discourages and seeks to prevent the diplomatic involvement of the United States in the East and South China Seas because Beijing considers these disputes bilateral issues between China and each claimant. However, U.S. treaty commitments and forward-deployed military presence bind the United States to the region in ways that link its security interests to the peaceful resolution of China's maritime disputes. Despite a generally improving military-to-military relationship, mutual mistrust about one another's long-term intentions continues to pervade the overall security relationship. This strategic backdrop poses challenges for the operational environment at sea, especially as the maritime operating areas of the two countries increasingly overlap.

Conclusions

Military and Security Year in Review

- PLA modernization is altering the security balance in the Asia Pacific, challenging decades of U.S. military preeminence in the region.
- The PLA Navy is in the midst of an impressive modernization program. China's acquisition of naval platforms, weapons, and systems has emphasized qualitative improvements, not quantitative growth, and is centered on improving its ability to strike opposing ships at sea and operate at greater distances from the Chinese mainland. Today, the PLA Navy is able to conduct high-intensity operations in China's immediate periphery as well as low-intensity operations beyond the region. Trends in China's defense spending, research and development, and shipbuilding suggest the PLA Navy will continue to modernize. By 2020, China could have approximately 60 submarines that able are able to employ submarine-launched intercontinental ballistic missiles or antiship cruise missiles and approximately 75 surface combatants that are able to conduct multiple missions or that have been extensively upgraded since 1992.
- The PLA is rapidly expanding and diversifying its ability to strike U.S. bases, ships, and aircraft throughout the Asia Pacific region including those that it previously could not reach, such as U.S. military facilities on Guam.
- The PLA's expanding involvement in real world missions allows it to field-test equipment and obtain hands-on experience in areas such as addressing unconventional threats in harsh and potentially hostile environments, satisfying expeditionary logistics requirements, and integrating into multilateral operations.
- The PLA is improving its day-to-day readiness levels and conducting longer-range and more frequent, robust, and realistic

training. As these reforms continue, the PLA will become more proficient and confident operating its advanced platforms and weapon systems and better able to rapidly respond to regional contingencies.

- The PLA Navy's growing presence in foreign EEZs contradicts its longstanding policy on military activities in its own EEZ. Rather than resolve the inconsistency between its actions and policy, Beijing likely will continue to assert its authority to regulate U.S. military activities in its EEZ.

China's Cyber Activities

- The Chinese government is directing and executing a large-scale cyber espionage campaign against the United States and to date has successfully targeted the networks of U.S. government and private organizations, including those of DoD and private firms. These activities are designed to achieve a number of broad economic and strategic objectives, such as gathering intelligence, providing Chinese firms with an advantage over their competitors worldwide, advancing long-term research and development objectives, and gaining information that could enable future military operations.
- China has not reduced its cyber intrusions against the United States despite recent public exposure of Chinese cyber espionage in technical detail. This suggests Beijing has decided to continue its cyber campaign against the United States.
- Developments in cloud computing in China may present cybersecurity risks for U.S. users and providers of cloud computing services. The relationship between China's Ministry of State Security and the Chongqing Special Cloud Computing Zone represents a potential espionage threat to foreign companies that might use cloud computing services provided from the zone or base operations there. In addition, the plan to link 21Vianet's data centers in China and Microsoft's data centers in other countries suggests the Chinese government one day may be able to access data centers outside China through Chinese data centers.
- There is an urgent need for Washington to take action to prompt Beijing to change its approach to cyberspace and deter future Chinese cyber theft. Actions and policies under discussion include the following: passing new legislation or modifying existing legislation; changing the cost-benefit calculus of Chinese cyber actors and China's leaders through sanctions and counterintelligence tactics; undertaking multilateral measures; appointing a Cabinet-level official to oversee an interagency process regarding the protection of intellectual property; and enhancing cooperation between the U.S. government and the private sector. These would be more effective if used in combination, as they probably would lead Beijing to make only temporary or minor changes to its cyber espionage activities if used in isolation.

China's Maritime Disputes

- China relies on a coercive and persistent maritime law enforcement and naval presence to gain control of disputed territory in the East and South China Seas. A consolidated maritime policymaking bureaucracy and streamlined maritime law enforcement fleets could increase Beijing's confidence in its capability for coercion in the ongoing maritime disputes.
- Two key drivers shape China's approach to its maritime disputes: First, China encourages ardent popular nationalism, which it exploits to support its foreign policy aims in the East and South China Seas. Second, China views sovereignty over claims in the East and South China Seas as central to its national security, territorial integrity, and economic development.
- China uses legal and administrative measures to assert de jure governance over its disputed maritime regions; it deploys maritime law enforcement and naval vessels to its claimed waters to demonstrate and lay the groundwork for de facto governance.
- Beijing's tendency to demonstrate resolve in its maritime disputes; its large and complicated political, foreign affairs, and military bureaucracy; and its inconsistent adherence to internationally accepted norms of air and maritime operations may contribute to operational miscalculations in the East and South China Seas. Unyielding positions on sovereignty and nationalist sentiment surrounding these maritime disputes increase the risk of escalation from a miscalculation at sea to a political crisis.

Chapter 3: China and the World

China and the Middle East and North Africa

China employs a multifaceted foreign policy approach to the Middle East and North Africa (MENA). It is characterized by growing economic (and particularly energy) ties; the pursuit of friendly relations with all countries (as well as the Palestinian territories) in the region; the protection of domestic stability and control in China; and the promotion of regional stability in support of China's own domestic economic, political, and security priorities. China has in recent years faced challenges in the region, particularly in responding to political upheaval and regime changes during and after the Arab Spring. China also has taken positions in support of regimes in Syria and Iran that put it at odds with the United States and other regional and international communities.

China is expanding and deepening its trade and investment ties with countries in the region. Between 2003 and 2012, China-MENA annual trade increased more than twelvefold, from $20.8 billion to $262.1 billion. In 2009, China overtook the United States to become the world's largest exporter to the region. China's energy demand is the primary driver of these economic ties. MENA accounts for more than 50 percent of China's crude oil imports; these imports are projected to grow in the coming decades. China's leaders view the country's growing reliance on MENA oil imports as a strategic vulnerability. This sense of vulnerability appears to drive Beijing's efforts to enhance the security of its imports by strengthening its relations with the region's largest oil producers, particularly Saudi Arabia and Iran, but also Iraq, Oman, and others.

China seeks to develop and maintain friendly ties with all MENA countries without being drawn into the region's conflicts and power struggles. As such, China has more or less successfully maintained positive relationships with the major powers in the region, simultaneously strengthening ties with regional rivals like Israel and Iran, Saudi Arabia and Iran, and the Israelis and Palestinians. Beijing's approach generally has been well-received in the region, where China enjoys mainly positive views among leaders and the public.

China also seeks to leverage its relations in MENA in support of its own domestic security, particularly in the Xinjiang Uighur Autonomous Region, home to many of China's ethnic Turkic Muslims. Episodic ethnic and political unrest in Xinjiang has in the past attracted support from overseas Muslim groups in MENA. Beijing fears these overseas groups could encourage or exacerbate what it refers to as "separatist insurgencies" in Xinjiang. To mitigate this perceived risk, China solicits support from countries in the region for its policies to suppress "separatist" activities in Xinjiang.

In addition, China has taken steps to promote stability within MENA. Offers of support for the Israeli-Palestinian peace process, counterpiracy operations in the Gulf of Aden, and participation in UN peacekeeping operations in MENA are among China's contributions to regional security and stability. However, China also has undermined security in the region with its support for the Assad regime in Syria and its continued economic and political ties to Iran.

As China's interests and presence in MENA grow, they inevitably will impact U.S. objectives and influence. Although Beijing has in the past avoided directly opposing Washington on issues related to MENA, this appears to be changing. Beijing's relationship with Tehran and its position on the Syrian conflict seem to indicate that, when key interests are at stake, China is willing to challenge the United States.

Taiwan

Cross-Strait economic ties continue to expand and deepen. From January through July 2013 (the most recent months for which official statistics are available), the total value of trade between China and Taiwan was $71.8 billion. The total value of cross-Strait trade during this period grew by 2.79 percent compared to the same period in 2012. Through the first seven months of 2013, China remained Taiwan's largest export market, accounting for approximately $47.3 billion worth of exports (26.9 percent of Taiwan's total exports). China followed behind Japan as Taiwan's second-largest source of imports, accounting for approximately $24.5 billion worth of imports (15.5 percent of Taiwan's total imports). Although China remained the top destination for Taiwan FDI in 2012, Taiwan's approval of $10.9 billion in investments in China in 2012 represented a 16.6 percent decrease from the previous year and a three-year low. From January through July 2013, the value of Taiwan FDI to China continued to decrease, slipping 17.23 percent from the previous year. Officials at the American Institute in Taiwan (AIT), which serves as the de facto U.S. embassy in Taiwan, told the Commission that Taiwan businesses increasingly are looking for investment opportunities in Southeast Asia, Africa, and Latin America as manufacturing costs in China continue to rise. Mainland investment in Taiwan continued to grow in the first seven months of 2013, with the value of investments increasing 79.34 percent compared to the same period in 2012.

In 2013, Taiwan used creative diplomacy to secure participation in a key international organization and to sign two free trade agreements despite China's continued efforts to restrict Taiwan's full participation in the international community. The president of the UN's International Civil Aviation Organization (ICAO) in September 2013 invited a Taiwan delegation to attend the upcoming ICAO assembly as his "guests." Furthermore, Taiwan and New Zealand signed a free trade agreement in July 2013, which marks Taiwan's first such deal with a country with which it does not have official diplomatic relations; Taiwan and Singapore agreed in principle to a free trade agreement in May 2013; and Taiwan is participating in negotiations with 22 other WTO members, including the United States, on a multilateral Trade in Services Agreement. Taiwan's Ministry of Economic Affairs told the Commission that Taiwan's efforts to expand its trade ties with the Asia Pacific region are part of Taiwan President Ma Ying-jeou's larger push to diversify Taiwan's economic partners to avoid overreliance on China. Other Taiwan officials explained to the Commission that the agreements will help promote Taiwan's inclusion in Asia's broader economic integration, including participation in multilateral trade pacts such as the Trans-Pacific Partnership and the Regional Comprehensive Economic Partnership.

In April 2013, Taiwan and Japan signed a fisheries agreement after 17 years of intermittent negotiations. President Ma said the agreement demonstrates Taiwan's constructive role in reducing tension in the East China Sea without compromising Taiwan's maritime claims and could be used as a blueprint and impetus for a similar agreement between Taiwan and other countries with claims in the South China Sea.

In March 2013, the Philippine Coast Guard opened fire on a Taiwan fishing boat operating in disputed waters in the South China Sea, resulting in the death of a Taiwan fisherman and sparking a diplomatic row with Taiwan. Manila and Taipei both assert the incident took place within their respective exclusive economic zones in the South China Sea. After Taiwan claimed that the Philippines failed to adequately address its demands in the aftermath of the shooting, Taiwan stopped accepting new Filipino labor applications; suspended trade, fishery, and technology exchanges with the Philippines; and removed the Philippines from Taiwan's visa waiver program. Taiwan removed the sanctions in August after the Philippines offered an official apology on behalf of the Philippine president, agreed to pay compensation to the victim's family, and recommended homicide charges for the Philippine Coast Guard personnel who opened fire on the Taiwan fishing boat. Taiwan and the Philippines also are discussing measures to reduce the risk of future incidents and working to establish a bilateral fisheries mechanism.

Taiwan's ability to defend against China's growing military capabilities is declining. The key shortcoming in Taiwan's defensive capabilities is its inability to survive initial Chinese air and missile strikes due to insufficient infrastructure hardening and lack of mobile systems. China's overwhelming quantitative and qualitative advantage over Taiwan also will challenge the Taiwan military's ability to sustain high-intensity operations during a conflict. Nevertheless, Taiwan's defense budget continues to decline. Taiwan's official defense budget contracted to $10.5 billion in 2013 from $10.6 billion in 2012. Taiwan's 2013 defense spending represents 2.1 percent of its GDP, a record low matched only in 2006 and 2011. This is less than 3 percent of GDP—the level at which President Ma pledged to maintain defense spending—and marks a substantial decrease from 3.8 percent of GDP in 1994. In response to concerns about Taiwan's declining defense budget relative to GDP, President Ma has explained defense spending cannot be expected to keep pace with Taiwan's GDP growth. Taiwan's GDP growth rate was 10.7 percent in 2010, 4 percent in 2011, and 1.3 percent in 2012.

Despite warming cross-Strait ties, China continues to engage in aggressive espionage activities against Taiwan. Since September 2012, Taiwan has arrested at least six former or active Taiwan military officers, including one flag officer, for espionage. In one case, a former Taiwan Navy officer may have provided to China classified submarine nautical charts as well as hydrographic information about the waters surrounding Taiwan. These cases underscore the breadth and depth of China's espionage activities against Taiwan and highlight the increasing counterintelligence risks to Taiwan and U.S. military information shared with Taiwan.

The recent cross-Strait rapprochement benefits the United States by reducing the likelihood of a U.S.-China conflict over Taiwan; contributing to peace, prosperity, and stability in East Asia; and allowing U.S. policymakers to focus their time and attention on other priorities in the U.S.-China and U.S.-Taiwan relationships. At the same time, warming ties between China and Taiwan raise concerns for Washington and Taipei. Increasing cross-Strait economic integration will continue to tie Taiwan closer to China. This could strengthen China's bargaining power over Taiwan and allow China to make progress toward its long-term goal of unification. Responding to these concerns, officials from Taiwan's National Security Council insisted to the Commission that Taipei's economic engagement with Beijing is carefully calibrated to promote both Taiwan's economic growth and continued autonomy.

Macau

The gaming sector is the most important element of the Macau Special Administrative Region (SAR) economy and is the highest-grossing gambling location in the world. Tax collections from the gaming sector in 2012 totaled $13.9 billion, which accounted for 87.5 percent of total government revenue. Macau's casino-oriented economy and its proximity to the PRC present a significant risk of money laundering. The main channel for money laundering is in the gaming sector through underregulated junket operators and their affiliates, which include the underground banking system that supports their operations.

Junket operators in Macau are significantly more involved in gambling operations than is common throughout the world, operating with far fewer restrictions. Macau's independent junket operators and independent VIP rooms are not subject to the same regulatory requirements as casinos. There is a risk of money laundering within the independent VIP gaming room operations which are physically conducted within the casinos but can remain outside of the casino's official oversight. The risk is enhanced because so much of the money that is wagered in Macau goes through the loosely regulated independent VIP rooms. In 2012, VIP baccarat rooms in Macau casinos accounted for 69.3 percent of total revenue from games of chance.

A 2007 evaluation by the Financial Action Task Force recognized the risk of money laundering in Macau's gaming sector and noted multiple deficiencies in its anti-money-laundering and counter-terrorist-financing framework. The evaluation also discovered several specific deficiencies in Macau's compliance with the Financial Action Task Force recommendations, including the refusal to respond to foreign requests to freeze assets, the inability to effectively implement UN Security Council resolutions on the financing of terrorism, and the inability of Macau's Customs Service to investigate money-laundering cases.

Since the report was published in 2007, there remain significant vulnerabilities with unlicensed junket operators and the junket affiliates that play an integral role in Macau's gaming system. Macau's junket operators are not subject to the same transparency requirements as casinos, and strict privacy controls prevent U.S. regulators from obtaining information on individuals operating in Macau subsidiaries of U.S. parent casinos. The Macau SAR Gaming Inspection and Coordination Bureau, Macau's gaming regulator, does not disclose financial information. The lack of information presents difficulties in determining the origin of money flowing through such operations, and U.S. state regulators do not have the authority or resources to independently conduct investigations in Macau or other foreign jurisdictions.

The PRC's capital controls have caused more money to cycle through Macau due to Macau's thriving VIP gaming industry, which relies on junket operators and their affiliates to facilitate cross-border money transfers for clients via underground banks. However, Beijing is beginning to take some measures to restrict illicit cross-border transfers and money laundering in Macau as part of the nationwide crackdown on corruption promoted by PRC President Xi.

Hong Kong

The most significant problem for democratic rights activists is the Hong Kong government's lack of progress toward ensuring universal suffrage in the election of the Legislative Council and the chief executive (Hong Kong's highest office). At present, the chief executive is chosen from a slate of nominees by a 1,200-person election committee. The Basic Law states that the ultimate aim for chief executive elections is through universal suffrage, and current

Chief Executive Leung Chun-ying (CY Leung) has indicated that the city is working toward this goal. In March 2013, Chief Executive Leung said in meetings with Chinese President Xi that he was committed to the process of achieving universal suffrage in Hong Kong by 2017. In July he also promised free and open elections for the Legislative Council by 2020.

Despite these stated goals, the dominance of the Hong Kong government by politicians allied to Beijing has stymied progress in achieving universal suffrage. The current election committee is heavily populated with business figures as well as politicians and labor leaders with strong connections to Beijing, giving it a distinctly pro-Beijing slant. Beijing effectively controls roughly 950 of the 1,200 election committee votes for chief executive. Currently, 30 members of the 70-person Legislative Council are elected by traditional functional constituencies, in which professionals in specific fields such as insurance, transportation, health care, finance, and tourism are allowed to cast a vote in addition to their vote in their geographic constituency. The greater representation of some segments of society as a result of the functional constituencies, combined with the dominant support for pro-Beijing candidates among functional constituency voters, ensures that the Legislative Council remains controlled by pro-Beijing representatives.

Between 2005–2012, Hong Kong's Freedom House ranking for press freedom fell from a status of "free" to "partly free." The Hong Kong press itself reports a sense of diminishing freedom. Following the election of Mr. Leung to chief executive in 2012, press freedom advocates reported an escalation in government efforts to censor and control media access to official information. Free press advocates contend that the government has reduced the number of full press conferences it holds for Hong Kong media, thereby denying journalists the opportunity to ask questions. Media self-censorship is also a pervasive concern. A poll conducted in May 2013 by the Public Opinion Program of the University of Hong Kong found that 48 percent of respondents believed that the local news media practiced self-censorship. Self-censorship has increased as the Chinese central government has co-opted media company owners. According to the 2013 annual report of the Hong Kong Journalists Association, roughly 50 percent of Hong Kong media owners have been appointed to the National People's Congress or the Chinese People's Political Consultative Conference.

Newly proposed legislation would further limit journalists. An antistalking bill that may be considered this year could hinder journalists' ability to seek out information from sources. Another law would limit personal data that corporate directors must make public. While supporters argue that this law is important for enhancing protections of individual personal data, detractors are concerned that it will unduly shield directors from media scrutiny.

Police surveillance is also a growing concern in Hong Kong. The 2006 posthandover Interception of the Communications and Surveillance Ordinance granted police broader and more explicit authority to conduct physical and communications surveillance for the sake of public security. The introduction of police cameras comes at a time when protests against the Hong Kong leadership are up sharply. In addition to the Occupy Central efforts and the rallies against the national education proposal, thousands of Hong Kong residents have participated in protests calling for the resignation of Chief Executive Leung. Pan-Democratic legislators meeting with Commissioners in Hong Kong reported that police are now monitoring and arresting prodemocracy demonstrators as much as 12 to 24 months after their participation in political events. In July 2013, for example, Yau Ka-yu was reportedly arrested and charged with illegal assembly in relation to her 15-month-old participation in an April 2012 protest outside the China Liaison Office in Hong Kong.

Conclusions

China and the Middle East and North Africa

- China is expanding and deepening its trade and investment ties with countries in MENA. More than half of China's crude oil imports are from MENA producers, and China increasingly looks to the region as an export market for manufactured goods and services.
- Energy security is a key driver of China's engagement in MENA. As China's continued economic growth becomes more dependent on a steady supply of oil and natural gas from the region, Beijing likely will augment already robust economic ties with stronger political and security engagement.
- China, driven primarily by its growing demand for energy, seeks to promote a framework for stability in MENA that supports its own economic, political, and security interests. These efforts include supporting the resolution of the Israeli-Palestinian conflict, conducting counterpiracy operations, and participating in UN peacekeeping missions. Conversely, China's position on the Syrian conflict and its support for Iran undermine peace and stability in the region.
- China struggled to diplomatically adapt to regime changes across MENA during and after the Arab Spring. Beijing's instinct has been to support sitting regimes in Egypt, Libya, and Syria and to oppose international intervention in these countries.
- Most MENA governments appear to judge China plays a positive role in the region. Oil- and natural gas-producing states in particular look to China as their future primary market. Moreover, governments in China and some MENA countries appear to share similar stances on issues of sovereignty, human rights and democracy, and the role of the state in the economy. However, many MENA countries have criticized China for its support for the Assad regime in Syria.
- Historically, China largely has avoided challenging U.S. influence and power in the Middle East. In recent years, however, when key Chinese interests are at stake, China has made use of its permanent membership in the UN Security Council to oppose U.S. policies and objectives in the region.

Taiwan

- Cross-Strait economic, cultural, and educational ties continue to expand and deepen. However, domestic political dynamics and priorities in China and Taiwan still constrain movement on political and security issues.
- Since the Commission's 2012 report, Taiwan has used creative diplomacy to sign two free trade agreements and secure participation in a key international organization. Taiwan's expanding international space helps the country counterbalance its economic reliance on China by increasing its competitiveness in the world economy, raises the cost to Beijing of military coercion against Taiwan, and promotes regional stability.
- President Ma since his reelection in January 2012 has accelerated efforts to increase Taiwan's economic engagement with the United States and gain U.S. support for expanding Taiwan's international space, while continuing to advocate for future U.S. arms sales.
- Taiwan's military over the last decade has improved its ability to conduct joint operations and has developed some asymmetric capabilities. However, China's rapid military modernization during this time has outpaced these improvements and negated many of the military advantages Taiwan previously held over China.

Macau and Hong Kong

- The rapid inflow of money to Macau, its casino-oriented economy, and its proximity to the PRC present a significant risk of money laundering and financing of terrorism, particularly in the underregulated shadow banking and junket system supporting the VIP gaming business in Macau.
- A combination of the PRC's strict capital controls and restrictions on the collection of gambling debts has given rise to grey market alternatives to facilitate the movement of gambling funds into Macau. Gambling debt collection conducted by unregulated third-party affiliates in the Mainland is susceptible to organized crime and violence.
- Macau's junkets with alleged criminal affiliations present legal risks for U.S.-licensed casinos operating VIP rooms in Macau. Casinos found to be working with junkets directly or indirectly associated with Asian organized crime may be subject to revocation of their state-issued license to operate in the United States.
- Macau's loose regulation of the junket system and its strict privacy law prevent U.S. regulators from accessing information they are accustomed to, and U.S. state regulators lack the authority and resources to independently conduct investigations in foreign jurisdictions. This prevents U.S. regulators from accurately accessing the situation in Macau and effectively stops them from evaluating individuals conducting business with U.S.-licensed casinos.

- Macau's anti-money-laundering and counter-terrorist-financing framework has fallen short in complying with internationally recognized standards. Numerous vulnerabilities remain in its regulations, including deficiencies relating to Macau's inability to effectively freeze financial assets and its inadequate inspection and oversight of casinos and junket operators and promoters.
- Despite reports that the PRC aims to more closely monitor Macau's gaming industry as part of its nationwide initiative to crack down on corruption, there is no substantial evidence to suggest that Beijing intends a crackdown on illicit money transfers and money laundering in Macau.
- To protect their licenses to do business in the United States, American casinos have adopted a number of measures designed to prevent illegal activities in their VIP rooms. The Commission is not in a position to evaluate whether those measures are fully adequate to insulate the operations of those rooms from illegal activity.
- Despite official statements of support from Beijing and the Hong Kong chief executive, the continued lack of meaningful progress calls into question Beijing's real intentions. Prospects for universal suffrage by 2017 are dimming. Political interference, government restraints on access to information, and self-censorship continue to take a toll on press freedom in Hong Kong. Public perceptions of media credibility have declined since the handover. Violent attacks on prodemocracy news outlets and their owners are on the rise, and the totality of the evidence suggests that Beijing does not intend to allow real democracy to develop in Hong Kong.
- Prodemocracy activists express alarm over stepped-up police surveillance at protests, which they fear may be aimed at chilling public discourse or quelling public dissent.
- All of these trends run counter to the Basic Law's assurances that Hong Kong's traditional democratic and civil rights would be preserved for the first 50 years following the handover.
- The systematic disenfranchisement of those who support greater democratic freedoms and civil liberties has created a climate of political polarization that may undermine Hong Kong's fundamental governability.

THE COMMISSION'S KEY RECOMMENDATIONS

The Commission believes that ten of its 41 recommendations to Congress are of particular significance. The complete list of recommendations appears at the Report's conclusion on page 397.

The Commission recommends:

- Congress fund the U.S. Navy's shipbuilding and operational efforts to increase its presence in the Asia Pacific to at least 60 ships and rebalance homeports to 60 percent in the region by

2020 so that the United States will have the capacity to maintain readiness and presence in the Western Pacific, offset China's growing military capabilities, and surge naval assets in the event of a contingency.

- Congress ensure that the Food and Drug Administration (FDA) makes it a priority to increase the number of physical inspections of Chinese food imports at the border; to increase the rigor of those inspections to include testing for pathogens and chemical, pesticide, and drug residues, and processed food ingredients; and to conduct more frequent and thorough inspections in food facilities in China. Congress should also urge the U.S. Department of Agriculture (USDA) to permanently assign inspection personnel to China so that the exporting plants receive regular visits by USDA inspectors.
- Congress direct the Department of Commerce to develop a comprehensive, ongoing inventory of Chinese foreign direct investment (FDI) in the United States and, on an annual basis, update the inventory. The inventory should identify the ownership structure of the entity engaging in the investment. In preparing the inventory, the department should call on private sector entities engaged in monitoring Chinese investments in the United States and such other entities to ensure that its report is complete and accurate. The department should prepare a comprehensive report to Congress on an annual basis identifying the FDI by Chinese entities that were made in the previous calendar year. In its report, the department should indicate those investments that received any assistance from the "Select USA" program. The department should also identify, on an ongoing basis, the lines of commerce that each of the investments are engaged in.
- Congress direct the Administration to prepare an inventory of existing federal use of cloud computing platforms and services and determine where the data storage and computing services are geographically located. Such inventory should be prepared annually and reported to the appropriate committees of jurisdiction.
- Congress assess whether to amend the Committee on Foreign Investment in the United States (CFIUS) statute to allow review of greenfield investments for threats to U.S. national security.
- Congress require the USDA and the U.S. Trade Representative (USTR) to conduct a comprehensive review of China's agricultural subsidies, discriminatory taxes, state trading, and procurement practices; take account of the damages incurred by U.S. farmers and downstream industries; and suggest appropriate remedies.
- Congress fund departments of Defense and State efforts to improve the air and maritime capabilities of U.S. partners and allies in Asia, particularly with regard to intelligence, surveillance, and reconnaissance, to improve maritime domain awareness in the East and South China Seas.

- Congress assess the extent to which existing laws provide for inadequate or ineffective remedies against the anticompetitive actions of Chinese state-owned or state-invested enterprises operating in the U.S. market. Additional remedies may be required to account for the fact that these enterprises may not be operating based on commercial considerations.
- Congress empower the Securities and Exchange Commission (SEC) to set minimum standards for companies listing and maintaining listings on U.S. exchanges and enable the SEC to directly delist foreign companies not in compliance with these standards.
- Congress urge the Administration to expedite progress in its implementation of Section 806 of the National Defense Authorization Act for Fiscal Year 2011 (Public Law 111–383), which was intended to enhance the Department of Defense's ability to address supply chain risks.

INTRODUCTION

While 2013 has been a year of leadership change for China, it is too early to say that the initial economic policy pronouncements will lead to quick reforms. Less heralded but longstanding and continuing improvements in China's military capabilities, however, could have a major impact on the region.

The Chinese leadership accomplished a peaceful turnover during the past year, complicated by factional political maneuvering. The handoff for the new five-year term took place with both ceremony and caution. In the absence of immediate policy changes from the newcomers, the government in Beijing coasted on the momentum from the previous decade. While China's economy slowed from a 30-year double-digit sprint to a more sustainable pace of 7.66 percent growth, Beijing's new economic policymakers appear to be clinging to the old formula of exports and infrastructure projects and a strong state-controlled sector to boost employment and maintain the regime's political control.

The Chinese renminbi continued to appreciate against the dollar but remains undervalued. The rise in the Chinese currency did not jeopardize China's expanding trade surplus with the United States nor its growing foreign exchange reserves, which hit $3.66 trillion at the end of September. China's new leaders, President and Party General Secretary Xi Jinping and Premier and Party Secretary of the State Council Li Keqiang, reaffirmed the government's long-promised goal of shifting the economy to one more driven by domestic consumption. However, the major market-based tools and reforms that China could use to empower Chinese workers and consumers remain unused: opening China's financial services sector to foreign investment; shrinking the size and number of state-owned enterprises; and expanding opportunities for private investment and savings beyond low interest-bearing deposits in state-owned banks or risky speculation in the volatile real estate market. Such moves by China would help reduce the growing trade imbalance with the United States and boost employment in America.

Also troublesome were the press reports in April 2013 of an official but secret party-approved directive known as "Document No. 9" that seeks to enhance party authority. Widely attributed to President Xi, the memo lists seven perils to be avoided, among them "Western constitutional democracy," "universal values" of human rights, press freedom and independence from the government, pro-market "neo liberalism," an independent judiciary, and "nihilist" criticisms of the Chinese Communist Party.

U.S. companies investing in China reported the same problem areas as the year before. In a survey of the top ten problems experienced by the foreign affiliates of U.S. companies, the majority were of the Chinese government's making. U.S. companies cited competition with Chinese government-owned companies, onerous licensing procedures, lax intellectual property protections, discriminatory laws and standards, and restrictions on foreign investment.

After announcing with some fanfare a free trade zone in Shanghai, Beijing diluted its potential impact by exempting segments of 18 different sectors, such as construction, finance, and manufacturing, from foreign investment and imposing a variety of other restrictions, highlighting continued disputes within the government over the pace and direction of economic reform. Beijing's leadership also reacted haltingly to the emerging problems in China's lightly regulated shadow banking system, particularly the buildup of unsecured, off-balance sheet loans. The system has proliferated because China's state-owned banking system still heavily favors government-run enterprises over the efforts of Chinese entrepreneurs and small- and medium-sized business owners. Without fundamental banking reform and expanded credit to private industry and consumers, China's goal of economic diversification will remain stuck in low gear.

One positive development in bilateral trade has been agriculture, the only sector in which the United States enjoys a substantial trade surplus with China. U.S. food producers stand to benefit from China's growing demand for consumer foods, especially meat products. But at present, China concentrates its imports on lower value-added bulk commodities while exporting consumer foods to the United States that pose significant safety risks.

Under its new political leadership, China's actions in the East and South China Seas continued to increase tensions in the region. It is becoming clear China does not intend to resolve its maritime disputes through multilateral negotiations or the application of international laws and adjudicative processes but prefers to use its growing power in support of coercive tactics that pressure its neighbors to concede China's claims.

Since the Commission's 2012 Report, strong evidence has emerged that the Chinese government is directing and executing a large-scale cyber espionage campaign against the United States. China to date has compromised a range of U.S. networks, including those of the Department of Defense and private enterprises. These activities are designed to achieve a number of China's broad security, political, and economic objectives, such as gathering intelligence, providing Chinese firms with an advantage over their competitors worldwide, advancing long-term research and development objectives, and gaining information that could enable future military operations.

Meanwhile, China continued to develop and field advanced military platforms and weapon systems. China's comprehensive military modernization is altering the balance of power in the Asia Pacific, challenging decades of U.S. military preeminence in the region.

China in 2013 expanded and diversified its arsenal of weapon systems capable of placing U.S. ships, aircraft, and bases in the Western Pacific at risk. The People's Liberation Army (PLA) also continued to pursue cyber, electronic warfare, and counterspace capabilities that will enable Beijing to degrade or disrupt the command, control, communications, computers, intelligence, surveillance, and reconnaissance that are essential to U.S. military power projection on behalf of its interests in the region. As these capabilities mature, the costs and risks to the United States of intervention in a potential regional conflict involving China will increase.

Furthermore, the PLA enhanced its regional power projection capabilities, improving Beijing's ability to use force against Taiwan, Japan, and rival claimants in the South China Sea. This could increase China's willingness to respond militarily to a perceived provocation or to consider preemptive attacks in a crisis involving Taiwan or China's maritime sovereignty claims. Many of these scenarios could require the U.S. military to protect U.S. regional allies and partners as well as to maintain open and secure access to the air and maritime commons in the Western Pacific.

Most Asian countries welcomed the U.S. rebalance to Asia when it was announced by the Obama Administration in 2011. However, there is growing concern among U.S. allies and partners that the Department of Defense will be unable to follow through on its commitment to the rebalance due to declining defense budgets and continuing security challenges elsewhere.

The Commission's Report addresses these and other issues in depth as it continues to monitor the evolving economic and security relationship between our two countries.

CHAPTER 1

THE U.S.-CHINA TRADE AND ECONOMIC RELATIONSHIP

SECTION 1: TRADE AND ECONOMICS YEAR IN REVIEW

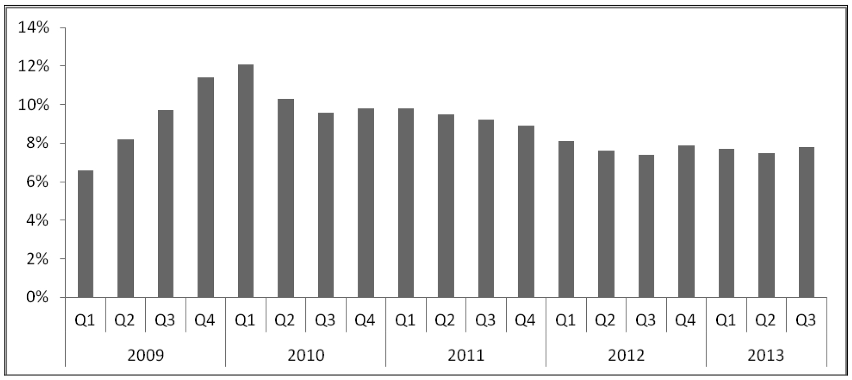
Introduction

China's economy grew at a 7.66 percent annualized rate in the first three quarters of 2013, continuing a three-year trend of decelerating output (see figure 1). This marked a significant decline from the three decades of growth in the 1980s, 1990s, and 2000s averaging 10 percent annually. Demand for China's exports stalled, and the domestic economy adjusted to a drop in government spending on massive infrastructure projects—undermining the two main pillars of China's economic surge over the previous decade.* The slowing of the world's second-largest economy rippled through much of the world, hobbling the economies of commodity-exporting countries. While the economic slowdown matched the central government's stated numerical target for growth, the change was not necessarily the result of a deliberate government policy. Rather, China's growth decline largely stemmed from the effects of a government-induced credit crunch, a precipitous drop in manufacturing, volatility in banking and real estate, a declining rate of growth in household incomes, the strain of meeting interest payments on a growing debt burden, and uncertainty about the new government's direction after a once-a-decade leadership transition. This section will explore the factors behind China's changing economy, the evolution of China's economic policy, and their implications for the United States.

* During the decade that ended with 2011, China's share of global exports rose from 7 percent to 21 percent. James R. Hagerty, "U.S. Manufacturers Gain Ground," *Wall Street Journal*, August 18, 2013. *http://online.wsj.com/article/SB10001424127887323423804579020732661092434.html#printMode*.

Figure 1: China's Quarterly Gross Domestic Product (GDP) Growth, 2009Q1–2013Q3

(percent year-on-year growth, real terms)

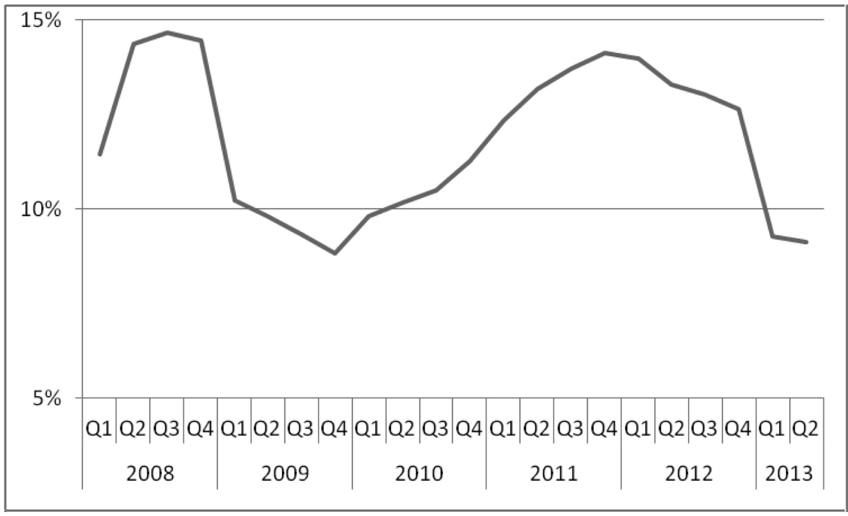


Source: China National Bureau of Statistics, via Trading Economics. *http://www.tradingeconomics.com/china/gdp-growth-annual*

In order to rebalance the domestic economy, Chinese policymakers say they intend to raise household income and consumption, but the past year saw limited progress on this front. In urban areas, growth in disposable income, the measure of personal income minus taxes, fell to its lowest levels since the global financial crisis, suggesting that urban wages did not rise at the same rate as in previous years. Urban households, which have very high savings rates, thus had less capacity to raise their consumption expenditure (see figure 2).[1] Growth in Chinese retail sales slowed, and the share of the economy represented by consumer spending declined in the first half of 2013 compared to the same period in 2012. As a share of gross domestic product (GDP), China's domestic consumption remained half that of the United States—following an established pattern.[2]

Figure 2: Urban Household Disposable Income Growth, 2008–2013Q2

(quarterly, percent year-on-year growth)



Source: China National Bureau of Statistics, via CEIC database.[3]

In China's repressed financial system, households still deposit the bulk of their savings in low-yielding bank accounts. According to estimates from the investment bank Nomura, China's household debt was only 20 percent of GDP last year, compared to 86 percent in the United States. Still, China's debt burden increased from 121 percent to 155 percent of GDP in 2008–2012—a rapid build-up similar to the United States before the subprime mortgage crisis. Given the explosion of China's shadow banking sector, actual debt levels are likely even higher. Debt is concentrated not among households, but among state-owned industrial enterprises, government-backed property developers, and local governments. The debt-to-asset ratio of property developers, for example, increased from 40 percent to 71 percent in 2009–2012. Unlike the United States, China's households act as net lenders to the rest of the economy, subsidizing the state sector with easy credit.*

Chinese leaders vow to deemphasize exports as a source of income. Export growth in China has slowed as demand in much of the world dropped, though not enough to correct the country's external imbalances. China still sends five dollars' worth of goods to the United States for every dollar in U.S. imports. In 2012, the U.S. deficit with China in goods reached $315 billion—the highest on record. In July 2013, China's monthly bilateral surplus with the United States surpassed $30 billion for the first time.[4] China's vast

* In the United States prior to the subprime mortgage crisis, the overall debt ratio rose by 30 percentage points of GDP, from 214 percent in 2003 to 244 percent in 2007. Zhang Zhiwei and Wendy Chen, "China: Rising Risks of a Financial Crisis" (Hong Kong, China: Nomura International (Hong Kong) Limited, March 15, 2013), pp.4–7; Federal Reserve Bank of St. Louis, "Household Debt to GDP for United States" (St. Louis, Missouri: October 2013). *http://research.stlouisfed.org/fred2/series/HDTGPDUSQ163N*; Tom Orlik, "Debt Binge Threatens China Growth," *Wall Street Journal*, August 27, 2013, p. c1. *http://online.wsj.com/article/SB10001424127887324906304579036592255182758.html*.

current account surplus, coupled with restrictions on its capital accounts and exchange rate, has caused the central bank to accumulate foreign currency reserves exceeding $3.66 trillion, by far the largest in the world.

Leadership Transition and Economic Policy

In the spring of 2013, Xi Jinping became president of the People's Republic of China (PRC). Li Keqiang, in turn, was appointed the premier and Communist Party secretary of the State Council, China's cabinet. No prominent political or economic reformers were elevated to the Politburo Standing Committee, China's highest decision-making body, though the backgrounds of Wang Qishan and Zhang Gaoli * suggest that they might be open to further economic reform.[5] Protégés of former PRC President Jiang Zemin captured more spots than the allies of former President Hu Jintao (the sole protégé of Hu Jintao on the Standing Committee is Premier Li Keqiang).† Although Jiang Zemin's era is associated with more economic reform than the subsequent Hu Jintao period, when many reforms were rolled back,‡ there are few signs of a renewed push for reform. (For coverage of the leadership change relating to foreign policy and military matters, please see chap. 2, sec. 1, of this Report.)

The uncertainty over the prospects for economic reform is the result of contradictory statements and actions by the new leadership. On the one hand, there are signs that President Xi and Premier Li are preparing a package of reforms that will be unveiled at the Third Plenary Session of the 18th Central Committee scheduled for November 2013. On the other hand, President Xi has been reaffirming the role of the state in the economy and introducing Maoist-style ideological campaigns aimed at stamping out political liberalization. A Chinese Communist Party (CCP) leadership statement approved by President Xi, "Document No. 9," enumerates seven perils for China, among them, "Western constitutional democracy," human rights, media independence, and market-based "neo-liberalism."[6] The fundamental conflict is that the economic liberalization the leadership expounds is impossible to achieve if the government continues to expand its ownership of and control over the economy.

Before handing over the reins, President Hu delivered a joint report at the beginning of the 18th Party Congress. Speeches delivered to the Party Congress are considered guides to future policy,

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* Zhang Gaoli was appointed the PRC executive vice premier (Wang Qishan was widely expected to be appointed to this position), in charge of economics and domestic policy. Mr. Zhang has extensive leadership experience in economically advanced regions (Shenzhen, Shandong, and Tianjin), but he has kept a low profile, and his views on further reform are unclear.

† For a more detailed assessment of China's new leadership lineup, see John Dotson, *The China Rising Leaders Project, Part 2: Outcomes of the Chinese Communist Party's 18th National Congress* (Washington, DC: U.S.-China Economic and Security Review Commission, December 21, 2012), pp. 19–20. *http://origin.www.uscc.gov/sites/default/files/Research/18th-CCP_Party Congress_Overview.pdf*.

‡ The state sector has prospered in the past decade, with financing, market access, and various policies aimed at protecting its interests. The consolidation and concentration of economic power in the government's hands has given rise to the catch-phrase "The state advances, the private [sector] retreats." For a detailed discussion of the Chinese government's role in and control over the Chinese economy, see U.S.-China Economic and Security Review Commission, *2012 Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2012), pp. 47–72.

especially during a power transition, because they are drafted by both incoming and outgoing leaders. The outgoing president's speech was interpreted by many analysts as a blow to economic reform. For example, the report contained strong language on the need to strengthen the state-owned portion of the economy. The departing President Hu said China would "unwaveringly consolidate and develop public ownership" and "steadily enhance the vitality of the state-owned sector of the economy and its capacity to leverage and influence the economy."[7] The report proclaimed that state-owned enterprises (SOEs) are the principal part of the Chinese economy and that they will increase their investment in areas of the economy that impact national security and core national interests.

Six months earlier, Mr. Xi had made his first trip as leader to the southern Chinese city of Shenzhen, in a gesture interpreted as more reformist, because it paralleled a similar trip by Deng Xiaoping during his famous "southern tour" to the same area 20 years ago.* President Xi followed up with trips to the countryside to highlight the plight of the rural poor.

Premier Li, who is broadly responsible for formulating and implementing economic and domestic policy, gave an early speech at a meeting of representatives of the 11 national "Comprehensive Reform Pilot Areas," which was interpreted by some western analysts as signaling his commitment to economic reform.[8] In particular, the speech started off noting that "reform is like a boat beating against the current; if you don't move forward, you will slip backwards." At the March 2013 annual Party Congress, Premier Li gave his first news conference. He pointed to the need to "shake up vested interests," stating that "however deep the water may be, we will wade into the water."[9] The government would have to enact a "self-imposed revolution," which would be "very painful and even feel like cutting one's wrist."[10] The reformist tone aside, Premier Li has loyally supported former President Hu's policies, which have hindered or reversed economic reform.

The New Economic Leadership Team

The National People's Congress meeting in March 2013 revealed the makeup of the economic leadership team that will be in charge of crafting economic policy for China's new administration. The lineup appears encouraging for economic reform; however, these individuals, though involved in policy-making, are not on the Standing Committee and, therefore, do not set the direction of China's economic policy. Much will depend on whether these individuals will be willing and able to sway the leadership toward economic reforms. Three top decisionmakers are highlighted below.

* During his 1992 southern tour, Deng Xiaoping stressed the importance of continuing economic reforms launched in 1978 and criticized those who were against further economic and openness reforms.

The New Economic Leadership Team—*Continued*

Zhou Xiaochuan was asked to stay on as head of the People's Bank of China (PBOC), the central bank. Observers were surprised by the announcement that Mr. Zhou will remain in his position since he turned 65 in January 2013, the ordinary retirement age for a minister-level official. According to insiders, the move is aimed at ensuring continuity in financial-sector policymaking and signals a desire to stay on course with the kind of financial reforms Mr. Zhou has championed, including a more flexible renminbi (RMB) exchange rate and market-based interest rate system.[11]

Lou Jiwei was appointed minister of finance. Mr. Lou, best known abroad as the former head of China's most public sovereign wealth fund, the China Investment Corporation (CIC), was a deputy finance minister for ten years and is known for his support of financial liberalization.[12] His comments at the 2013 Strategic and Economic Dialogue (S&ED) talks in Washington generated some controversy when Xinhua, the official CCP propaganda arm and news agency, censored his remarks regarding China's target GDP growth in 2013. Mr. Lou said, "There is no doubt that China can achieve the growth target, though the 7 percent goal should not be considered as the bottom line," but Xinhua changed that to "7.5 percent" (the official target) in its reporting.[13]

Liu He, long recognized as the key economic adviser to Xi Jinping, was confirmed as the official head of the Leading Group for Financial and Economic Affairs of the CCP Central Committee.[14] Mr. Liu will also hold an appointment as a vice head of the National Development and Reform Commission (NDRC), China's chief economic planning body. As the head of the Leading Group for Financial and Economic Affairs, Mr. Liu will lead the writing of the official documents framing economic reforms planned over the next five years.[15] According to Cheng Li, a China scholar at The Brookings Institution, Mr. Liu was a "major collaborator" in last year's World Bank report[16] that advocated accelerating market-driven change and is a proponent of financial liberalization.[17]

Economic policymakers have identified and registered some limited successes in addressing problems that threaten to foment unrest among Chinese citizens who are not part of the urban coastal elite. In recent months, the government has introduced some important initiatives aimed at addressing some of the country's growing inequalities of wealth and opportunity.

Inequality: Even as President Xi and Premier Li's rhetoric indicates a reformist bent, resistance to reform from entrenched local interests and the export sector remains strong.[18] Although the Chinese government has been successful in lifting millions out of poverty, China's level of inequality has been steadily rising. In February 2013, the State Council released a new plan aimed at curbing inequality and redressing some of the worst gaps in development between urban and rural populations.* The plan includes an ambitious agenda for expanding the social safety net, improving healthcare and education, limiting the power of SOEs, and tackling corruption by government officials.

The 35-point "Income Distribution Plan" is aimed at boosting minimum wages to at least 40 percent of average salaries, loosening controls on bank lending and deposit rates, and increasing spending on education and affordable housing.[19] Other reforms include a requirement that SOEs contribute more of their profits to the effort of reducing inequality and a commitment to push through market-oriented interest rate reforms to give savers a better return and more security. In theory, these measures signal an attempt to shift the economy toward increased domestic consumption as an underpinning for economic growth. As with most sweeping Chinese government plans, everything depends on implementation. For example, past proposals to encourage higher dividend payments from SOEs collapsed under fierce resistance from the politically powerful heads of the SOEs, who are also ranking Communist Party members. Similarly, corruption is endemic among local government officials, and addressing its manifestations, such as land seizures from peasant farmers, might undermine the stability of the CCP (see below).

Corruption: A Pew Research Center poll last year showed a rise between 2008 and 2012 in Chinese public concern about corrupt officials. The anticorruption group Transparency International last year ranked China number 80 out of 174 countries in terms of perceptions of corruption in the public sector, worse than Liberia, Italy, and South Africa. Transparency International excluded China from its 2013 survey on corruption because local polling survey firms, which are licensed by the government, said they would have to omit certain questions in order to be allowed to conduct the survey.[20]

Upon becoming president last November, Mr. Xi vowed to eliminate the "tigers and flies" (i.e., high-ranking as well as low-ranking officials) who had enriched themselves through bribery and patronage. He denounced the prevalence of corruption and said officials needed to guard against its spread, or it would "doom the Party and the state."[21] Some observers took Wang Qishan's assignment as the director of the CCP's watchdog agency for corruption, the Central Disciplinary Inspection Commission, as a sign of the government's seriousness about the issue. Mr. Wang's previous experience in banking and international trade might have made him a better fit in an economic position, but reformers applauded Mr. Wang's choice because he has a strong reputation as a "firefighter" and capable problem solver.[22]

In the past, the Chinese government has paid lip service to tackling corruption without undertaking any actual reform. The current anticorruption campaign appears similarly aimed at placating the public anger or eliminating political enemies rather than creating genuine change. For example, the focus on Chinese officials and ex-

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*For an in-depth analysis of the new reform plan, see Nargiza Salidjanova, *China's New Income Inequality Reform Plan and Implications for Rebalancing* (Washington, DC: U.S.-China Economic and Security Review Commission, March 12, 2013). *http://origin.www.uscc.gov/sites/default/files/Research/China%20Inequality%20-%203%2012%2013.pdf*.

ecutives at China's big, state-run companies appears to be politically motivated.[23] The head of the State-owned Assets Supervision and Administration Commission, the agency responsible for supervising state-owned assets, was recently removed for "serious disciplinary violations." He is a close associate of Zhou Yongkang, former domestic security chief, who is also targeted in the current campaign.[24] Four senior managers at PetroChina have been removed amid separate investigations by authorities; one of the executives is a former aide to Mr. Zhou.[25]

President Xi has spearheaded an austerity drive, banning banquets, gift-giving, and other lavish trappings of Chinese officialdom. There are signs that this is having a real impact: First-class airline ticket sales have dropped by a tenth in recent months; luxury goods dealers have reported a 20 percent to 30 percent decrease in sales; and restaurants surveyed in February experienced a 60 percent drop in reservations over the same period in 2012.[26]

The Chinese government also issued a directive banning the construction of government buildings for the next five years. The new directive is a continuation of the anticorruption campaign, describing the ban as "important for building a clean government" and improving the ties between the party and the people.[27] Grandiose official galas, which often feature variety shows and celebrity appearances, are likewise banned, because they are "wasteful" and had "damaged the image of the Chinese Communist Party and the government, triggering public complaints."[28]

The affected local governments are finding ways to side-step these bans. According to a report in Xinhua, local government officials in some provinces are reclassifying government buildings in order to avoid notice. For example, in Jiangsu Province, the government power company offices have been renamed "dispatch centers," and public security offices have been renamed "technical investigation centers."[29] Furthermore, the construction ban does not address the proliferation of so-called "luxurious canteens," or deluxe cafeterias in government offices.

While the anticorruption efforts have appeared in the headlines, the reality presents a more confusing picture. For example, a proposed regulation that would require top officials to publicly disclose their personal assets has stalled.[30] Moreover, just as the prohibition on new government buildings was being announced, the government started to round up and prosecute activists who called on officials to disclose their wealth and the wealth of their families. In the most celebrated case, Xu Zhiyong, a prominent human rights activist, was charged with "assembling a crowd to disrupt order in a public place."[31]

Despite official proclamations, so far the CCP has demonstrated "little inclination" to pursue any fundamental reforms to root out corruption, according to Elizabeth Economy, director for Asia Studies at the Council on Foreign Relations. Instead, the latest measures will most likely follow an established pattern: "a number of high-profile arrests, no institutional change [. . .], and an endless cycle of anticorruption campaigns."[32] According to Minxin Pei, professor of political science at Claremont McKenna University, President Xi does not actually want to end corruption, because it is the lifeblood of the Chinese government: "The Communist Party is a patronage machine and patronage by definition is corruption."[33] In other words, while fighting corruption might endanger the party, cracking down on the appearance of corruption is a good measure to address the "public relations nightmare that accompanies corruption."[34] Party officials remain staunchly opposed to disclosing their assets, and both *The New York Times* and Bloomberg websites were blocked in China after reporting on the wealth amassed by the families of former Premier Wen Jiabao and Xi Jinping, respectively.

Urbanization: Premier Li has made urbanization the core of his agenda, calling it "the biggest development potential."[35] Government departments are drawing up policies to guide rural citizens into cities over the next decade.[36] The hope is that urbanization will become the next growth engine, initiating a new wave of investment, adding to the consumer class, and creating a surge in demand for housing and infrastructure.[37] The urbanization drive may also boost Chinese efforts to make more land available for agriculture and improve farming efficiency (for more on the government's agriculture modernization efforts, see chap. 1, sec. 4, of this Report).

The effect is likely exaggerated. For example, in many cases urbanization will simply entail the reclassification of rural areas as urban and not boost consumption or investment.[38] In addition, unscrupulous officials might use the excuse of urbanization to seize village land, which they then may sell to developers without compensating the farmers.

The key test of the Chinese government's ability to push through greater urbanization will be how it plans to pay for it. The Chinese Academy of Social Sciences, a government think tank, estimates the cost (including spending on healthcare, housing, and schools) at $106 billion a year, the equivalent of 5.5 percent of fiscal revenue in 2012.[39] Local governments cannot pick up the check for the expansion of such costly spending since they do not have a steady tax revenue stream: By law they must give most tax receipts to the central government. As a result, most local governments rely on land seizures and sales to fund spending, already a large contributor to public perceptions of corruption since farmers receive comparatively little from the government,

No urbanization initiative can be fully successful without first tackling one of the key factors behind the rural-urban disparity: China's system of household registration, known as *hukou*.* People from the countryside with a rural registration, or *hukou*, are restricted from enjoying the far better education and health benefits available to those with an urban *hukou*. Allowing migrants to the cities to obtain an urban *hukou* has been met with strong resist-

* Created in its current form in 1960, China's modern *hukou* was first developed after 20 million migrants rushed to China's urban cities during the Great Leap Forward (1958–1960) in order to fill a perceived labor gap. The *hukou* system requires the registration of all citizens in China at birth and then limits access to government services based on the residency permits issued after registration. Citizens' residency permits fall into one of two categories, urban or rural *hukou*, and entitle a holder access to social services in the town or city to which their *hukou* is registered. For more on the *hukou* registration and its impact on migrant workers, see "China's Internal Dilemmas" in U.S.-China Economic and Security Review Commission, *2011 Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2011), pp. 107–128. *www.uscc.gov/Annual_Reports*.

ance from local governments that fear being overwhelmed by a flood of new migrants.[40] There are small signs of change. A report issued by the State Council suggests that the government is considering relaxing *hukou* in small cities "in an orderly manner" in tandem with the urbanization drive, to be followed by bigger cities.[41]

The Mini Stimulus

In July 2013, the Chinese government announced a package of measures aimed at boosting the slowing economy while at the same time staying away from the massive investment drive. It also appears aimed primarily at small- and medium-sized private enterprises rather than SOEs, which were the main beneficiaries of the 2008 stimulus package. A statement by the State Council described a three-pronged approach: a temporary tax cut (scrapping all value-added and operating taxes) for more than six million small- and medium-sized enterprises; reduction of approval procedures and administrative costs for exporting companies; and more investment in railway construction in China's central and western regions.[42]

In recent decades, the CCP has derived its legitimacy from growth, so the government's willingness to tolerate slow growth may be finite, particularly if unemployment rates rise. A major test for China will be how the rest of the global economy performs. Many analysts believe the top priority for the new leadership is not reform but making sure that growth does not deviate far from the official 7.5 percent target. If the economies of China's biggest trading partners, the United States, the European Union (EU), and Japan, remain weak, the pressure on the Chinese economy may force the new government to return to such policies as further credit expansion or infrastructure investment, which shore up growth in the short term but also create more problems in the future, such as inflation, overcapacity, excessive debt, and economic uncertainty.

Rebalancing China's Economy

Economic rebalancing is a multifaceted challenge for China that not only entails lowering investment and increasing overall consumption but also scaling down the role of the state sector, reducing speculative investment in real estate, altering the way credit is allocated, and speeding growth of the services sector. Some economists predict that effective rebalancing of China's economy will result in more sustainable long-term growth.[43] Failure to make necessary reforms to rebalance China's economy may result in reduced output, widespread defaults, stress on the banking sector, and social unrest.[44] But in the past year, China has made little progress toward its stated goal and, in some cases, has regressed to the old, short-term solutions: ramping up exports through subsidies to exporters and borrowing to undertake infrastructure projects and increase factory output.

Although China marginally reduced its massive trade surplus in the years immediately following the 2007–2008 global financial crisis, this progress was temporary and largely attributed to domestic stimulus and slowing demand in western economies. Rebalancing China's domestic economy has lagged even more so, as some positive trends proved to be short-lived.

There are good reasons for the Chinese government not to try to boost growth with additional stimulus or policies to expand exports: A GDP slowdown may help Beijing tackle some of the structural problems with the economy, once described by former Premier Wen Jiabao as "unbalanced, uncoordinated, and unsustainable." Patrick Chovanec, an economist who has written extensively about the Chinese economy, says that "if China slowed for the right reasons, by being more selective with their investments, and moving toward more consumption, a slight slowdown would actually be a good thing."[45] Proper economic rebalancing, however, cannot happen without a significant decrease in medium-term growth rates, and the government's willingness to tolerate slow growth on a sustained basis is untested.

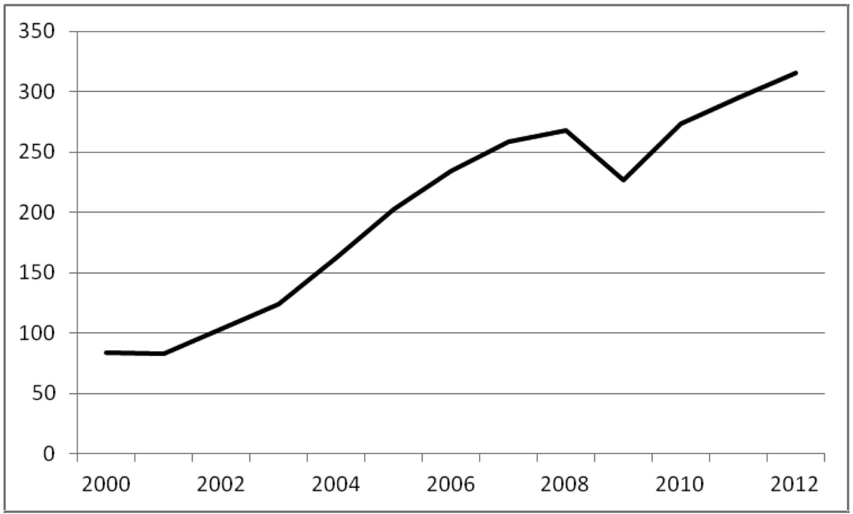
External Rebalancing

Balancing China's external accounts with other nations—or reducing China's massive trade surplus by increasing the import share of total trade—is a key element in rebalancing China's economy. Following the global financial crisis, China made progress in reducing its global trade surplus, which fell as a share of GDP from a peak of 10 percent in 2007 to 2.7 percent in the first half of 2013.[46] However, the decline in China's trade surplus with the world is not necessarily an outcome of deliberate structural rebalancing. In the first half of 2013, China's goods exports outpaced goods imports by 4 percentage points, causing its trade surplus with the world to grow by 40 percent year-on-year to $157 billion.[47] The International Monetary Fund (IMF) projects that China's current account surplus will rise from 2.7 percent to 4 percent of GDP by 2018. This forecast assumes that there will be a gradual recovery in global demand, minimal appreciation of the RMB, and limited progress in domestic rebalancing.[48]

The United States is among the countries most affected by China's export surplus (see figure 3). The U.S. cumulative bilateral deficit with China has risen to more than $3 trillion since 1979.[49] For the first six months of 2013, China's goods trade surplus with the United States was $148 billion; a decade ago, that figure stood at $54 billion. While China sold 17 percent of its total goods exports to the United States in 2012, it purchased just 7 percent of total U.S. exports.[50] More strikingly, China in 2012 was responsible for nearly three-quarters of the U.S. trade deficit in non-oil products.[51]

Figure 3: U.S.-China Trade Deficit in Goods, 2000–2012

(US$ billions)



Source: U.S. Bureau of Economic Analysis.

To be sure, U.S. manufactures exports to the world improved slightly in the first half of 2013, registering a lower deficit than in the prior year. Some industry experts have interpreted this as a sign of rising competitiveness in U.S. industry, driven in part by low energy prices.[52] Nevertheless, the only manufacturing sector in which the United States registered a substantial trade surplus with China was transportation equipment ($3.6 billion), which comprises automotive, aircraft, and ship products. Other sectors with a substantial surplus were agriculture ($6.3 billion), waste and scrap ($4.2 billion), and minerals and ores ($1.3 billion). The United States has a persistent trade deficit with China in advanced technology products. Although exports to China have improved in the first half of 2013, the total value of trade in those sectors is small (see table 1).

Table 1: U.S. Trade Balance with China in Advanced Technology Products, January-June, 2012–2013

(U.S. millions)

	Exports	Imports	YTD Balance Jun'13	YTD Balance Jun'12	Change 2012–2013
TOTAL	**7,828**	**42,327**	**−34,499**	**−35,418**	**919**
(01) Biotechnology	122	25	97	58	39
(02) Life Science	901	667	234	156	78
(03) Optoelectronics	102	1,335	−1,233	−2,429	1,196
(04) Information & Communications	1,375	38,607	−37,232	−35,717	(1,515)
(05) Electronics	1,439	1,049	390	163	227
(06) Flexible Manufacturing	713	278	435	185	250
(07) Advanced Materials	77	70	7	15	(8)

Table 1: U.S. Trade Balance with China in Advanced Technology Products, January-June, 2012–2013—*Continued*

(U.S. millions)

	Exports	Imports	YTD Balance Jun'13	YTD Balance Jun'12	Change 2012–2013
(08) Aerospace	2,901	256	2,645	2,162	483
(09) Weapons	1	39	−38	−34	(4)
(10) Nuclear Technology	199	1	198	23	175

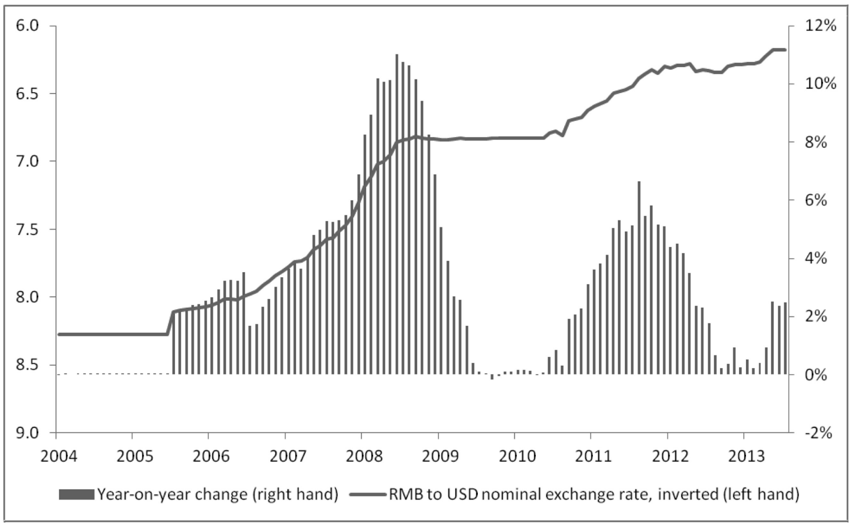
Source: U.S. Census Bureau, NAICS database (Washington, DC: U.S. Department of Commerce, Foreign Trade Division). *http://censtats.census.gov/cgi-bin/naic3_6/naicCty.pl.*

There are four important preconditions for increasing China's imports as a share of total trade. First, China must further open its market to imports in order to allow increased competition to stimulate consumption. At the China Development Forum held in March, Premier Li acknowledged as much, promising that "China will expand its opening-up policy, and the nation needs to promote domestic consumption through continuing to open up its markets."[53] Second, the RMB must continue to appreciate against the dollar, to lower the price of U.S. goods and services in China. Third, household disposable income must continue to grow to create sufficient domestic demand. Fourth, China must reduce its household and corporate savings rate. Money that is not saved or invested is necessarily spent, often on imports. In 2012, however, China's private savings rate reached the world's highest level, surpassing 50 percent, well above the global average of 20 percent. The high savings rate is largely attributed to China's low level of government safety net spending on health, education, and old age pensions, high down payment requirements for securing mortgages, negative or low real interest rates on ordinary bank deposits, and capital controls that restrict Chinese citizens from investing abroad.[54]

RMB Revaluation

The RMB has continued to slowly appreciate against the dollar, gaining less than 2 percent in the first half of 2013.[55] This represents a slowdown in appreciation from previous years, particularly when compared to the period 2005–2008 (see figure 4). The rise of the RMB is still not controlled by market forces; the PBOC resets the value of the currency at the start of each trading day, allowing only 1 percent daily fluctuation. In January, strong market pressures to appreciate the currency were offset by interventions in the international currency market by the central bank and China's state-owned commercial banks, which purchased a record $110 billion worth of foreign exchange within a matter of days.[56]

Figure 4: Appreciation of the RMB, 2004–2013H1



Note: "2013H1" includes data from January to June 2013.
Source: China State Administration of Foreign Exchange, via CEIC database.

The Commission in past years has characterized the value of the RMB as "manipulated" by the Chinese central bank in an effort by the government to discount its exports to the United States and raise the price of U.S. exports to China. The intended purpose is to create and maintain an artificially high surplus in China's bilateral trade with the United States. The U.S. Treasury Department chooses not to use this technical term in order to avoid mandatory countermeasures dictated by U.S. law * but acknowledges that China's exchange rate "continues to be tightly managed" and "continues to exhibit significant undervaluation."[57]

As in previous administrations, the U.S. Treasury Department has taken up the issue with China during bilateral talks and received assurances from top Chinese officials that change will be forthcoming and that market forces will be allowed a "bigger role" in determining the value of the RMB. However, China still refuses to publish data on exchange rate interventions by the central bank, in contrast to other G-20 members. Such interventions, combined with China's subsidies to exporting industries, have helped China accumulate the world's largest foreign currency reserves—$3.66 trillion by the end of September 2013—almost as large as the total amount of foreign exchange reserves held by all advanced economies combined.[58] The monthly U.S. trade deficit in goods with China hit a record $30.1 billion in July.[59]

* The U.S. Treasury Department is required by the Trade Act of 1988 to report to Congress twice yearly on the exchange rate policies of major trading partners and to identify countries that "manipulate the rate of exchange between their currency and the United States dollar for purposes of preventing effective balance of payments adjustment or gaining unfair competitive advantage in international trade." The Administration would be required to open negotiations with any country so designated.

Further Developments in RMB Internationalization

As part of a push to internationalize the RMB, China has been developing an offshore market for it as a precursor to allowing global firms, banks, and asset managers access to its domestic market. China has currency swap lines* with around 20 countries, mostly small, emerging economies that have natural resources, such as Argentina and Indonesia, but no major economic powers like the United States or EU countries. That may be about to change as China established two important swap agreements with major trade partners. First, the Bank of England, Britain's central bank, and the PBOC established a currency swap line in June 2013. The agreement will initially last for three years and has a maximum value of 200 billion RMB ($32.6 billion).[60] Then, in October 2013, China agreed to swap euros and RMB with the European Central Bank, China's second largest swap deal. The swap agreement has a maximum size of RMB 350 billion ($60.8 billion) and is valid for three years.[61]

In January 2013, Taiwan and China formally established a direct RMB-clearing system between them, following a signing of a cross-Strait currency clearing last year. Taiwan will become the third place with such a clearing arrangement with China, after Hong Kong and Macau. Under the agreement, Taiwan's and China's central banks will be able to settle directly in RMB payments without first converting their currencies into U.S. dollars, which is the current practice.[62]

On April 25, 2013, the government in Hong Kong loosened restrictions on interbank trading of the RMB, a move that is intended to enhance Hong Kong's status as an offshore RMB trading center, a segment that is witnessing competition from other financial centers.[63] Global use of the RMB for trade settlement is limited but has been rising steadily. By June 2013, the volume of RMB used to settle trade was 174 percent higher than in January 2012, when the policy was first introduced.[64] The Chinese currency now ranks 13th in the world for cross-border payments, up from 20th this time last year, according to SWIFT, the global payments company.[65] True RMB internationalization stays out of reach, however, as long as China's capital account remains closed, which makes use of RMB for trade settlement and investment difficult.

Domestic Rebalancing

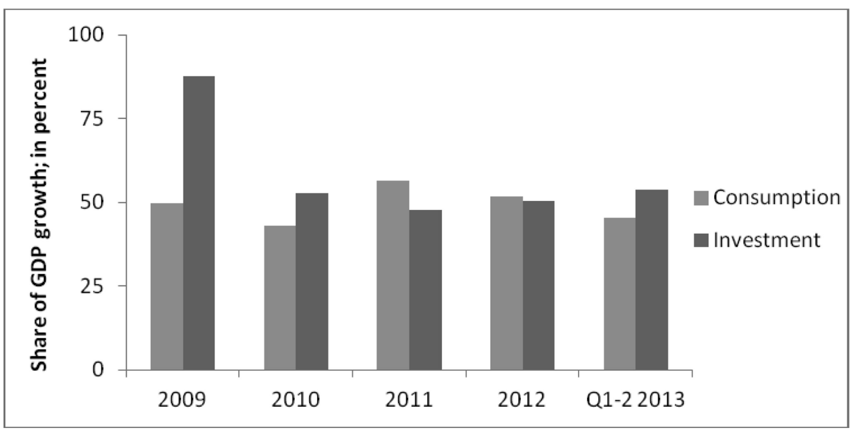
As of 2013, imbalances in China's domestic economy remain substantial. Beijing's economic policy has resulted in what the IMF calls a "pattern of growth [that] has become too reliant on investment and an unsustainable surge in credit, resulting in rising domestic vulnerabilities."[66] Rebalancing toward consumption-driven growth can only be achieved if consumption continually grows faster than investment for many years. Yet while private and govern-

*Under a swap agreement, central banks agree to exchange each other's currency and can then lend the money to domestic banks to improve liquidity.

ment consumption accounted for more than half of China's GDP growth in 2011–12, the trend reversed in the first half of 2013.[67] Nicholas Borst of the Peterson Institute for International Economics rated China's progress in rebalancing a grade of "D" and "F" for the first and second quarters of 2013, respectively.[68] His perspective summed up the consensus that China has experienced no significant domestic rebalancing this year.

In the first half of 2013, consumption's contribution to economic growth fell below investment for the first time since 2010. Consumption contributed 45.2 percent to GDP growth, down 15.4 percentage points from the first half of 2012. Investment, however, increased to 53.9 percent, up 2.7 percent from 2012 (see figure 5).[69] In China, consumption's share of GDP remains low compared to other countries. Globally, it represents about 65 percent of GDP, and China's share of consumption is still far lower than developed western economies, where consumption accounts for over 70 percent of GDP (see figure 6).[70]

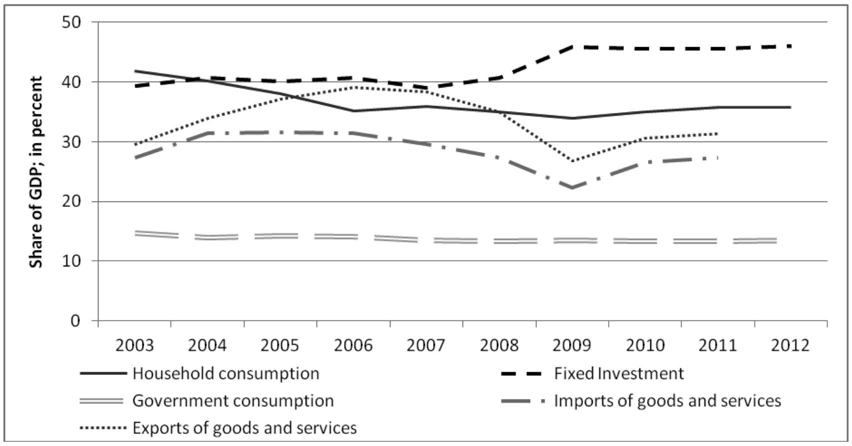
Figure 5: China's Consumption vs. Investment, 2009–2013
(as share of GDP growth; in percent)



Source: China National Bureau of Statistics, via CEIC database.

The IMF has warned that if credit-fuelled investment in the manufacturing sector remains high, resources are likely to be wasted and nonperforming assets will accumulate, because such investment will only add to China's industrial overcapacity.[71] Numerous examples of overinvestment and excess supply resulting in overcapacity have already arisen in the steel, shipbuilding, and solar manufacturing industries, which has resulted in insolvency and employee layoffs for many companies.[72] This slowdown in the manufacturing sector has resulted in diminishing returns on the government's investment. Beijing has expressed tolerance for slower economic growth while it claims to be directing China's economy toward more domestic consumption.[73] Despite this, independent analysts believe that China's new leaders lack the political will to adopt an ambitious rebalancing agenda.[74]

Figure 6: Composition of China's GDP, 2000–2012



Note: 2012 data for "imports of goods and services" and "exports of goods and services" were not yet released by the World Bank at the time of publication.

Source: World Bank China data (Washington, DC: 2013). *http://data.worldbank.org/country/china*.

The most important—and most challenging—element of domestic rebalancing is increasing household consumption as a share of GDP.* Households' consumption has declined as a share of China's GDP for decades while the share of fixed-asset investment has grown. Although year-on-year growth of urban household consumption has been expanding at a steady rate of 9.7 percent for the past ten years, in the first half of 2013, growth in urban household consumption dropped to 7.2 percent.[75] Meanwhile, fixed-asset investment grew by 20 percent.[76] Although for the past decade real annual growth of household consumption in China has outperformed a dozen major economies, including Brazil and India,† as long as fixed-asset investment is growing faster than household consumption, it will be difficult to rebalance China's domestic economy.

An important factor in increasing household consumption's share of GDP is sustained growth in disposable income minus any increase in the household savings rate.[77] If disposable income grows and the household savings rate remains stable or declines, this will result in more spending by Chinese consumers—a positive sign for domestic rebalancing. In the first half of 2013, however, the opposite occurred. Growth in nominal median urban household income took a dive, declining by 5.8 percentage points. The urban household savings rate remained high, reaching 35.6 percent, up 1.1 percent from 2012. And, most notably, there was lower growth of real

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* Household consumption is generally defined as expenditures for goods and services by a household, excluding the purchase of a home but adjusting for "imputed rent" or the amount that a household would pay to rent the same residence. It includes healthcare and education—even that portion supplied by the government—but does not include taxes paid to government nor does it include savings or investments by the household.

† According to Daniel H. Rosen and Beibei Bao of the Rhodium Group, it is unreasonable to expect household consumption to grow faster than its current rate. They argue that effective rebalancing will not depend on a growth in household consumption but on reduced and better managed investment growth. Daniel H. Rosen and Beibei Bao, "China Has Problems, But Household Consumption Isn't One," *Caixin,* September 20, 2013. *http://english.caixin.com/2013-09-20/100584374.html*.

urban disposable income.[78] These three factors—slowing income growth, an increasing household savings rate, and a drop in growth of urban disposable income—cut into overall household consumption. In turn, the slowdown in household consumption contributed to an overall slowdown in retail sales. Year-on-year growth in retail sales for the first half of 2013 was down to 12.7 percent from 14.4 percent in 2012.[79] On a quarterly basis, growth in retail sales was down an average 1.3 percent from last year.*

Financial reform is also integral to rebalancing China's economy. Continued reform in China's banking system is a precondition to increasing access to credit and providing higher returns on household deposits. The new leadership made progress toward financial reform in July 2013 when the PBOC announced it would eliminate the floor on lending rates, allowing banks more freedom to compete by offering cheaper loans.[80] As a result, loans may become more accessible to small- and medium-sized enterprises. Although removing the floor on lending rates is a major step in financial reform, the PBOC did not remove the more important ceiling on deposit rates. The ceiling limits the rate that banks can pay depositors and ultimately stymies growth in household disposable income.[81] The PBOC acknowledged that removing curbs on deposit rates would have a greater effect on consumption than lending rate reform.[82]

Maintaining positive real interest rates would also play a role in increasing the returns for China's households. Interest rates on one-year deposits lagged behind inflation and were thus negative from 2010 to 2011, which adversely affected household consumption by cutting into disposable income. Depositors find that their savings have less purchasing power over time when inflation exceeds their return on savings. Although real interest rates have been positive since peaking at 1.5 percent in June 2012, they dropped to 0.3 percent in 2013.[83] As a result of the low interest rates, many seeking higher returns will favor alternatives in China's property sector, a cycle that will only result in increased fixed-asset investment and further inflation of China's real estate bubble.

China implemented a new set of controls in March 2013 on the housing market that were targeted at curbing speculative investment in real estate.[84] However, growth of investment in residential real estate continues to exceed real GDP growth, and reports of excess housing stock have indicated that it is unlikely that real estate investment is driven by actual demand.[85]

Monetary Policy

Management of Foreign Exchange Reserves

The reserve assets held by China's central bank grew by $169 billion in the first half of 2013—$37 billion more than in all of 2012.† Although China's reserve accumulation has slowed significantly since 2011, cumulative reserves are still extremely large, exceeding the combined foreign holdings of Japan, Norway, the

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* Data used in calculation exclude the months of January and February. China National Bureau of Statistics, via CEIC database.

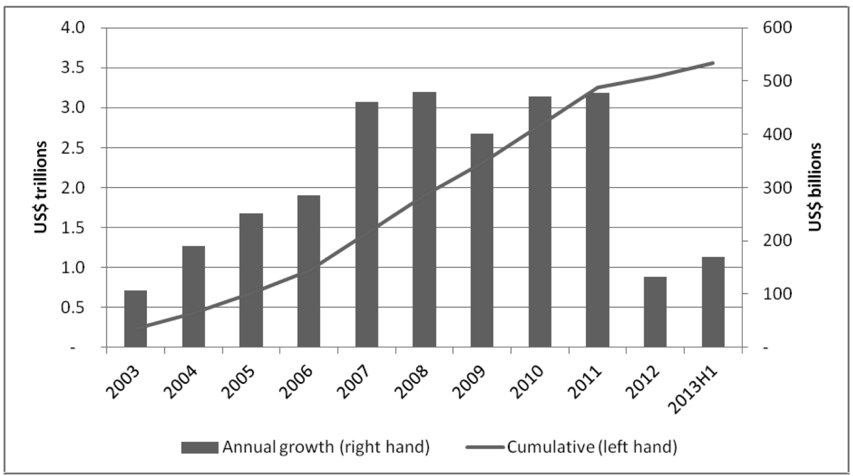
† Total "reserve assets" are primarily comprised of foreign exchange. By the end of September 2013, China's foreign exchange reserves reached $3.66 trillion.

United Arab Emirates, and Saudi Arabia, which rank directly behind China as the top foreign exchange reserve holders (see figure 7).[86]

China's share of U.S. Treasuries in foreign hands increased to 23.2 percent in 2013, cementing its rank as the world's largest holder of U.S. Treasury securities. Other top holders of U.S. Treasuries, such as Japan, Brazil, and Taiwan, all saw their shares decrease over this period.[87] As of June 2012 (most recent data), China was also the second-largest holder of U.S. agency debt, at $202 billion.

Figure 7: Growth of China's Reserve Assets, 2003–2013

Cumulative (US$ trillions); Annual (US$ billions)



Note: "2013H1" refers to first half of 2013. Numbers for 2003 to 2010 are from China State Administration of Foreign Exchange's balance of payments data. Numbers for 2011 to 2013 are from the State Administration of Foreign Exchange's quarterly report on the international investment position, which are more widely used by economists but are not available for the period before 2011.

Source: China State Administration of Foreign Exchange, via CEIC database.

While maintaining a preference for government securities, China continues to diversify its foreign exchange assets. China's nonfinancial outbound foreign direct investment (FDI) for the first half of 2013 totaled $45.6 billion, up 29 percent from the prior year.[88] One motive behind China's outbound FDI is to acquire resources and enter new markets overseas. In this context, China is increasing its direct ownership of foreign companies. Another motive, which also relates to China's portfolio investments and overseas loans, is to counteract the depreciation of the dollar against the RMB and to earn a higher yield than is provided by U.S. Treasuries.[89] (For an analysis of China's foreign investment in the United States, see chap. 1, sec. 2, of this Report.)

Rising Competition among China's Sovereign Wealth Funds

China Investment Corp. (CIC),* established in 2007, is the only state-sponsored investment vehicle recognized by the Chinese government as a sovereign wealth fund. But, according to the Sovereign Wealth Fund Institute, an international research body, mainland China currently has three other entities that may qualify as sovereign wealth funds—State Administration of Foreign Exchange (SAFE) Investment Company,† the National Social Security Fund,‡ and the China-Africa Development Fund.§ Each investment fund serves separate interests among branches of the Chinese government and competes with other state-sponsored entities for access to China's foreign exchange reserves.

The Ministry of Finance has been the strongest supporter of CIC and has advocated that the fund act as China's primary outbound investor.[90] Lou Jiwei, formerly the vice minister of Finance, served as CIC's chairman in 2007–2013.[91] As part of the leadership transition, he was appointed as minister of finance in March 2013.[92] After some bureaucratic infighting, Mr. Lou was replaced at CIC by another Ministry of Finance official, effectively allowing the ministry to retain its influence over the fund.[93] China's central bank, on the other hand, has preferred to invest the country's dollar reserves through other state-sponsored investors. SAFE, the subsidiary of the central bank that manages the bank's foreign exchange, is subject to less external pressure than CIC, because it does not participate in internationally recommended practices on transparency.¶

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* CIC is registered as a state-owned enterprise under China's Company Law. Unlike SAFE Investment Company and the National Social Security Fund, it is not a legal subsidiary of any government agency. It reports like a ministry directly to the State Council, China's highest administrative body. Under CIC's Articles of Association, five government agencies—the People's Bank of China, SAFE, the Ministry of Finance, the Ministry of Commerce, and the National Development and Reform Commission—have a seat on the fund's board.

† SAFE Investment Company is a limited company that was registered in Hong Kong prior to the handover of the island to mainland China. It constitutes one of four overseas investment arms of the State Administration of Foreign Exchange. The State Administration of Foreign Exchange is the branch of the People's Bank of China, China's central bank, which exclusively manages China's foreign exchange reserves. SAFE Investment Company's primary objective is to retain the value of China's foreign exchange by making portfolio investments overseas.

‡ Established by the State Council, under the auspices of the Ministry of Social Security, the National Social Security Fund is a public pension fund under China's Social Insurance Law. Its objective is to maintain the real value of public pension proceeds as a means to support future social security expenditures. The National Social Security Fund can invest 20 percent of its funds outside China.

§ The China-Africa Development Fund is a small fund set up to foster economic ties between China and Africa. It functions as a branch of China Development Bank, China's largest policy bank, though various government ministries are represented on its board. It is worth noting that the China Development Bank is majority owned by Central Huijin, the domestic subsidiary of CIC.

¶ CIC is a participant in the International Forum of Sovereign Wealth Funds (IFSWF) and has endorsed the Generally Accepted Principles and Practices, or "Santiago Principles," a set of recommended practices for sovereign wealth funds that calls for increased transparency. SAFE, however, does not participate in the IFSWF.

Rising Competition among China's Sovereign Wealth Funds—*Continued*

China's sovereign wealth funds rank among the world's largest in terms of assets and have developed substantial portfolios in the United States. CIC has acquired stakes in and loaned capital to major U.S. companies in energy and financial services.[94] CIC's subsidiary, the bank holding company Central Huijin, also owns shares in China's largest commercial banks, which have opened branches in the United States.[95] SAFE has become a more aggressive investor and has moved beyond U.S. Treasuries to riskier asset classes.[96] In 2013, SAFE opened a new branch in New York that will invest in U.S. private equity and real estate.[97] In addition, China's sovereign wealth funds are contracting U.S. fund managers, such as Blackrock and TPG, to manage large portions of their portfolios.[98]

Foreign exchange is being channeled into overseas lending as well. Among the top lenders is China Development Bank, China's largest policy bank. The bank was established in 1994 to subsidize development projects in China's most backward regions but has vastly expanded its dollar-denominated loan portfolio in recent years. In May, it signed a $1 billion oil-for-loan deal with India's largest oil company, Essar Oil Ltd. China Development Bank has issued several such loans to energy-rich countries since 2007, notably Venezuela, Russia, and Brazil.[99]

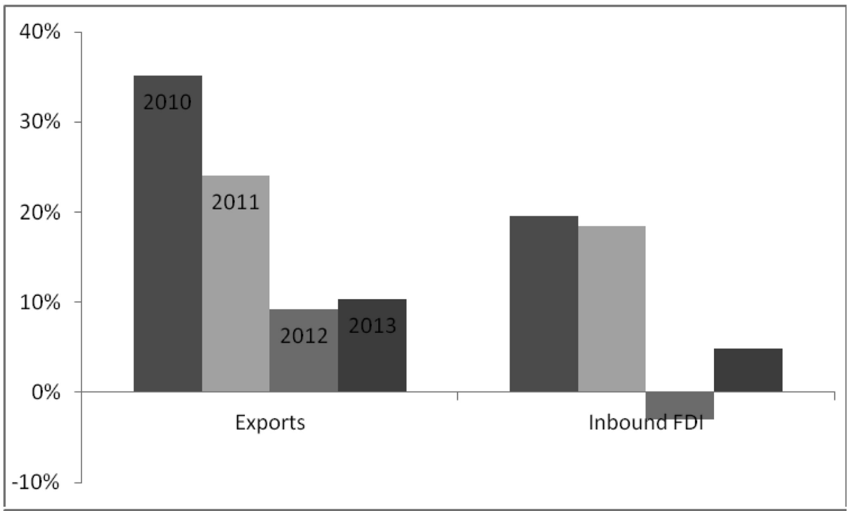
Currency Inflows and the Cash Crunch

China's foreign currency inflows in the first half of 2013 were large but volatile: reserve accumulation surged in the first quarter, followed by outflows in the second quarter.[100] Volatility in China's external accounts carried over into the domestic financial sector, which encountered a temporary liquidity crisis. The central bank intervened to maintain stability in a slowing economy exposed to high levels of debt.

Export earnings and inbound FDI grew at a slow pace in the first half of 2013, making only a moderate contribution to China's dollar inflows (see figure 8). China's foreign exchange reserves increased by $128 billion in the first quarter, well above the $43 billion trade surplus and $30 billion in foreign investments.[101] Other factors, less tied to the health of the economy, played a significant role in attracting capital to the Mainland. One was the reversal of capital flight. According to a February 2013 briefing to the Commission by the U.S. Treasury, many wealthy individuals took money out of the country during China's once-in-a-decade leadership transition in 2012, due in part to concerns about political and economic instability.[102] China's central bank records indicate that some $79 billion of foreign exchange outflows went unaccounted for. The outflows of capital were so large that China's foreign exchange reserves in 2012 grew by less than the trade surplus—a pattern not seen since China joined the World Trade Organization (WTO). The resumption of currency inflows in early 2013 suggested that some of the flight capital reentered the country.[103] Due to China's tight capital controls, a considerable portion of the inflows entered illicitly through over-invoicing of export revenues and other means.[104]

Figure 8: Growth of China's Exports and Inbound FDI (January—June, 2010–2013)

YTD (year-on-year, %)



Source: China General Administration of Customs, China Ministry of Commerce, via CEIC database.

Another factor behind China's surging capital inflows was financial speculation. International investors borrowed U.S. dollars at low rates of interest to purchase assets denominated in RMB, which offered a higher yield and the potential to profit from currency appreciation. Although the RMB did not appreciate much in 2012, the upward pressure on the currency resumed in 2013. This investment pattern was reinforced by the U.S. Federal Reserve's purchases of longer-maturity assets, such as commercial bank bonds, under the stimulus program known as "quantitative easing." First implemented in November 2008, quantitative easing substantially lowers the longer-term cost of borrowing in dollars.[105]

As it has done persistently since 2005, the PBOC counteracted rapid capital inflows by heavy market intervention. The PBOC purchased dollars with RMB in order to support the targeted RMB-dollar exchange rate. That not only added to the PBOC's bulging foreign exchange reserves but also increased China's money supply, raising the risk of inflation. To reduce those risks, the PBOC took additional "sterilization" measures to absorb liquidity out of the economy—essentially issuing RMB-denominated bonds in an effort to remove the money from circulation.[106]

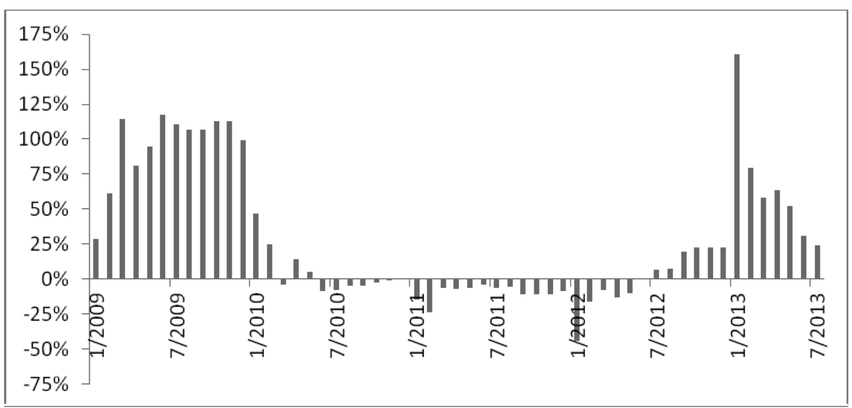
Nonetheless, the liquidity buildup contributed to an expansion of lending and debt in China. The broad money supply (M2)* grew by

* Broad money (M2) is a measure of liquid money supply beyond physical currency and demand deposits (also termed narrow money, or M1). M2 includes time-related deposits, savings deposits, and noninstitutional money market funds.

16.1 percent through April, above market forecasts of 15.5 percent.[107] The Chinese government's measurement of debt, or "total social financing," rose at its fastest pace since the stimulus in 2009 (see figure 9). Much of this credit expansion was in the "shadow banking" sector, in products such as trust company loans.[108] At the same time, worrying trends appeared in the traditional banking sector. Foreign currency lending increased by 37 percent year-on-year through May—versus 16 percent for RMB-denominated loans—as banks recycled the excess dollars coming into their accounts.[109] Chinese banks are less restricted in terms of the amount of deposits they need to have available when lending in foreign currency, a loose regulation that prompts riskier lending. Nonperforming loans at Chinese banks also grew at their fastest quarterly rate in a decade; an indication that credit was not well allocated (see figure 10).

Figure 9: Aggregate Credit Growth in China, January 2009–July 2013

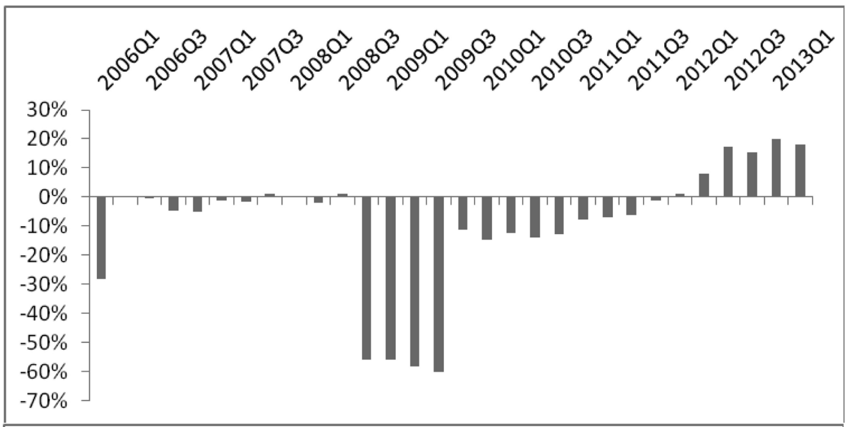
Monthly (year-on-year, %)



Source: People's Bank of China, via CEIC database.

Figure 10: Growth of China's Nonperforming Loans, 2006–2013Q1

Quarterly (year-on-year, %)



Source: People's Bank of China, via CEIC database.

Faced with a sudden rise in liquidity, the PBOC in June began to take more drastic measures, such as imposing tougher lending conditions on banks. These policies, which came to be known as the "credit crunch," were effective in reducing dollar inflows. A concurrent development was the U.S. Federal Reserve's announcement in May that it might taper quantitative easing, a major policy shift that would raise the cost of borrowing in dollars and reduce the relative yield on RMB-denominated assets. In response to the Federal Reserve's announcement, international investors rushed to transfer funds out of China and other emerging markets.

However, the credit crunch also destabilized China's financial sector. The primary effect was to raise interest rates in the interbank lending market to record highs—lending among Chinese banks froze temporarily in late June. Many indebted borrowers worried that they would be unable to refinance their debt.[110] The average price-to-earnings ratio for China's major commercial banks fell sharply on the country's major stock exchanges, part of a broader decline in China's capital markets.[111]

Ultimately, the cash crunch did not do much to rein in China's debt. Once the initial scare of tight liquidity passed, aggregate credit growth continued to rise in June and July. Even as banks have found themselves increasingly strapped for cash, other signs indicate that they may actually be expanding their issuance of risky loans. Shortly after the engineered rate spike that froze interbank lending, nearly every major Chinese bank was selling a short-term wealth management product (a particularly popular vehicle for financing high interest rate, off-balance-sheet loans) that had to be completed by the end of June.[112] (For more on shadow banking, see chap. 1, sec. 3, of this Report.)

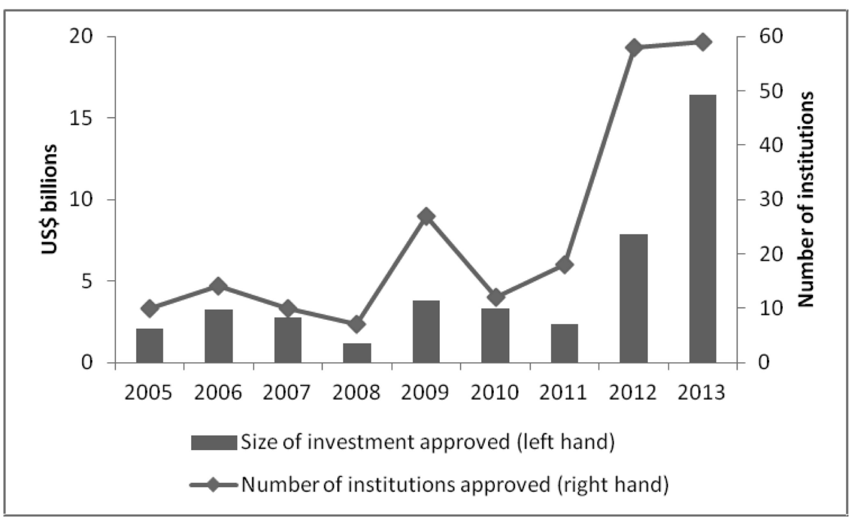
Capital Account Liberalization

Beijing took moderate steps in 2013 to further open its capital account. The primary motive was to attract foreign investors, an indirect way to stimulate a sluggish economy. Financial regulators launched the Qualified Foreign Institutional Investor program in 2002 to allow licensed foreign investors to buy and sell shares on China's stock exchanges. China's central bank and securities regulators approve any increase in the number of institutions and the amount of funds that these institutions can invest in China under the scheme. In 2013, the Qualified Foreign Institutional Investor program saw its largest-ever increases in investment approvals (see figure 11). Most of the approvals were given to investors who already held Qualified Foreign Institutional Investor licenses.

In addition to individual approvals, the quota for total investment under the Qualified Foreign Institutional Investor program was increased from $80 billion to $150 billion. Raising the quota seemed relatively pointless; with total cumulative funding approvals of $43 billion over 11 years, even the original $80 billion quota has yet to be filled. Nonetheless, the policy had its intended effect of generating interest among foreign investors, as several financial services companies quickly applied for a larger quota.*

Figure 11: Increase in Investment Quota under the Qualified Foreign Institutional Investor Program, January-July, 2005–2013

(US$ billions)



Source: China State Administration of Foreign Exchange, via CEIC database.

The RMB Qualified Foreign Institutional Investor program, first established in December 2011 to complement the Qualified Foreign Institutional Investor program, was also expanded. Whereas the Qualified Foreign Institutional Investor program allows investors to bring U.S. dollars onshore and exchange them into RMB, the

* According to the Qualified Foreign Institutional Investor program, the China Securities Regulatory Commission grants Qualified Foreign Institutional Investor licenses and market access to foreign investors, while the State Administration of Foreign Exchange approves quotas for individual Qualified Foreign Institutional Investor funds. Josh Noble, "China Approves HSBC for Onshore Currency Investing," *Financial Times*, July 26, 2013, via Factiva database.

RMB Qualified Foreign Institutional Investor program allows select institutions to raise RMB offshore as well.[113] RMB Qualified Foreign Institutional Investor funding approvals reached $20 billion by July 2013, four times higher than the year before, with 34 institutions approved for investment.[114] The China Securities Regulatory Commission removed rules on how quotas could be used, so that fund managers could invest in either China's equity or domestic bond markets without requiring separate licenses.[115] The China Securities Regulatory Commission also allowed units of Chinese banks and insurers in Hong Kong—as well as other financial institutions based in the city—to apply for RMB Qualified Foreign Institutional Investor quotas. Previously, only the Hong Kong units of Chinese fund management and securities companies were allowed to invest in mainland China via the program.[116] In June, the RMB Qualified Foreign Institutional Investor program was then extended beyond Hong Kong to other offshore RMB trading centers, such as London, Singapore, and Taiwan, to the dislike of mainland Chinese fund managers who hoped to monopolize this new market.[117]

It is questionable, however, whether the Chinese government is making a genuine effort to open the capital account or is merely luring foreign investors into China to stimulate the economy. It has done much less to open up the capital account for Mainland investors looking to send money overseas. Chinese domestic investors are allowed to access foreign equity markets via pilot trustees called Qualified Domestic Institutional Investors, which comprise banks, fund management firms, insurance companies, dealers, and brokers approved by the China Securities Regulatory Commission.[118] The amount of investment permitted for Qualified Foreign Institutional Investors barely increased in the first half of 2013.[119] The government announced plans in 2012 to introduce a Qualified Domestic Individual Investor program that would permit individuals from the Mainland to trade Hong Kong securities directly. By October 2013, the plan had yet to proceed.[120] The government in 2013 introduced a less ambitious Qualified Domestic Institutional Investors scheme that would allow firms set up in the new Qianhai special economic zone to invest a certain amount of money in Hong Kong securities or bond markets.[121]

Excess Industrial Capacity

The Excess Capacity Crisis

In 2012–2013, China's manufacturers recorded their worst performance since the height of the financial crisis four years ago. Monthly growth in China's industrial production, averaging 13.3 percent in 2010, slowed to 6.1 percent in the first half of 2013. The purchasing managers' index, a monthly survey of manufacturers in China, consistently showed stagnation or decline in production and orders. China's exports were also sluggish, due to weak external demand.[122] The construction sector, a key source of demand for many industrial materials, recovered slightly in the first half of 2013 from 2012 levels but was still growing at 7 percentage points less than in 2010–2011.[123]

The economic slump exacerbated the problem of excess capacity in China's heavy industry. The sectors affected extended along the value chain, from suppliers of basic materials, such as metals and cement, to manufacturers of ships, solar panels, and chemical additives. China today is the world's leading producer of most of these goods. According to official estimates, industrial enterprises in many of these sectors were operating at only three-fifths to three-quarters of capacity in 2012, below the Chinese government's target minimum of 80 percent capacity (see table 2).

Table 2: Capacity Utilization in Select Chinese Industries, 2012

Capacity utilization (%)

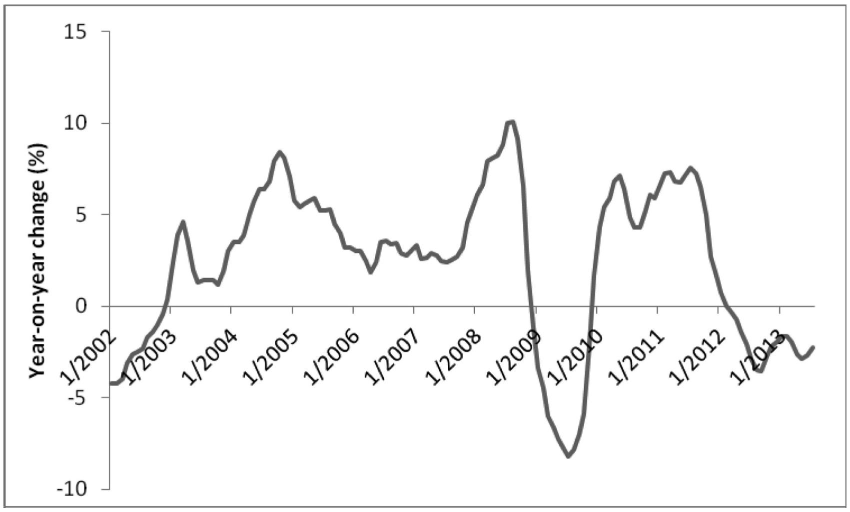
Sector	Capacity utilization (%)
Chinese government target	*>80%*
Glass	75%
Cement	75%
Aluminum	73%
Wind turbine	70%
Steel	75%
Solar panels	60%

Source: Xinhua News Agency, based on official Chinese government estimates.

Due to excess capacity, business conditions in many industries deteriorated. In order to sell off their inventory and attract new orders, producers slashed prices, leading China's producer price index to contract throughout 2012–2013 (see figure 12). Some enterprises took on more debt in order to offer generous financing terms to their customers. Shipyards, for instance, accepted down payments of just 5 to 10 percent for new orders, versus up to 60 percent at the high mark in 2007.[124] To some extent, these measures proved effective—the total losses of the industrial sector, and the total number of loss-making industrial enterprises, declined in the first half of 2013, after steep increases in 2012.[125]

Figure 12: Producer Price Index in China, January 2002–July 2013

Monthly (year-on-year change, %)



Source: China National Bureau of Statistics, via CEIC database.

Still, many firms incurred debts that brought them to the brink of insolvency. Among 88 private steel enterprises, the number of companies suffering losses grew from a third to half in 2012–2013.[126] In the solar sector, China's state-owned banks grew wary of lending to panel makers after product prices fell 66 percent in two years.[127] Suntech Power, the world's largest solar panel manufacturer, declared bankruptcy in March 2013 after running out of cash and defaulting on a bond payment of more than $541 million.[128] In the shipbuilding sector, China Rongsheng Heavy Industries Group Holdings Ltd., a publicly listed company and China's largest private shipyard, sought a bailout in July from the local government in Jiangsu Province.[129] In its 2012 annual report, Rongsheng acknowledged that it had only $343 million of cash and cash equivalents to service debts of $2.7 billion.[130]

Although producers were affected by a slowing economy, structural imbalances and ineffective government policies created the underlying problem. China's industrial sector remains very fragmented. For example, while Japan and South Korea have only a few dozen large-scale shipyards, China has some 1,650 yards of various sizes. Such industrial enterprises have failed to coordinate production or pool resources on a national level, creating cut-throat competition in undifferentiated product lines. They have done so with subsidies from local governments keen on attracting business to grow the economy and raise government revenue. Low-interest-rate loans from state-owned banks, with a bias toward industrial enterprises, created additional capacity without regard for insufficient demand. The 2009 economic stimulus accelerated this pattern. Fixed asset investment in manufacturing grew by an average of 35 percent in 2010–2011.[131] For 35 steel companies listed on the Shanghai and Shenzhen stock exchanges, local government subsidies increased by 128 percent year-on-year in 2010–2011.[132] One shipbuilder, Rongsheng, received some $550 million in local government subsidies in 2010–2013, along with two five-year financing deals with Export-Import Bank of China, a Chinese policy bank, and a ten-year agreement with Bank of China, one of China's "Big Four" commercial banks.[133]

Reinforcing these patterns was the deliberate expansion of productive capacity in China's poorer inland regions. In the case of aluminum, more than 90 percent of new capacity has emerged in western areas since 2010. Excess capacity in the cement industry was as high as 30 percent in the Northeast and West of the country, versus 10 to 15 percent in the more developed eastern regions.[134] Industrial enterprises have relocated to where land and labor are cheaper, urban density is lower, and local governments are less likely to enforce environmental regulations decreed by the central government.[135]

Some of China's industries have also fallen behind their international competitors, who have performed better in a difficult economic climate. In the aluminum sector, the U.S. firm Alcoa registered profits of $191 million in 2012, while China's aluminum giant Chinalco had a loss of $780 million, its worst since going public in 2007.[136] In shipbuilding, China in 2012 received orders of $14.3 billion, its lowest order value since 2004, while its South Korean rivals received $29.6 billion worth of new orders.[137]

Market forces are unlikely to correct the structural problems of China's heavy industry. Heavily indebted firms often have an incentive to maintain current output levels, because their loans are contingent upon future output. Due to fierce competition, there is also a concern that distributors will turn to other producers if deliveries are cut. Because many local communities depend on industry for employment, it is difficult to reduce pay or shed jobs. For example, Wuhan Iron and Steel, one of China's top-five steelmakers, supports a workers' town of 300,000 people in Hubei Province.[138]

While such overcapacity is harmful to the affected Chinese industries and individual businesses, as well as any shareholders involved, it also spreads damage beyond China's borders. Industries within the United States, such as steel and glass, are sometimes forced to match the "China price" even if it is below the cost of production, leading to business losses and unemployment.

Tougher Policy Responses by the New Leadership

Excess capacity in China's industry is not a new problem. The central government's restructuring of the country's state-owned enterprises in the 1990s was partly aimed at reducing overcapacity, particularly in the industrial northeast. The 11th Five-Year Plan (2006–2010) focused on the consolidation of capacity, and in the 12th Five-Year Plan (2011–2015), issued in 2010, the State Council introduced a specific five-year Plan for Industrial Transformation and Upgrading.[139] An important proponent of consolidation has been the NDRC, the coordinating ministry in charge of China's industrial policy. In September 2009, it issued Document 35, "On Restraining Excess Capacity and Industrial Redundancy in Certain Industries." The document identified industries such as steel, cement, aluminum, and shipbuilding. It placed much of the blame on the lavish subsidies and lax regulation of local governments and warned that unchecked capacity expansion would eventually lead to fierce competition and cost-cutting at the national level, threatening the financial health of enterprises and their creditors; depleting China's resource base; increasing reliance on raw material imports; and worsening industrial pollution near urban centers.[140]

However, these efforts by the government did not suffice to check industrial expansion. Instead, industrial capacity continued to increase under the $586 billion economic stimulus program introduced during the global financial crisis. The EU's Chamber of Commerce in China warned in a 60-page report in 2009 that industries such as steel, cement, and plastics were "still blindly expanding" despite a slump in export demand. Referring to the steel industry, the report noted that China, with annual production capacity of 660 million tons of steel, and with an additional 58 million tons coming online, had sold less than 500 million tons the previous year.[141] With 20 million tons of primary aluminum capacity in 2008, China could sell only 13.5 million tons, or just 68 percent of its capacity.[142]

By the spring of 2013, during the National People's Congress's annual meetings, top officials openly acknowledged that excess capacity was untenable, particularly in the steel sector. NDRC head Zhang Ping urged "mergers and acquisitions, eliminating backward production, and encouraging more companies to tap into the overseas market."[143] In April, the new leadership took its first tentative steps to address the issue. Based on a comprehensive set of criteria, including product quality, environmental sustainability, and resource efficiency, the Ministry of Industry and Information Technology (MIIT) chose 45 out of a pool of 104 enterprises for consolidation of the steel industry under the 12th Five-Year Plan. MIIT announced that those companies that could not meet the criteria would eventually be forced to exit the market, either by legislative fiat or reduced access to capital.[144]

From June to August, the government's efforts to reduce capacity intensified. The "credit crunch" in June, widely attributed to China's central bank, helped to clamp down on short-term borrowing, forcing dozens of companies to cancel or delay bond sales, including China Development Bank, a key backer of the shipping industry.[145] Weeks after the credit crunch, the central bank lifted the floor on bank lending rates. According to economist Nicholas Lardy, at the Peterson Institute for International Economics, the leadership used the credit crunch and rate reform to signal that the corporate sector would need to cut costs and improve productivity in order to remain profitable.[146]

Beijing followed with more targeted measures aimed directly at heavy industry. The most far-reaching measure came on July 25, when MIIT ordered more than 1,400 companies in 19 industries to permanently retire entire production lines within factories by the end of 2013. In a break from past policy, the government published detailed lists of exactly which plants should reduce capacity and by how much.[147] The lists were downloadable from the MIIT website and included publicly listed companies, some of which saw their share price drop as a result.[148] Although the industries were wide-ranging, the companies targeted were primarily in metals, cement, and other basic materials.[149] MIIT reinforced these policies with specific documents targeting the aluminum and rare earths sectors.*

On September 17, MIIT released another list for industrial capacity retirement—the third of the year—involving a total of 58 companies operating in 14 sectors. The affected industries were largely the same as before, comprising steel, coking, battery, copper smelting, zinc smelting, cement, and plate glass, among others. Black-listed capacities were to be demolished before the end of the year. MIIT expressly forbid the relocation of production to the hinterland.[150]

A Lenient Approach to the Shipbuilding and Solar Photovoltaic Industries

Although the central government took concrete steps to rationalize production, vested interests appeared to impede similar efforts in the shipbuilding and solar photovoltaic sectors. A three-year plan to upgrade the country's shipbuilding industry, released by the State Council on July 31, encouraged local governments to provide subsidies to shipbuilders. It also offered ship-holders incentives to scrap their ships in advance, until the end of 2015, in order to raise demand for new ships. Banks were ordered to extend favorable loans to overseas ship-buyers and provide credit support to domestic ship-builders. Although the plan also called for industry consolidation, the measures were less targeted at individual plants.[151]

Similarly, in the "Guidance on Promoting the Healthy Development of the Solar Industry," issued on July 15, the State Council announced new measures to spur solar panel installations. The policy called for raising the capacity target for solar power generation in China to 35 gigawatts (GW) by 2015, a large step up from the 21 gigawatt target set in the 2011–2015 Solar Development Plan issued by the National Energy Administration in 2012.[152]

The Chinese government also supported the solar industry through an aggressive trade policy. China followed through on a probe it launched in 2012 into alleged subsidies for U.S. and South Korean polysilicon producers, applying antidumping duties on these imports in July 2013. Many critics interpreted the move as retaliation for U.S. antidumping duties leveled against Chinese solar panel makers in September 2012. The duties also protect China's domestic polysilicon industry, which is suffering from overcapacity.[153]

* MIIT in July convened several agencies, including the Environment Ministry, Customs, the Ministry of Land and Resources, and the Ministry of Commerce, to deliberate a new wave of crackdowns in the rare earths industry, with a focus on rooting out illegal production through higher fines and the closure of mines and smelting facilities. On July 24, MIIT released new aluminum industry standards: only large alumina projects would be authorized to use imported bauxite; alumina projects using high-aluminum fly ash for production were to locate in a place close to fly ash production, to reduce pollution; and the minimum capital ratio of electrolytic aluminum projects was raised to 40 percent from the previous 35 percent, to ensure less leveraged investments in new capacity. Shanghai Securities News, "'Zhengzhi fang'an' lidu kongqian: Xitu jiage fantan huo zhicheng" ('Unprecedented Crackdown' to Support Price Rebound for Rare Earths) July 23, 2013, p. 5; Xinhua's China Economic Information Service, "MITT Rolls Out Policies to Resolve Excess Aluminum Capacity," July 24, 2013, via Factiva database.

In parallel to its rift with the United States, China engaged in a protracted trade dispute with the European Union, which in May 2013 threatened to apply antidumping duties on Chinese solar panels, similar to those being enforced by the United States.[154] The proposed duties, averaging 47.6 percent, would have been the largest duties that the European Union has applied to China and involved some $27 billion worth of imports.[155] The Chinese government made extensive efforts to block the duties. In mid-May, the Ministry of Commerce (MOFCOM) warned that imposing duties would "seriously harm" bilateral trade ties between the European Union and China.[156] A statement posted on the Chinese government's main website on May 30 asserted that EU member states did not all agree on the need for the tariff duties.[157] Premier Li Keqiang used his first trip to Europe to encourage Germany and other major countries to oppose the measures.[158]

China's diplomatic offensive proved effective. On June 4, the European Commission agreed to temporarily lower the new tariffs from the proposed level of 47.6 percent to a mere 11.8 percent, while the two sides attempted to negotiate a solution.[159] In late July, China scored a major victory in the negotiations, as the European Union agreed to scrap its proposed duties in favor of a "price undertaking." The settlement allows Chinese exporters to sell into the European Union only enough solar panels to generate up to seven GW of capacity each year, at a minimum price of 0.56 euros per watt. Only Chinese firms that do not comply are subject to duties. The outcome effectively permitted China's subsidized solar panel exports to the European Union to continue unabated, only at a higher sales price. As *The Wall Street Journal* noted, the deal was much like the voluntary export restraints negotiated between the Japanese and U.S. governments in the 1980s.[160]

U.S.-China Strategic and Economic Dialogue

The fifth round of the U.S.-China Strategic and Economic Dialogue (S&ED) was held on July 10–11, 2013, in Washington, DC. Prior to the S&ED, the United States and China held the first meeting of the civilian-military Cyber Working Group, where the two sides committed to work together on cooperative activities and hold further discussions on international norms of state behavior in cyberspace, but there were no tangible results.[161] Both sides agreed to hold the next meeting before the end of 2013. (For discussion of U.S.-China tensions over cybersecurity, see chap. 2, sec. 2, of this Report.)

On the economic front, the most relevant announcements were (1) resumption of Bilateral Investment Treaty (BIT) talks; (2) the launch of the Shanghai Free Trade Zone; and (3) new measures to liberalize China's financial sector.

Announcement 1: BIT Talks Resumed

Of the economic outcomes, the most significant development was an agreement to restart the 2008 talks to reach a BIT. Six months before leaving office, the Bush Administration had launched talks for a U.S.-China BIT. In November 2009, President Obama then issued a joint statement with President Hu Jintao, announcing plans to expedite these negotiations. Until now, little progress has been made.[162]

At the S&ED talks, China agreed to negotiate market access using a "negative list" approach (which means that all sectors are negotiable, except for those specifically exempted). China also agreed to grant U.S. investors national treatment in the "pre-establishment" phase of investment, or before U.S. firms are actually invested in China. This means, for example, that China will not discriminate against U.S. firms while they are trying to obtain a license or treat them differently than a domestic firm.[163]

Treasury Secretary Jacob Lew described this as a "significant breakthrough" that "would work to level the playing field for American workers and businesses by opening markets for fair competition."[164] U.S. business groups welcomed the development as a possible solution to Chinese opposition to foreign investment in large sectors of the Chinese economy, most notably financial services.

Others have urged caution, however. Dr. Lardy called the BIT "a noble goal but one which will be very difficult to conclude in any reasonable time period and it might well fail."[165] Derek Scissors, then at the Heritage Foundation, was similarly skeptical, noting, "BITs are primarily about protecting investors from discriminatory government policies. They are not transformative instruments that change the nature of economies, especially not large economies."[166]

A comprehensive BIT with China would be highly controversial and involve protracted Senate debate over details. BITs are treaties rather than executive agreements,* such as the North American Free Trade Agreement, and require a two-thirds vote of the Senate to ratify. A BIT would also potentially curtail the powers of state and local governments to regulate health and safety issues and even zoning, raising sovereignty concerns. Moreover, with the exception of a few failed deals, Chinese firms have had success investing in the United States even without an investment treaty. Similarly, U.S. companies have been investing in China for years, fully cognizant of various restrictions on investment, policies that discriminate against foreign investors in favor of Chinese firms, and rampant intellectual property rights theft. China may not be willing to make major concessions for a deal.

Announcement 2: Shanghai Free Trade Zone

At the S&ED talks, China also agreed to expand access to its financial services sector for foreign investors. The most relevant outcome involves the establishment of a pilot free trade zone in Shanghai, which will guarantee equal access to domestic and foreign enterprises. Led by Premier Li, the State Council approved the plans on July 3, a week prior to the S&ED talks. Unlike China's existing special economic zones, which were established in the early 1980s to attract foreign investment in manufacturing to boost exports, the Shanghai free trade zone will not simply provide fiscal and other incentives; it will also serve as a platform to test an assortment of controversial market reforms.[167]

* Free trade agreements are generally passed under an expedited "fast track" rule that does not allow amendments on the floor and calls for expedited procedures.

China's Ministry of Commerce approved the establishment of the free trade zone in August 2013, touting it as a "new path and a new mode of opening to the outside world." [168] After months of media speculation, on September 27, 2013, the State Council released rules to govern the new free trade zone. Beijing has agreed to allow RMB convertibility and market-based setting of exchange rates and interest rates, the first such steps toward full currency convertibility.[169] Financial institutions in the zone would be allowed more freedom to experiment with new products and services, which may allow foreign firms to increase the quantity and sophistication of financial products. The government also pledged to open up shipping, commerce, specialized services (including legal), and travel. Further details remain vague. No specific timeline was given for implementing any of the reforms, though the State Council announcement said that financial liberalization will proceed "as conditions allowed" and "risks would be controlled," forestalling any suggestion of rapid change.[170]

The government announced that unlike other Chinese free trade zones the investment at the Shanghai free trade zone will be governed by a "negative list" approach. The use of the negative list suggested that the ability of Chinese regulators to arbitrarily constrain foreign investors might be curtailed. However, expectations for broad reform were dampened following the publication of this list by Shanghai government officials.[171] The list includes restrictions covering 18 sectors, including finance, media, utilities, property, and manufacturing.[172] Analysts and banking officials noted that the wide range of restrictions reflects continued jockeying among Chinese government officials over the speed of liberalization.[173] The list applies to the remainder of 2013 and will be updated as the government continues testing liberalization policies in the free trade zone.

The *South China Morning Post,* a Hong Kong publication, reported that the government would suspend some Internet controls, granting people inside the Shanghai free trade zone access to websites blocked elsewhere in the country, such as Facebook and Twitter.[174] However, the statement by the State Council did not mention any such change. It did say foreign companies might be allowed to offer "specialized telecommunications services" in the zone, and permission to offer services that break existing Chinese laws might be granted on a case-by-case basis by the State Council.[175]

The new pilot zone will take up to ten years to construct and will cover 28 square kilometers within Shanghai's existing Waigaoqiao bonded trade zone and three other special customs supervision zones. If successful, the model may be replicated nationwide. In response to the Shanghai free trade zone, other port cities, including Xiamen and Tianjin, have expressed interest in establishing similar pilot zones.[176]

Announcement 3: Financial Sector Liberalization

As in past S&ED talks, China once again promised to move toward a market-determined exchange rate and to submit another proposal to join the WTO's Government Procurement Agreement. After China was admitted to the WTO in 2001, it agreed to sign the procurement agreement "as soon as possible." However, its first bid was only submitted in February 2008. Because the terms of accession that China offered did not satisfy other WTO members, China subsequently submitted two more bids, the latest in November 2012. Three bids are generally the maximum required for Government Procurement Agreement applicants; yet several obstacles make China's imminent accession unlikely, not least its huge public sector and narrow definition of procurement in domestic law. China has resisted U.S. demands to include SOEs as government entities that would be bound by the agreement.

China also hinted at greater market access for U.S. financial firms, particularly in trading government bond futures and underwriting corporate bonds. This form of foreign participation would be conducive to China's financial sector reform, as the government seeks novel ways to raise funds for companies while reining in credit issued by trust companies, local government financing vehicles, and other nontraditional lenders. China also welcomed participation by foreign banks in RMB settlement of cross-border trade and investment.[177] A day after the adjournment of the S&ED talks, China announced that the Qualified Foreign Institutional Investor program will expand to $150 billion (the current quota stands at $80 billion, but only $43 billion of that has been allocated for use in investment).[178] A similar plan for Hong Kong-based RMB investors will grow to encompass Singapore, London, and other cities.[179]

China's securities regulator also announced at the S&ED talks that it will begin providing certain audit work papers to the U.S. Securities and Exchange Commission (SEC) and the Public Company Accounting Oversight Board, a first step toward resolving a longstanding impasse on enforcement cooperation related to companies that are listed in the United States. U.S. and Chinese audit regulators also committed to accelerating cooperation for cross-border audit oversight.[180] However, the S&ED joint factsheet makes no mention of a formal mechanism for sharing audit papers, so much work remains to be done on this issue. (For further discussion of the U.S.-China friction over the audit issue, see chap. 1, sec. 3, of this Report.)

The U.S.-China Relationship at the WTO

On August 2, 2013, a WTO panel found that China had violated WTO rules in applying antidumping (AD) and countervailing duties (CVD) on U.S. exports of chicken broiler products.* China's MOFCOM imposed AD and CVD on these products in August and September 2010, respectively. The AD duties ranged from 50.3 percent to 53.4 percent for the U.S. producers who responded to MOFCOM's investigation notice, while MOFCOM set an "all others" rate of 105.4 percent. In the CVD investigation, MOFCOM imposed CVDs between 4 percent and 12.5 percent for the participating U.S. producers and an "all others" rate of 30.3 percent. According to the Office of the U.S. Trade Representative, U.S. exports to China of broiler products fell by 80 percent following the applica-

*Broiler products include most chicken products, with the exception of live chickens and a few other products such as cooked and canned chicken.

tion of the duties.[181] The United States brought the case in September 2011.

In its report, the WTO dispute settlement panel found in favor of the United States on nearly all U.S. claims, including substantive errors in MOFCOM's calculations and procedural errors.[182] The United States scored a major victory against China's use of the average cost of production methodology in calculating dumping margins (i.e., the difference between the price of poultry products in the U.S. market and the price of the same product in China). In order to estimate the cost of production for a given chicken part, China would estimate the average cost of producing a whole chicken and assign the cost of producing that part depending on its weight. The United States argued that this methodology dramatically overestimated the cost of production for cheap parts of a chicken, such as paws.[183] Both sides agreed not to appeal the ruling, and it was adopted by the WTO on September 25, 2013.

In addition to the broiler case, there are pending WTO cases between the United States and China, whose status is summarized in tables 3 and 4 below.

Table 3: Active WTO Cases Brought by the United States against China

No.	Title	Request for Consultations	Panel Report	Appellate Body Report	Compliance Status
DS419	Measures concerning wind power equipment	December 22, 2010	In consultations; panel not yet formed		
DS427	Antidumping and Countervailing Duty Measures on Broiler Products from the United States	September 20, 2011	August 2, 2013	N/A	The panel upheld most U.S. claims. The two sides agreed not to appeal the ruling
DS431	Measures Related to the Exportation of Rare Earths, Tungsten, and Molybdenum	March 13, 2012	Panel composed September 24, 2012; report pending		
DS440	Antidumping and Countervailing Duties on Certain Automobiles from the United States	July 5, 2012	Panel composed February 11, 2013; report pending		
DS450	Certain Measures Affecting the Automobile and Automobile-Parts Industries	September 17, 2012	In consultations; panel not yet formed		

Source: WTO Dispute Settlement Gateway. *www.wto.org*.

Table 4: Active WTO Cases Brought by China against the United States

No.	Title	Request for Consultations	Panel Report	Appellate Body Report	Compliance Status
DS437	Countervailing Duty Measures on Certain Products from China [184]	May 25, 2012	Panel composed November 26, 2012; report pending		
DS449	Countervailing and Antidumping Measures on Certain Products from China [185]	September 17, 2012	Panel composed March 4, 2013; report expected by December 2013		

Source: WTO Dispute Settlement Gateway. *www.wto.org*.

China's Preferential Trade Agreements

Following its accession to the WTO, China has actively worked to negotiate and implement bilateral and multilateral trade agreements across the globe. As China transforms from a regional player to a global power, it has not only created a growing web of international legal obligations but has also gradually advanced its economic and political influence. As of August 2013, China has signed thirteen preferential trade agreements (PTA),* including two with Iceland and Switzerland this year. The Iceland and Switzerland PTAs were the first signed between China and European countries—both representing a significant milestone in strengthening China's trade relationship with Europe.[186] China is currently in the process of negotiating additional bilateral and multilateral PTAs with neighboring and distant countries, each encompassing particular economic and political motives (see table 5).

Table 5: Preferential Trade Agreements with the PRC

Signed Trade Agreements	Asia-Pacific Trade Agreement (2000)			
	Hong Kong (2003)	Macau (2003)	ASEAN (2004)	Chile (2005)
	Pakistan (2006)	New Zealand (2008)	Singapore (2008)	Peru (2009)
	Taiwan (2010)	Costa Rica (2010)	Switzerland (2013)	Iceland (2013)
Under Negotiations	Norway	China–Japan–Korea		
	Australia	Gulf Cooperation Council (GCC)		
	Regional Comprehensive Economic Partnership (RCEP)			
Under Consideration	India	Korea	Colombia	

Notes: Number in parentheses indicates the year initial agreement of PTA was signed. ASEAN=Association of Southeast Asian Nations

Source: Liu Debiao, "*Zhongguo Ziyou Maoyi Xieding Gailun*" (Introduction to China's Free Trade Agreements) (Beijing, China: *China Commerce and Trade Press*, June 2012), p. 10; Ministry of Commerce, *China FTA Network* (Beijing, China). *http://fta.mofcom.gov.cn/topic/eniceland.shtml*.

While economic development remains the focus and primary objective of China's national policy, PTAs also serve as an important

*Many PTAs negotiated by China are not comprehensive, meaning provisions on trade in goods, services, and investment are not all included or are signed separately. The 20 bilateral PTAs negotiated by the United States, such as those with Chile, Costa Rica, Singapore, and South Korea, differ markedly from the 11 negotiated by China. U.S. agreements tend to cover more product categories and are negotiated from the start with as comprehensive a list as possible. China's PTAs have a narrower scope with fewer product categories.

diplomatic tool and a means to expand regional influence and secure resources. The recently signed PTA with Iceland, for example, was not exclusively motivated by the reduction of barriers to trade but was likely a strategic move by Beijing to advance its access to Arctic shipping routes between China and Europe.[187] Other PTAs currently under negotiation demonstrate Beijing's desire to secure natural resources, especially oil, which is not abundant domestically. China is strategically advancing its domestic agenda by negotiating trade agreements with oil-rich countries such as Norway and international organizations such as the Gulf Cooperation Council, an economic union of oil-rich Arab nations.[188]

On a multilateral level, the United States and China have diverging and competing trade initiatives, each of which excludes the other. The U.S.-led Trans-Pacific Partnership is a free trade agreement among 12 Pacific Rim countries. The Trans-Pacific Partnership is based on the principles of "open regionalism,"[189] meaning that any Asia-Pacific country, including China, is welcome to apply on the condition that other parties to the agreement agree that it made a credible commitment to meet the high standards of the agreement.* The second, the China-supported Regional Comprehensive Economic Partnership, is an initiative to link Association of Southeast Asian Nations (ASEAN) member states and its free trade agreement partners. The Regional Comprehensive Economic Partnership includes China and multiple countries concurrently participating in the U.S.-backed Trans-Pacific Partnership negotiations, such as Australia, Japan, and New Zealand.[190]

Negotiations on the Regional Comprehensive Economic Partnership began in early 2013 and are to conclude by the end of 2015.[191] If realized, the agreement would create the world's largest group of trading partners, accounting for about half of the global market and about a third of the world's economic output.[192] The Regional Comprehensive Economic Partnership has been seen as a move to counteract the U.S.'s high-profile involvement and promotion of the Trans-Pacific Partnership regional trade agreement, which has been interpreted by the PRC as a strategy to reduce China's economic influence in the Asia-Pacific region.[193] Furthermore, Beijing is leading its own regional trade agenda in Asia through the China–South Korea, China-Australia, China-India, and the trilateral China–Japan–South Korea negotiations, ultimately seeking to construct a regional web of its own free trade agreements and establish an independent ring of influence.[194]

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*At the 2011 Asia-Pacific Economic Cooperation (APEC) summit meeting in Honolulu, Hawaii, the leaders of the (then) nine Trans-Pacific Partnership countries agreed to the broad outlines of the agreement. In their statement, they envisaged the Trans-Pacific Partnership as a "living agreement," meaning that it will be open to addressing new issues as they evolve, and permit new members to join if they are willing to sign up to its commitments. See Office of the U.S. Trade Representative, "Trans-Pacific Partnership (TPP) Trade Ministers' Report to Leaders" (Washington, DC: November 12, 2011). *http://www.ustr.gov/about-us/press-office/press-releases/2011/november/trans-pacific-partnership-tpp-trade-ministers%E2%80%99-re*. The process by which new members are added has not been formalized. The aspiring candidates have followed a process agreed to by current members informally, with each aspiring candidate being approved with the consensus of the other parties. In practice, the aspiring participant must not only agree to full trade liberalization but must also demonstrate a genuine willingness to negotiate on issues sensitive to others and to commit to a high-standard agreement overall. See Ian F. Ferguson et al., *The Trans-Pacific Partnership Negotiations and Issues for Congress* (Washington, DC: Congressional Research Service, August 21, 2013).

Doing Business in China—Investment and Antitrust Challenges

Investment

China continues to adopt measures designed to encourage FDI into the country even as FDI into China dropped from a record $116 billion in 2011 to $111.7 billion in 2012. In the first half of 2013, FDI into China recovered slightly to $62 billion.[195,196] Declining optimism about the returns on investment results from China's slowing growth rate, rising labor costs, and regulatory conflicts. Among the major impediments cited by American-based multinationals operating in China are the government's favoritism toward Chinese SOEs and private domestic firms, restrictions on foreign ownership; a lack of regulatory transparency; inequity in licensing processes; increased pressure to transfer technology; weak intellectual property protection; an unreliable legal system; and corruption on the part of government officials.[197,198]

FDI has shown signs of recovering in 2013 and was up 4.9 percent to $62 billion in the first half of the year.[199,200] Beijing's current, targeted efforts to bolster FDI are consistent with its history of relying on a set of measures, including investment catalogues and tax policy, to guide FDI inflows in accordance with development priorities set by the CCP. China's *12th Five-Year Plan for Foreign Capital Utilization and Overseas Investment* seeks to attract higher-quality foreign investment in designated strategic emerging industries.* The Plan also encourages multinational corporations to establish regional headquarters and centers for research and development, procurement, and financial management in China. It also indicates that China will open a variety of sectors to foreign investors.[201] In November 2012, Beijing announced plans to simplify procedures for FDI, "including new rules under which investors will not require approval for opening foreign currency accounts or for reinvesting foreign exchange earnings."[202] Beijing is also considering suspending FDI-related laws and regulations in newly proposed free-trade zones† in order to encourage investments by foreign companies and joint ventures between foreign and Chinese companies.[203,204] Nevertheless, concerns persist, particularly amid high-profile Chinese antitrust and corruption investigations, which have implicated a growing list of foreign firms.

China Targets Foreign Firms with its Antimonopoly Law

In July 2008, China enacted its Antimonopoly Law. Three agencies‡ evaluate effects on competition in the marketplace, as well as national security ramifications of corporate practices, and other issues relevant to China's economic development. MOFCOM is au-

* There are seven strategic emerging industries designated in the 12th Five-Year Plan (2011–2015): (1) energy saving and environmental protection; (2) next-generation information technology; (3) biotechnology; (4) high-end equipment manufacturing; (5) new energy; (6) new materials; and (7) new energy vehicles. Strategic emerging industries benefit from preferential policies and funding.

† On July 3, 2013, the State Council approved the establishment of a free-trade zone in Shanghai, "more akin to a free-market zone subject to less regulation and interference than an area of duty-free trade." Bloomberg, "China to Ease Foreign Investment Rules for New Free Trade Zones," August 17, 2013.

‡ MOFCOM, NDRC, and the State Administration for Industry and Commerce.

thorized to handle merger clearances; NDRC to handle cartels and pricing conduct; and the State Administration for Industry and Commerce (SAIC) has authority over abuse of dominance and other non-price-related, anticompetitive conduct. Until recently, however, only MOFCOM was actively engaged in Anti-Monopoly Law investigation and enforcement activities. In the five years since the law came into effect, MOFCOM has reviewed approximately 650 mergers and acquisitions, while NDRC has concluded about 30 cases, and SAIC has handled only 12.[205]

In recent months, the NDRC has stepped up investigations of foreign companies suspected of price fixing, particularly the pharmaceutical and milk powder industries. The milk powder investigations culminated with the issuance of record fines totaling $109 million in August 2013, after companies admitted to entering into contracts with distributors to set a minimum sales price for milk powder.[206,207] U.S.-based Mead Johnson Nutrition was issued the largest fine, RMB 204 million ($33 million) or 4 percent of the company's total revenue in 2012.[208] The NDRC's antimonopoly bureau chief, Xu Kunlin, told China Central Television in August that the petroleum, telecommunications, banking, and auto industries could be next.[209] The State Administration for Industry and Commerce is also stepping up its investigative efforts. As of August 15, it is separately investigating claims of bribery, fraud, and anticompetitive behavior in the pharmaceutical industry.[210]

Although both domestic and foreign firms have been targeted in these investigations, there has been speculation that Beijing is specifically targeting multinationals either in reaction to recent antitrust cases penalizing Chinese companies overseas or as a means of protecting domestic industry.* [211] This speculation was bolstered by revelations that at a July 2013 Antimonopoly Law training session, NDRC officials pressured some 30 foreign firms to confess antitrust violations and advised them against hiring outside counsel to defend them in investigations.[212]

The broad scope of the new Antimonopoly Law makes it difficult for foreign companies to determine whether they are breaking the law. On July 31, 2013, Maureen Ohlhausen, head of the U.S. Federal Trade Commission, told a Beijing audience that she hoped Chinese competition authorities would move to "promote predictability, fairness and transparency." [213]

Protecting Business Abroad—Chinese Corporate Litigation in International and Foreign Domestic Courts

Beijing has long encouraged domestic enterprises to learn to defend themselves in foreign markets. Under the Regulations on Responding to Antidumping Suits (2001), the government also authorized the Ministry of Foreign Trade and Economic Cooperation (now a division of the Ministry of Commerce) to coordinate companies' legal activities in order to ensure that individual cases are harmonized with national trade policies and objectives.[214,215] Over the last decade, China has increasingly initiated cases in international

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* In March 2013, for instance, a U.S. federal district court found North China Pharmaceutical Group and its affiliate firm to have violated U.S. antitrust law by colluding to raise prices on vitamin C exports to the United States. The Chinese plaintiffs were fined $162 million.

courts as a means of pursuing and defending its trade and economic interests and, in recent months, there has also been a surge in Chinese corporate litigation in international and foreign domestic courts, backed by official actions and statements of support.

Bringing legal challenges directly is a means for Chinese companies to assert influence over foreign economic policies and practices in forums not designed for state-vs.-state litigation. The idea that corporate litigation can influence trade and investment relationships is not novel, but Beijing's increasing use of such litigation suggests a strategic policy that will play an important role in China's relations with its trading partners. It also has potentially significant implications for China's use of trade and investment agreements.

In 2012, in concert with Chinese government actions at the WTO, Chinese companies successfully used European courts to challenge and overturn CV and AD duties.* Speaking to the press about the 2012 legal victory of Aokang Shoes in overturning duties levied by the European Union, a spokesman for the Chinese Ministry of Commerce said it "boosted the confidence of Chinese companies in protecting their interests through legal action." [216] *China Daily* cited the victory in a call for Chinese companies to take "bolder moves to defend themselves through legal means;" and China Central Television featured a panel discussion of how the case could serve as an example for dealing with international economic challenges.[217] Chinese companies are also employing this strategy in the United States, as exemplified by the GPX Tire cases brought in U.S. federal courts last year, which supplemented Beijing's WTO actions, though less successfully.†

Chinese companies are also beginning to bring investment-related claims, both in foreign domestic courts and at the International Center for the Settlement of Investment Disputes. In foreign domestic courts, these companies are questioning other nations' assertions of what constitutes a national security issue and challenging the legality and constitutionality of other countries' domestic applications of their own laws. Ralls Corporation, for example, launched a precedent-setting challenge to the Committee on Foreign Investment in the United States (CFIUS), constitutional

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* In late 2012, Aokang Shoes, the largest private Chinese shoe manufacturer, won a major victory when the European Court of Justice overturned duties that the European Union had levied on imported Chinese leather shoes in 2006. In July 2012, Zhejiang Xinan Chemical Company, a manufacturer of the herbicide glyphosate, also won a landmark victory at the same court on similar grounds. Both companies' cases coincided closely with related WTO challenges brought by the Chinese government.

† In December 2011, the U.S. Court of Appeals for the Federal Circuit ruled that the Department of Commerce had incorrectly applied double remedies against imported tires from China's GPX International Tire Co., because statutory and case law both dictated that countervailing duties could not be applied to nonmarket economy countries. (See 1984, 1988, and 1994 amendments to the United States Tariff Act of 1930. See also *Georgetown Steel Corp. v. United States*, 801 F.2d 1308, Fed. Cir. 1986, where the court concluded that countervailing duties could not be applied to nonmarket economy countries because such duties are applied in response to subsidies; a subsidy is a financial contribution by a government that distorts a market; and there can be no finding of a subsidy where there is not a market to distort). This landmark decision threw a host of open countervailing duty investigations into limbo. Fearing that the ruling had encouraged Chinese challenges of the application of countervailing duties on a host of products, the U.S. Congress adopted a legislative fix in the form of Public Law 112–99. This legislation, signed into law on March 13, 2012, amended the Tariff Act of 1930 such that the Department of Commerce was required to apply countervailing duties to nonmarket economy countries where it found subsidies, and made this requirement retroactively applicable to "all proceedings initiated . . . on or after November 20, 2006."

due process claim, in response to President Obama's executive order that it divest its investment in an Oregon wind farm.*

At the International Center for the Settlement of Investment Disputes, Chinese companies are employing novel and more expansive interpretations of the investor protection clauses in their bilateral investment treaties. For example, China's second-largest insurer, Ping An, is currently pursuing a $2.28 billion claim at the International Court for the Settlement of Investment Disputes against the government of Belgium, arguing that Belgium violated the investor protections in the China-Belgium BIT. Though China is one of the world's most prolific BIT negotiators, historically, its agreements have been geared toward managing foreign investment within China and have provided only narrow investor protections in order to protect Beijing's sovereign authority. However, in both the Ping An case and a prior one, *Tza Yup Shum v. The Republic of Peru* (2011), Chinese companies have asserted broader interpretations of investor protection clauses in existing Chinese BITs in order to protect their investments abroad.†

From Beijing's perspective, these private corporate actions may be a necessary part of a defensive strategy abroad. According to Pu Lingchen, a partner at one of the Chinese law firms that represented Aokang Shoes in its European court cases, "Without effective legal challenges against [foreign countries'] administrative measures, the often erroneously-applied legal articles used to defeat Chinese companies will be taken as precedent in future cases," and this will encourage other foreign markets to follow suit, attacking Chinese products and companies without fear of retaliation.[218] The upshot of this new trend in Chinese corporate litigation is that it indicates a growing reliance on the rule of law. This is good because, as one *Economist* article succinctly points out, the alternative to reliance on the law "would likely be escalating retaliations unrestrained by rules."[219] But the trend of Chinese corporate plaintiffs directly litigating disputes with foreign governments also suggests a diminishing willingness to rely on the dispute resolution mechanisms offered by international legal regimes, which is not promising for the navigability of the future international legal landscape.

Implications for the United States

China's failure to rebalance its economy harms the United States in two ways. China's emphasis on fixed investment has created overcapacity in many industries, such as steelmaking, which has depressed world prices and caused unemployment in the United States and other developed countries where subsidies to industry

* Ralls Corporation, a U.S. subsidiary of one of China's largest private enterprises, filed suit in U.S. district court in October 2012, presenting a precedent-setting constitutional challenge to CFIUS and the U.S. president. The suit was filed after the president issued an executive order that halted the company's planned construction of four wind farms in Oregon. The U.S. District Court for the District of Columbia dismissed the last remaining claim in October 2013, but Ralls is appealing the Court's decision. Earlier in 2012, Chinese-owned Shanghai Pengxin won a protracted legal challenge to its efforts to acquire a group of bankrupt New Zealand dairy farms, prevailing over contentions that the acquisition might pose a threat to New Zealand's strategic national resources.

† In *Tza Yup Shum v. The Republic of Peru* (2011), Mr. Tza successfully contended that the Peruvian regulators had violated Peruvian law and the China-Peru Bilateral Investment Treaty in their treatment of his investment.

are few. Privately owned companies cannot compete on a commercial basis against Chinese state-owned and state-subsidized companies exporting goods at below the cost of production. China's resistance to imports and foreign investment in its financial and services sector, and its reliance on exports to fuel economic growth, has helped to create an enormous trade imbalance with the United States. China's share of U.S. exports is rising slowly, benefitting a few industries, such as carmakers and soybean growers. And yet, the world's second-largest economy accounted for just 7 percent of total U.S. exports in 2012, a reflection of China's discriminatory market. The cumulative U.S. trade deficit with China since 1979 has risen to more than $3 trillion, reducing employment in the United States. This trade surplus represents a claim on the productive assets of the United States.

The ASEAN-led Regional Comprehensive Economic Partnership, supported by China, has been seen as a move to counteract the U.S. promotion of the Trans-Pacific Partnership regional trade agreement. The Trans-Pacific Partnership, in turn, has been interpreted by the PRC as a strategy to reduce China's economic influence in the Asia-Pacific region. Concurrent negotiation of two competing Asia-Pacific trade pacts may lead to disunion among ASEAN member states and serve as a point of contention between the United States and China as both countries seek to establish economic and political influence over the region.

The Chinese government's attitude toward foreign investment creates an uncertain environment for U.S. firms. On the one hand, in light of slowing economic growth, Beijing has undertaken steps to reinvigorate foreign investment flows. On the other, recent government actions appear to unfairly single out foreign companies for scrutiny in bribery and pricing investigations and enforcement of the Anti-Monopoly Law.

In July 2013, Chinese regulators launched a series of antibribery and antimonopoly probes into foreign and domestic firms. The probes began with an NDRC-led antibribery probe into British multinational pharmaceutical firm GlaxoSmithKline.[220] Subsequently, numerous antibribery and antimonopoly investigations were conducted on foreign firms. China fined six manufacturers of baby formula more than $100 million for price-fixing, among them New Zealand's Fonterra, the world's largest dairy company.[221] Critics have argued that targeting foreign companies is merely a convenient scapegoat for the government, which is eager to assuage consumers who are upset about high prices and questionable safety of food and medicine products.[222]

While Chinese BITs have traditionally focused on protecting China from foreign litigants, Chinese companies' increasing reliance on international and foreign domestic courts to pursue and protect investment interests abroad suggests a shift toward a more aggressive use of investment treaties. Chinese corporate litigants can also be expected to directly pursue grievances against U.S. trade policies in U.S. courts with increasing frequency, just as they are doing in other jurisdictions around the world.

Conclusions

- China underwent a once-a-decade leadership change with a new president and premier and several new members of the Politburo and Standing Committee. The leadership indicated that China's overall economic policy goal—to transition from an export and investment-led growth model to a greater reliance on domestic consumption, remained the same. In reality, this change proved difficult to implement by a new government concerned about a slowing economy, real estate speculation, stagnating wages, and unemployment. The incoming government issued statements supporting a large and powerful state-owned sector in the economy, disappointing advocates of a larger private sector.
- The new Chinese leadership introduced initiatives aimed at reducing inequality, cracking down on corruption, and promoting urbanization. There are significant impediments to the government's ability to implement these reforms. For example, corruption is endemic at all levels of government, while local governments oppose urbanization due to fear that they will be overwhelmed by a flood of new migrants.
- China's progress in external rebalancing following the financial crisis was only temporary and largely driven by a weak global demand that reduced the relative size of China's export sector. Trade data for 2012–13 show that Chinese exports are again growing at a higher rate than imports, signaling a continued reliance on exports to fuel economic growth and a reversal in reducing China's massive trade surplus. As a result of failed measures to rebalance its economy, China has continued to expand its already record foreign currency reserves, reaching $3.66 trillion by the end of September 2013.
- China's trade surplus with the United States in goods in 2012 was $315 billion, a record. For the first seven months of 2013, China's trade surplus with the United States was $178 billion, also a record. China continues to manipulate the value of its currency, the RMB, to achieve a competitive advantage with the United States. China also continues to follow mercantilist policies to foster a trade surplus with the United States.
- China has had little success transitioning toward a consumption-led growth model and reducing its reliance on massive infrastructure projects to boost economic growth. Consequently, China's high investment levels have led to overcapacity in multiple industries, including steelmaking, shipbuilding, and solar panel manufacturing. A slowdown in urban household disposable income growth and an increase in the household savings rate have cut into consumer purchasing power and contributed to a decline in total retail sales growth.
- Chinese officials have played down the significance of lower growth, saying the slowdown is partly due to economic rebalancing. However, the government continues to stimulate the economy through a variety of small steps. For example, the State Council, China's cabinet, instituted a temporary tax cut (scraping all value-added and operating taxes) for more than 6 million

small- and medium-sized enterprises; reduced approval procedures and administrative costs for exporting companies; and provided more investment in railway construction in China's central and western regions. In a similar vein, securities regulators and the central bank issued record amounts of investment approvals to the Qualified Foreign Institutional Investors program.

- Due to its restrictive monetary policy, China's central bank has accumulated the world's largest foreign exchange reserves. The bulk of these reserves are invested in U.S. Treasury securities, so that Chinese ownership accounts for nearly one-quarter of foreign-owned U.S Treasuries. In addition, China's two largest sovereign wealth funds, China Investment Corporation and SAFE Investment Company, have expanded their equity and real estate investments in the United States.
- The PRC has concluded 13 trade agreements, the latest with Iceland and Switzerland this year—the first signed with European governments. China is in the process of negotiating six additional trade agreements, which include the ASEAN-led Regional Comprehensive Economic Partnership, an initiative to link ASEAN member states and preferential trade agreement partners to form the world's largest trading bloc. The Regional Comprehensive Economic Partnership, which excludes the United States, is competing with the U.S.-led Trans-Pacific Partnership, which excludes China. Formal negotiations of the Regional Comprehensive Economic Partnership began in May 2013 and are scheduled to conclude by the end of 2015.
- China's attempts to keep the value of the RMB artificially low while strictly limiting the flow of RMB from the country, coupled with its efforts to control a large state banking sector, led to a banking crisis. The collapse in liquidity threatened economic growth in China and demonstrated the difficulty of conducting a monetary policy so at odds with its trading partners and international norms.
- The fifth round of the U.S.-China Strategic and Economic dialogue was held on July 10–11, 2013, in Washington, DC. There were no significant achievements in the strategic track. On the economic front, the most relevant announcements were (1) resumption of bilateral investment treaty talks; (2) the launch of the Shanghai Free Trade Zone; and (3) new measures to liberalize China's financial sector. In the multilateral arena, the United States successfully challenged China's improper imposition of antidumping and countervailing duties at the WTO.
- China continues to take incremental steps toward RMB internationalization, but the goal of making the RMB a major international currency remains out of reach as the government continues to maintain strict controls on cross-border capital flows.
- Beijing's efforts to reform the financial system continue to be hampered by risky off-balance-sheet lending by banks and nonbank financial institutions. Beijing has undertaken efforts to curb these risky lending practices, removing the floor on lending rates and imposing a short-term credit crunch in a clumsy effort

to send a strong signal to the financial sector. However, there is little evidence so far that these efforts have succeeded. The ceiling on rates paid to depositors remains low, and some risky lending actually increased during the credit crunch.

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SECTION 2: TRENDS IN CHINESE INVESTMENT IN THE UNITED STATES

Introduction

China has amassed the world's largest trove of dollar-denominated assets. Although the true composition of China's foreign exchange reserves, valued at $3.66 trillion, is a state secret, outside observers estimate that about 70 percent is in dollars.* China's concentration on accumulating dollar-denominated assets is unusual for another reason: China's government has deliberately adopted a conservative investment strategy, even accepting low or negative returns on its holdings.

In recent years, China has become less risk averse and more willing to invest directly in U.S. land, factories, and businesses. This trend appears to be accelerating. In June 2013, China announced its largest purchase of a U.S. asset to date: a $7.1 billion acquisition of Virginia-based Smithfield Foods, Inc. Given China's large holdings of U.S. dollars, China has a huge potential for foreign direct investment (FDI),† particularly if China should substitute or abandon portfolio investment for direct investment.

This section, which draws on the Commission's May 9, 2013, public hearing, continues the Commission's assessment of Chinese investment in the United States. It examines the motives and incentives driving Chinese investment, and the sectoral and geographical distribution of Chinese investment in the United States. The section also examines the mechanisms to screen and monitor such investments for threats to national security. Finally, it evaluates the proposals for reforming such mechanisms and amending them to include a net economic benefit test.

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*Official U.S. government figures show that China holds $1.28 trillion in U.S. Treasuries, making China the largest foreign holder of U.S. Treasury securities. This figure does not include holdings of U.S. agency or corporate debt nor does it reveal China's purchases of U.S. Treasury securities on the secondary market or through foreign exchanges. U.S. Department of the Treasury, "Major Foreign Holders of Treasury Securities" (Washington, DC: September 17, 2013). *http://www.treasury.gov/resource-center/data-chart-center/tic/Documents/mfh.txt*.

†FDI is investment to acquire a "long-term relationship and reflecting a lasting interest and control" in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. There are two types of FDI: inward FDI and outward FDI, resulting in a *net* FDI *inflow* (positive or negative) and stock of FDI, which is the cumulative number for a given period. FDI excludes most portfolio investment, which is usually investment through the purchase of shares of an insufficient number to allow control of the company or its board of directors. A foreign direct investor may acquire voting power or control of an enterprise through several methods: by incorporating a wholly owned subsidiary or company (e.g., a "greenfield" investment); by acquiring shares in an associated enterprise; through a merger or an acquisition of an unrelated enterprise; or by participating in an equity joint venture with another investor or enterprise. For more information, see UNCTAD [United Nations Conference on Trade and Development], *World Investment Report 2010: Investing in a Low Carbon Economy* "Methodological Note" (New York and Geneva: United Nations, 2010); and World Bank, "Foreign Direct Investment." *http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD*.

China's National Outward Direct Investment Strategy

While the Chinese government has been encouraging large amounts of inward FDI to foster domestic economic growth for decades, policies supporting outward FDI have only recently been put in place.[1] The Chinese government explicitly adopted a policy encouraging Chinese companies to invest abroad in its 10th Five-Year Plan (2001–2005).[2] The "go out" policy became one of China's main development strategies and has focused largely on Chinese state-owned enterprises (SOEs). According to Derek Scissors, then-senior research fellow at The Heritage Foundation, state-owned and state-controlled entities dominate China's global outward FDI: From 2005 to 2012, SOEs accounted for 86 percent of total outward investment, and private entities accounted for 14 percent.[3]

The 12th Five-Year Plan (2011–2016) accelerated China's "go out" strategy by calling for a three-pronged approach. First, competitive Chinese manufacturing companies should invest overseas in order to establish international sales networks and globally recognized brand names. Second, Chinese companies should invest in research and development (R&D) outside China. Finally, the plan set goals for shifting acquisitions from sectors that support resource-intensive and polluting manufacturing in favor of services and those sectors that promote a cleaner, high-tech economy.[4]

The "go out" policy focused China's outward investment goals on sectors in which domestic state-owned or state-controlled firms were already intended to be dominant by policy (the so-called "strategic and heavyweight industries"), such as energy, machinery, construction, and information technology (IT).[5] The 12th Five-Year Plan expanded this list with the Strategic Emerging Industries, which the government has selected for special promotion and support. The seven Strategic Emerging Industries are energy conservation/environmental protection, next-generation IT, biotechnology, high-end equipment manufacturing, new energy, new materials (raw materials), and new energy automobiles. As part of its "go out" strategy, the Chinese government has developed specific investment funds to promote outward investment in natural resources and in fields with technological promise.[6]

According to the 12th Five-Year Plan, the contribution of the Strategic Emerging Industries to China's gross domestic product (GDP) is to grow from roughly 3 percent in 2010 to 8 percent by 2015 and 15 percent by 2020. The government promised to offer financial support, promote technical innovation and education policies, and to create a market environment to facilitate the development of the Strategic Emerging Industries.* With this change, China's outward FDI has expanded from securing natural resources to include helping Chinese companies "upgrade their technology, pursue higher levels of the value chain previously conceded to foreign firms, and augment managerial skills and staffing to remain globally competitive."[7]

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*For background on the 12th Five-Year Plan generally, and the "Strategic and Emerging Industries" specifically, see U.S.-China Economic and Security Review Commission, *2011 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, 2011), chapter 1, section 4. *http://www.uscc.gov/content/2011-annual-report-congress*.

Another important goal of Chinese outward FDI is creation and promotion of globally competitive brands. With some notable exceptions (such as technology firm Lenovo, telecommunications giant Huawei Technology Co. Ltd., and Haier Group, a home appliance and consumer electronics manufacturer), Chinese companies have stumbled in efforts to build home-grown brands that have global recognition. The alternative strategy for many Chinese companies looking to create global reputations has come to mean buying strong brands abroad that already have marketing power rather than attempting to build Chinese brands and businesses.[8] The aim is to create multinational companies through acquisition, particularly in the areas that are critical to China's economic development goals.[9] Finally, investment can be a crucial tool of soft power and may be used by the Chinese government to link financial incentives to meeting political goals or simply to burnish China's image abroad.

The Chinese government wields many tools to encourage and guide investment to favored companies or industries. Overseas investments by Chinese firms require permission from the government, because the country controls capital movements across its borders, and such clearances are easier to receive if the investment is in the area favored by the Chinese government, such as food, technology, and natural resources.[10] Favored industries also enjoy preferential access to financing and other benefits, making them more likely to have incentives and opportunities to go abroad. These more indirect policies are highly effective. For example, many Chinese investments in the United States reflect the Strategic Emerging Industries mentioned in the latest Five-Year Plan. In addition, evidence is growing that the Chinese government is using or sanctioning use of cyber espionage against private enterprises to give companies in favored industries a competitive edge. (For more on China's use of cyberespionage in general, and industrial espionage in particular, see chap. 2, sec. 2, of this Report.)

Patterns of Chinese Investment in the United States

In contrast to China's large holdings of portfolio investment, China is still a relative newcomer when it comes to FDI. According to official statistics from the U.S. Bureau of Economic Analysis (BEA), in 2012, the United States attracted $174.7 billion of global FDI, of which $219 million came from China. For 2011, BEA estimates that flows of Chinese FDI were valued at $576 million (with FDI stock * of $3.8 billion). A better estimate—by country of ultimate beneficiary owner—put stock of Chinese FDI in the United States at $9.5 billion at the end of 2011.† For the same year, China's Ministry of Commerce (MOFCOM) estimates the flows of Chinese FDI to the United States at $1.8 billion, with stock of FDI es-

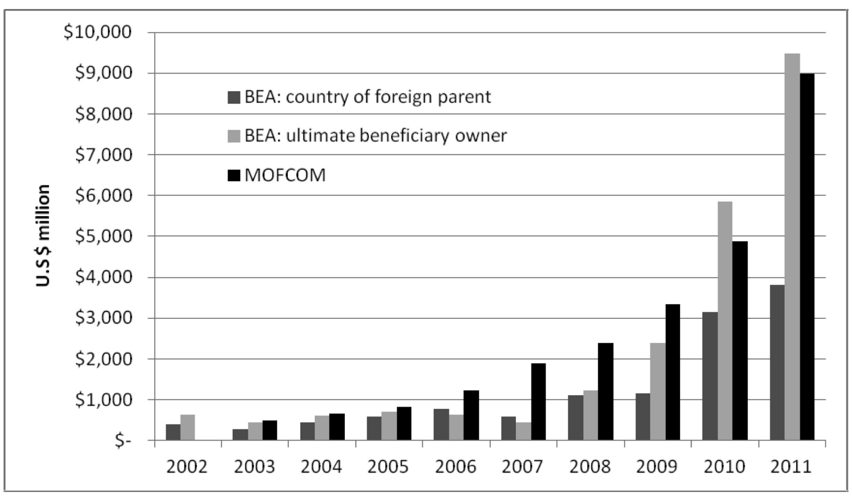
* FDI stock is the cumulative value of the capital and reserves attributable to the parent enterprise (the investor). FDI flows comprise capital provided by a foreign direct investor to an FDI enterprise, or capital received from an FDI enterprise by a foreign direct investor (these data are commonly compiled for a given period, usually per annum). For details, see UNCTAD, *World Investment Report 2010: Investing in a Low Carbon Economy* "Methodological Note" (New York and Geneva: United Nations, 2010). *http://www.unctad.org/en/docs/wir2010meth_en.pdf*.

† Unlike the standard reporting method, which attributes each investment to the direct purchaser of record, the method known as "country of ultimate beneficiary owner" tracks the investment to the actual owner.

timated at around $9 billion. Despite a sustained upward trend (see figure 1), Chinese FDI accounts for less than 2 percent of total FDI in the United States.

Whether one uses the U.S. or Chinese figures, the official estimates are too low (for example, just adding together the value of the deals publicly announced in 2012, exceeds the U.S. government's estimates for cumulative Chinese investment). One key reason is that the estimates do not account for flows of FDI through Hong Kong and other offshore financial centers, such as the Cayman Islands, which are likely transit points for Chinese money on the way to the real investment destination. Private estimates of Chinese FDI in the United States provide more up-to-date information but also vary depending on the methodology used.* Dr. Scissors estimates that in 2012, China invested over $14 billion in the United States, with cumulative FDI between 2005 and 2012 reaching $54.2 billion. According to estimates by the Rhodium Group, in 2012 Chinese firms invested $6.7 billion, for a total of $23.1 billion between 2000 and 2012.

Figure 1: Chinese FDI Stock in the United States, 2002–2011



Source: U.S. Bureau of Economic Analysis; China MOFCOM, various years.

At the Commission's May 9, 2013, hearing, witnesses suggested a variety of reasons for Chinese FDI into the United States. According to Thilo Hanemann, research director of the Rhodium Group, the recent increase in Chinese FDI in the United States is

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*The International Trade Administration (ITA), a bureau within the U.S. Department of Commerce, stated in a 2013 report on Chinese FDI in the United States that it is "important to be aware of different estimates" of Chinese investment. ITA noted that private sector valuations employ different definitions of FDI, data gathering mechanisms, and accounting methods that lead to differences in reported value of investments. See International Trade Administration, *Report: Foreign Direct Investment (FDI) in the United States from China and Hong Kong SAR* (Washington, DC: July 17, 2013). Private sector estimates help bridge a gap that currently exists in classifying FDI by ownership (for example, private vs. state-owned investor), as the U.S. Department of Commerce is unable to report on company-level data for FDI in the United States. BEA, which prepares the U.S. international transactions accounts, is required by law to keep such company-level data confidential.

driven by changing policies and commercial considerations. On the policy side, Beijing has become increasingly aware of the "strategic vulnerability" of having most of its foreign exchange reserves invested in low-interest-bearing U.S. Treasury securities and is looking to diversify its investments. On the economic side, U.S. leadership in technology and services has made the United States an attractive prospect for Chinese investors seeking to "increase their competiveness at home and preserve access to U.S. customers abroad." [11] Mr. Hanemann noted that a related trend is growing investment in R&D and modern service operations such as customer service and retail: "Those investments complement the acquisition of advanced manufacturing assets and allow Chinese firms to tap into the U.S. talent base and move closer to their U.S. customers." [12]

Dr. Scissors concurred that the United States is an attractive destination for any investment, including Chinese investment, by virtue of its abundant land and energy assets, technology, and skilled labor. But Dr. Scissors has identified a more strategic dimension behind the interest of the Chinese government in foreign investment:

> *There is almost surely a plan behind Chinese investment, both globally and in the U.S. state-owned enterprises dominate outward investment volume, making it feasible to have a coordinated strategy beyond simply seeking demand or higher financial return. More specifically, Beijing has repeatedly indicated that ownership of overseas commodities is a valuable means of ensuring the continuous imports the [Chinese] economy so badly needs.*[13]

Andrew Szamosszegi of Capital Trade Inc. concluded in his testimony that Chinese investment in the United States was motivated both by market forces and by government policies and guidance, focusing, in particular, on the Chinese government's role as a "gatekeeper" in the investment approval process.[14] Mr. Szamosszegi also pointed out that a minor motivating factor may be the desire by private Chinese firms that have difficulty raising capital in China (because state-owned banks tend to favor SOEs) to come to the United States to take advantage of the U.S. stock exchanges. From 2007 to 2011, more Chinese firms entered U.S. capital markets through the purchase of listed U.S. shell companies, a technique known as a "reverse merger," than through initial public offerings (IPOs) by a ratio of three to one.[15] (See chap. 1, sec. 3, of this Report for fuller treatment of the reverse merger issue.)

Distribution of Investment by Sector and Ownership

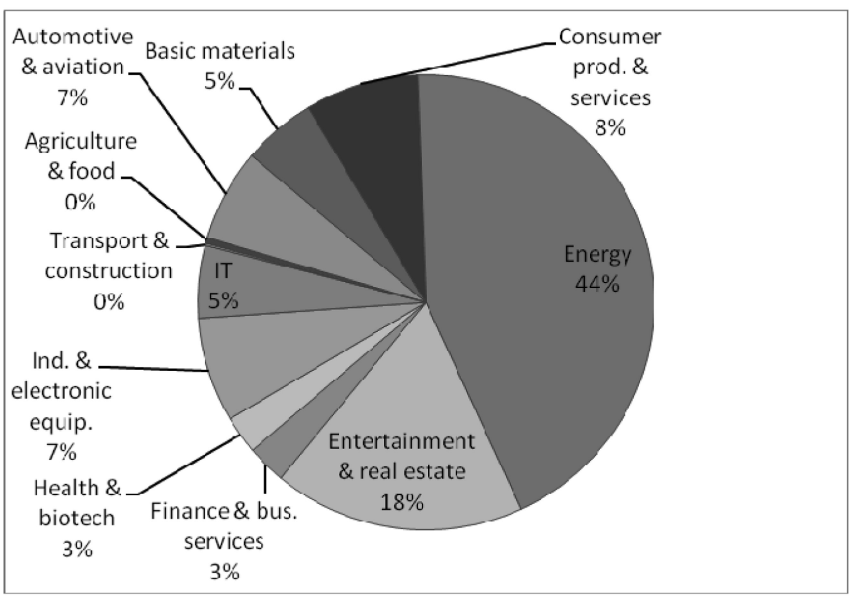
In the United States, Chinese investments have emphasized services, energy, and technology and are also notable for their focus on brand acquisition. Examples include Lenovo's purchase of IBM's personal computer division, and a purchase by a unit of China Aviation Industry Corp., a state-run company, of Cirrus Industries, a Minnesota-based company famous for its very light jet aircraft.

Though Chinese FDI in the United States comes in a variety of shapes and sizes, by value, it is dominated by SOEs that closely follow the industrial policies of the Chinese government and that tend to make far larger investments. Private investors, which Rhodium defines as having 20 percent or less government ownership, are more likely to be involved in smaller deals. According to Rhodium estimates, in the years between 2000 and 2012, state-owned companies concluded 149 deals valued at over $12.6 billion, while private companies made 444 deals, valued at $10 billion.

Energy and services have been primary targets for Chinese investors. Chinese FDI in the energy sector is dominated by a few major deals by state-owned energy giants, as they pursue know-how and technology such as fracking, which China lacks (see figure 2). Chinese energy majors have been particularly active in the last five years. In January 2012, Sinopec paid $2.5 billion to Devon Energy (of Oklahoma City) for a stake in about 1.3 million acres of drilling property in Michigan, Ohio, and elsewhere. In February 2013, Chesapeake Energy Corp. sold a stake to Sinopec for $1 billion in an oil and natural-gas field straddling the Oklahoma and Kansas border. In 2010 and 2011, China National Offshore Oil Corporation (CNOOC) bought stakes in Chesapeake's oil and gas shale assets in south Texas for $1.08 billion and in Colorado and Wyoming for $570 million, respectively.

Figure 2: Cumulative Chinese FDI in the United States, by Sector, 2000–2013Q2

(total deal value $27.9 billion)



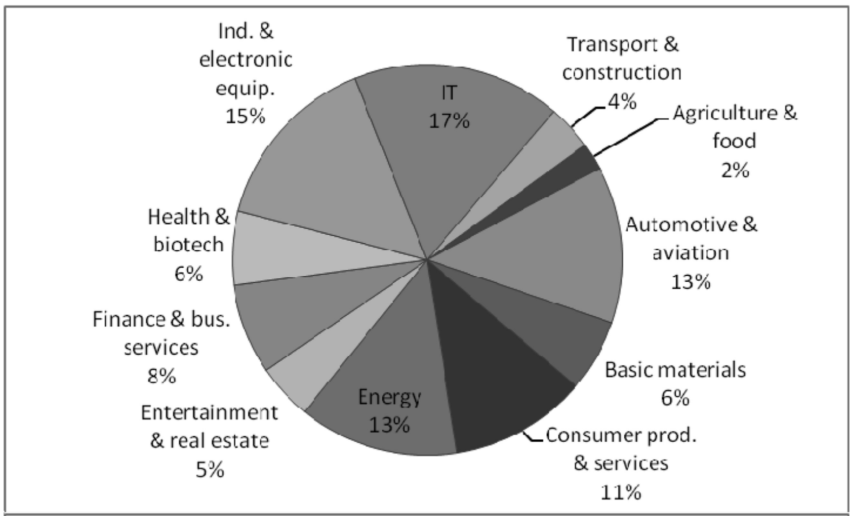
Source: Rhodium Group, *China Investment Monitor* (New York, NY: 2013).

Services are also playing a major role, accounting for over a quarter of China's outward FDI value in the United States. In this segment, a burgeoning industry is real estate, which is favored by many Chinese investors as a more secure investment than Chinese equities. Last year's purchases included major investments in U.S. cities, especially San Francisco, where China's largest developer, China Vanke Co., partnered with Tishman Speyer Properties, a U.S. real estate business, to build a $620 million apartment complex downtown. (Under the deal, Vanke provides 70 percent equity, and Tishman is responsible for the construction.)

High-tech manufacturing is another important component of China's investments, particularly when measured in terms of the number rather than the value of deals. Industries such as IT and industrial equipment take top positions, reflecting Chinese interest in U.S. technology (see figure 3).

Figure 3: Cumulative Chinese FDI in the United States, by Sector, 2000–2013Q2

(670 deals total)



Source: Rhodium Group, *China Investment Monitor* (New York, NY: 2013).

To date, the largest Chinese acquisition in the United States has been the 2013 Shuanghui International Holding Ltd.'s $7.1 billion bid (including debt assumption) for Virginia-based Smithfield Foods Inc., the biggest U.S. pork producer. Smithfield and Shuanghui submitted the deal voluntarily for review by the Committee on Foreign Investment in the United States (CFIUS), and it was cleared in early September 2013, according to the companies (Smithfield shareholders approved the deal on September 24, 2013).[16] The agricultural sector has not been an important target for Chinese FDI in the United States so far, but it is a part of a broader trend of Chinese global investment in farm assets or food technologies.[17] China's acquisitions in agriculture and other sectors are being driven by the desire to secure higher volumes of safe products and, in the long term, access to advanced production and processing technologies. (For a discussion of China's food security concerns and agricultural policy, see chap. 1, sec. 4, of this Report.)

Chinese FDI is present in most U.S. states, but states with certain industry clusters, such as oil, gas, and automotive, stand out among Chinese investors. According to Mr. Hanemann, California is by far the number one destination for Chinese investment by the number of deals, with over 170 transactions between 2000 and 2012, or roughly one-quarter of all Chinese FDI in the United States. Other top recipients by the number of deals are New York, Texas, Illinois, and Michigan. These five states account for 352 deals out of 620 concluded between 2000 and 2012. By value of deals, New York, Texas, and Virginia lead, followed by California.[18]

China's attempts to diversify its investment away from U.S. Treasury bonds are also evident in its investments in U.S. private equity. For example, the State Administration of Foreign Exchange (SAFE), which manages China's foreign exchange holdings, has set up a New York operation to invest in private equity, real estate, and other assets.* Unlike China Investment Corporation (CIC), China's less publicity-shy sovereign wealth fund, SAFE has been very secretive, so little is known about the nature and magnitude of SAFE's deals.[19] SAFE has been active in buying United Kingdom (UK) property and infrastructure and Japanese equities, according to some analysts. Dr. Scissors estimates that SAFE's non-bond investments in the United States total $4.5 billion, mostly in private equity funds and similar investments. For example, in 2011, SAFE invested $500 million in a real estate private equity fund managed by the Blackstone Group.[20]

Economic Security Issues Related to Chinese Investment in the United States

The potential economic benefits of investment are well known: job creation, expansion of the tax base, and improvement in productivity and overall competitiveness. This is especially the case for "greenfield" investments (i.e. investments in which entirely new factories or businesses are created). Mergers and acquisitions also can generate or save jobs if the new investors revitalize ailing firms or expand local capacities. An investment in the United States made by a Chinese company on market-based terms free from strategic considerations or political interference has the potential for providing the same benefits made by any other purely economic investor.

But as is evident from the figures, Chinese investment in the United States is more often than not undertaken with a nod to Chinese industrial policy goals, such as the acquisition of valuable technology to enhance China's carefully chosen Strategic Emerging Industries (for example, Chinese investments in U.S. battery and solar technology). When such investments are made by Chinese companies owned or controlled by the government, they attract extra scrutiny for their apparent policy goals.

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* In addition to SAFE, another Chinese investment entity, China Investment Federation, established an office in the Trump Building in Manhattan. The group was started in the summer of 2012 with the aim of helping Chinese investors overcome cultural, political, and logistical hurdles to doing business in the United States. It is sponsored by DKI Capital, a Beijing-based investment firm. Lingling Wei and Carolyn Cui, "China is Seeking U.S. Assets," *Wall Street Journal*, May 20, 2013; Bloomberg, "China Said to Study U.S. Property Investments with Reserves," May 27, 2013. *http://www.bloomberg.com/news/2013-05-27/china-said-to-study-investing-reserves-in-u-s-property-market.html*; and William Alden, "A Toehold for China on Wall Street," *New York Times*, May 17, 2013. *http://dealbook.nytimes.com/2013/05/17/a-toehold-for-china-on-wall-street/?partner=bloomberg*.

Experts testifying at the Commission's May 9 hearing agreed that the issue of the Chinese government's role in promoting foreign investment was further complicated by the difficulty in separating truly private Chinese companies from those under government influence or control. For example, if a private company in China sees that the government favors investment in a certain industry, it will try to invest in that industry to curry favor and take advantage of subsidies provided by the government. Mr. Szamosszegi said that "it would be the same as if the government had said . . . 'we want you to invest a lot and we want you to invest in the U.S. industry.'"[21] Dr. Scissors pointed out that for private firms in China "there is no rule of law; there is no right of refusal for private firms" to reject government pressure to make an investment.[22]

Furthermore, even genuinely private companies benefit from a slew of local and provincial government subsidies, creating an uneven playing field for their foreign competitors. A recent study by Usha and George Haley, U.S. researchers on China's economy, found that Chinese steel, glass, paper, and auto parts producers turned into global players with the benefit of local subsidies.[23] Another study, by Matthew Forney and Laila Khawaja from Fathom China, a research consultancy, found that most non-state-owned Chinese companies received some form of direct subsidy.[24]

Witnesses at the Commission's hearing pointed out that U.S. trade laws may not be sufficient to address negative aspects of state-driven Chinese investment. For example, when a U.S. firm has to obtain credit at market rates to finance its activities, but a Chinese firm can obtain financing at minimal or even zero interest from Chinese state-owned banks, it distorts competition in the U.S. market. According to Elizabeth J. Drake, partner at Stewart and Stewart, current U.S. law does not adequately protect U.S. workers and firms from this type of unfair competition. She noted:

> *Existing antitrust rules, for example, are based on assumptions about the profit-maximizing behavior of market actors that simply may not apply to certain Chinese firms. In the area of predatory pricing, the U.S. applies a recoupment test, under which pricing is only deemed anticompetitive if the predator is likely to eventually collect enough profits to make up for the losses caused by the predatory behavior. . . . A Chinese SOE, by contrast, may be able to rely on state support to maintain losses that may never be recouped, and engage in predatory pricing in order to gain U.S. market share in the furtherance of political or industrial policy goals. Such a firm could engage in predatory pricing behavior that causes severe damage to its U.S. competitors, but, under current law, such behavior would not be considered anticompetitive as long as the Chinese firm was not expected to recoup its losses.*[25]

Mr. Szamosszegi and Ms. Drake noted that one motivation for Chinese investment may be to access markets that are otherwise restricted by trade barriers such as tariffs or duties imposed to counteract unfair trade practices, such as antidumping and countervailing duties.[26] Chinese producers are currently subject to 121 antidumping and countervailing duty orders. According to Mr. Szamosszegi, some Chinese firms have sought to avoid the duty orders by shipping to the United States illegally through third markets, while other Chinese firms from the steel, aluminum, and solar panel industries have attempted to invest in the United States to avoid existing trade remedy orders or to preempt an investigation.

National Security Issues Related to Chinese Investment in the United States

Trade-related aspects of foreign investments may intersect with national security concerns. For example, foreign intelligence collection efforts and espionage that target U.S. technology, intellectual property, trade secrets, and other proprietary information can be concealed under the seemingly benign pretext of foreign investment in cleared government contractors. In order to protect classified national security information, the federal government created the National Industrial Security Program (NISP), a program administered by the U.S. Defense Security Service on behalf of the U.S. Department of Defense and 25 other government agencies. This program seeks to prevent unauthorized disclosure of classified information, and to mitigate the threat posed by companies determined to be under foreign ownership, control, or influence (FOCI).* The Defense Security Service can mitigate some dangers of such foreign investment using a specialized set of methods, which vary from case to case (for example, altering the terms of the deal or board membership).[27]

There may be gaps, however, in the ability of the Defense Security Service to identify and mitigate FOCI. Approximately 75 percent of NISP companies are privately held and are not required to disclose their ownership or investor information to an independent regulatory agency such as the Securities and Exchange Commission. When a company enters the NISP, it must fill out a special form,[28] and the Defense Security Service then attempts to verify this self-reported information. Such verification efforts are often hampered by limited resources and the lack of disclosure requirements to an independent regulatory agency. Furthermore, a foreign entity could be the primary investor in a U.S. private equity fund with ownership in a company in the NISP without this potential influence ever being disclosed. Such indirect ownership further complicates analysis of possible foreign influence.

The Committee on Foreign Investment in the United States

The United States has a limited FDI screening process. CFIUS is an interagency committee that reviews certain mergers, acquisitions, and takeovers of U.S. businesses by foreign persons, corporations, or governments for national security risks. Submitting the

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*A company is considered to be operating under FOCI whenever a foreign interest has the power, direct or indirect, whether or not exercised, and whether or not exercisable, to direct or decide matters affecting the management or operations of that company in a manner that may result in unauthorized access to classified information or may adversely affect the performance of classified contracts. Defense Security Service, "Foreign Ownership, Control or Influence (FOCI)" (Quantico, VA). *http://www.dss.mil/isp/foci/foci_info.html*.

details of an acquisition for national security review is voluntary, but CFIUS can also initiate an investigation on its own after a merger or acquisition of a U.S. company by a foreigner. CFIUS can demand that the deal be unwound or restructured on national security grounds if a deal is considered a security risk, even after the deal has been completed.

There is no definition of national security in the CFIUS legislation, which allows some discretion in initiating a review process. Screening only applies to potential mergers and acquisitions and does not extend to greenfield investments (i.e. a foreign entity is establishing a company or affiliate where none exists). CFIUS also does not assess economic costs or benefits to the United States of any given acquisition. Several other countries, including Canada, Australia, France, and China have screening programs similar to CFIUS that also apply a net economic benefit test.

Among other things, CFIUS considers two elements when evaluating whether an investment by a foreign entity warrants an investigation: the degree of foreign state control, and whether the transaction could affect U.S. national security.[29] For China, the question of state control can be particularly complicated, because the government's role is not always straightforward or even disclosed. Despite economic reforms and moves toward privatization, large swathes of the Chinese economy remain under control by various parts of the Chinese government.[30]

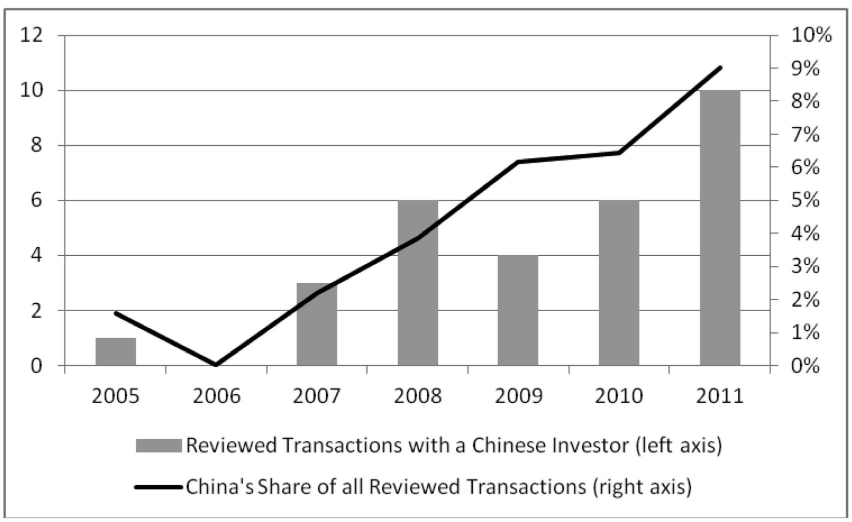
In addition to outright ownership or control, the Chinese government or the Chinese Communist Party (CCP) can also control a publicly traded corporation by influencing the composition of corporate boards and the corporation's management team.[31] Finally, it remains debatable whether privately held Chinese corporations, especially in industries the government deems critical, such as the Strategic Emerging Industries, are free of state control or influence. For example, a report by the House Intelligence Committee flagged Chinese telecommunications-equipment makers Huawei and ZTE for potentially providing opportunities for Chinese intelligence services to tamper with U.S. telecommunications networks.[32]

Chinese managers often complain that their firms face discrimination from regulators in the West. For example, Gao Xiqing, vice chairman of CIC, complained during a visit to Washington in April 2013 that his fund was being "singled out as a different investor" by the U.S. authorities, going as far as to say that certain people were "slapping [us] in the face and telling [us], OK, we don't like you."[33]

The perceived bias against Chinese investment has been caused by a few failed deals and largely precipitated by Chinese investors' confusion over U.S. regulatory structures. In China, deals are approved in a centralized, top-down process, but in the United States, the control and regulation of foreign investment are decentralized. Federal regulations are largely responsible for vetting deals on national security grounds, with local governments, private individuals, labor unions, nongovernmental organizations, and Congressional leaders weighing in on various aspects of the deal. Chinese investors often attribute the derailment of a deal due to political or activist opposition to purposeful discrimination by the U.S. government against Chinese investors, but in reality it is a natural consequence of a robust democratic process. In contrast, China has several major industries, including finance, agriculture and telecommunications services, walled off from foreign investors, often as part of a policy to promote domestic companies.

U.S. regulators have blocked at least six major acquisitions from China since 2005; however, there were hundreds of projects (including deals done by CNOOC, known previously for a failed 2005 bid for Unocal) that were not rejected. Overall, despite perceptions in China, to date, the number of Chinese deals reviewed by CFIUS has been very small and those rejected even smaller (see figure 4).

Figure 4: Chinese Transactions Covered by CFIUS, 2006–2011



Source: Committee on Foreign Investment in the United States, *Annual Report to Congress* (Washington, DC: various years).

According to the 2012 CFIUS report to Congress, in 2011, out of 111 covered transactions, 10 were from China. Out of 114 planned and completed critical technology transactions in 2011, China was linked to four.[34] (For a list of select controversial Chinese investments, see Addendum I.)

Proposals for Amending the CFIUS Mandate

At the Commission's May 9, 2013, hearing, witnesses debated whether CFIUS should be amended to address some of the perceived gaps in the current mandate (for example, CFIUS cannot investigate and block greenfield investments, even those that might pose national security threats).* Investors and analysts frequently criticize CFIUS for the secrecy of its reviews, the opacity of its national security criteria and decision-making process, and its limited scope.

*There appear to be no federal laws or screening mechanisms that empower the federal authorities to evaluate whether a greenfield investment may pose a national security threat.

To address some of these concerns, Dr. Scissors proposed that CFIUS develop a very narrow definition of national security, which would make the reviews more predictable and make it easier to understand CFIUS's actions.[35] Dr. Scissors advocated expanding the CFIUS mandate to include any domestic transaction, including greenfield investments, involving a foreign entity. Under the expanded mandate proposed by Dr. Scissors, for example, CFIUS should be able to investigate equipment contracts, with a particular focus on telecom equipment in light of cybersecurity worries.[36] Dr. Scissors also criticized CFIUS for its extreme secrecy, arguing that a more transparent review, with both Congress and foreign investors receiving more information about transactions, would enhance the credibility and accountability of the CFIUS process.[37]

Mark Plotkin, partner, Covington & Burling, agreed that the CFIUS review process could be made more transparent:

> *CFIUS today will not even acknowledge that it is reviewing a ticket or transaction if asked. I do think it is important for the public to know that CFIUS is reviewing transactions. . . . The regulation of CFIUS could be enhanced to provide more information to foreign investors as to what kind of issues CFIUS takes into account when CFIUS is reviewing a transaction.*[38]

Ms. Drake proposed that the CFIUS review process be expanded to include a "net benefit test" to review "all investments that are subsidized by or owned or controlled by foreign governments. Such investment should be reviewed from the standpoint of competitive neutrality and be reviewed for their economic as well as national security implications."[39] In other words, under her proposed revision, CFIUS would not just screen foreign investment for national security concerns but also for any potential economic benefit or risk to the United States.

Mr. Plotkin, on the other hand, argued against an introduction of a clear definition of national security under CFIUS because it would impede CFIUS's ability to address new or emerging problems:

> *That flexibility [of the definition of national security] allows the CFIUS agencies the ability to weigh and address their individual equities and mandates during the course of a CFIUS review, and it also allows CFIUS to adapt to an ever-changing threat environment. I'd like to offer two examples of that adaptability: cyber security and state-owned enterprises.*[40]

Similarly, Mr. Plotkin said it would be a mistake to expand the CFIUS mandate to include a net benefit, or economic, test, because the "principles underlying an economic test are beyond the core competency of CFIUS. . . . Moreover, CFIUS operates in strict secrecy. Secrecy in the conduct of an economic benefit test risks being perceived as protectionist."[41]

Implications for the United States

The federal government is responsible for national security and has put in place a system to review transactions with potential security implications. China presents new challenges, because investment by SOEs can blur the line between national security and economic security. The possibility of government intent or coordinated strategy behind Chinese investments raises national security worries. Recent investments by Chinese companies in global shale oil and gas projects match Chinese government interests in acquiring relevant technologies and diversifying its energy mix. More broadly, Chinese companies' attempts to acquire technology track closely the government's plan to move up the value-added chain. There is also an inherent tension among the different levels of government in the United States regarding FDI from China. The federal government tends to be concerned with maintaining national security and protecting a rules-based, nondiscriminatory investment regime. The state governments are more concerned with local economic benefits, such as an expanded tax base and increased local employment, rather than national strategic issues, especially as job growth has stagnated.

While Chinese FDI in the United States has been quite low so far, it has substantial room to grow. The United States needs to be prepared to harness the benefits and address the problems posed by Chinese funds flowing into our economy. Though estimates vary, even the most generous assessment shows that Chinese FDI constitutes less than 2 percent of total inward direct investment coming to the United States. Chinese companies are most interested in the U.S. energy, real estate, and service sectors, particularly financial services. In energy, as in other sectors, they are pursuing technology and expertise they do not yet have.

If current trends continue, much of China's outward FDI, at least in value terms, will be made by Chinese SOEs. Chinese SOEs receive substantial benefits from the central and provincial governments, which are not available to their foreign competitors, including preferential policies and low cost of capital. These SOEs are increasingly active globally, seeking to expand China's economic reach and power around the globe. They are involved in aerospace, autos, oil, steel, telecommunications, and other industries that the Chinese government has designated as strategic. U.S. companies face an uneven playing field when competing against Chinese SOEs in the United States and in the global market while enjoying none of the benefits afforded to SOEs by the Chinese government.

Chinese investments in the United States are subject to the same set of rules and regulations as investment from other foreign countries in the areas of foreign corrupt practices, export administration, sanctions, and antitrust. If Chinese firms run afoul of these rules, they will be subject to legal sanction. But gaps exist in the U.S. government's ability to address the competitive challenges posed by SOEs.

Chinese SOEs commonly receive subsidies from central or local governments, such as low-cost loans, loan forgiveness, favorable regulatory and tax treatment, discounted land purchases, free infrastructure improvements, and such inputs as electricity or fuel at below-market rates—benefits that are not available to U.S. competitors. By contrast, U.S. affiliates in China operate at a distinct disadvantage in sectors where favored Chinese SOEs enjoy extensive government support.

When companies favored by the Chinese government invest overseas, the situation becomes more problematic. Often, Chinese SOEs do not have to worry about making a profit, because they can rely on government support. They need not worry about their fiduciary obligations to their shareholders. Instead, they are often encouraged by the government to pursue other goals. These include resource acquisition, technology transfer, and capturing market share, regardless of cost.[42]

Furthermore, SOEs investing in the United States may engage in particular predatory or anticompetitive behavior that U.S. trade remedies cannot address. For example, an SOE exporting goods below cost to the United States can be penalized through antidumping and countervailing duty laws. Such laws, however, do not apply to goods made in the United States by a competitor subsidized by the government, a practice that could leave U.S. companies at a disadvantage at home and in third-country markets.

Conclusions

- Chinese foreign direct investment (FDI) in the United States continues to grow, though from a very low base. According to official U.S. statistics, in 2012 the United States attracted $174.7 billion of global FDI, of which $219 million came from China. An estimate by country of ultimate beneficiary owner, which better tracks actual investors, put stock of Chinese FDI in the United States at $9.5 billion at the end of 2011. For the same year, China's Ministry of Commerce put the flows of Chinese FDI to the United States at $1.8 billion, with stock of FDI estimated at around $9 billion.
- Official statistics underestimate the true volume of Chinese investment, because they do not account for flows of FDI through Hong Kong and other offshore financial centers, which are likely transit points for Chinese money on the way to the real investment destination. Official data are also provided after a significant delay, which hinders analysis.
- To date, state-owned enterprises (SOEs) have dominated Chinese FDI in the United States measured by the value of deals, though private companies lead by the number of deals. One reason is that the biggest investments so far have been made in the oil and energy fields, which are dominated by Chinese state-owned giants.
- Chinese investors have primarily targeted those sectors where China lacks know-how and technology, particularly in the Strategic and Emerging Industries identified in the 12th Five-Year Plan. Energy and services (in particular real estate and financial services) have received the most investment. High-end manufacturing is another important destination for China's investments, particularly when measured in terms of the number rather than the value of deals.
- Due to the considerable government ownership of the Chinese economy, provision by Chinese companies of critical infrastructure to U.S. government or acquisition by Chinese companies of

U.S. firms with sensitive technology or intellectual property could be harmful to U.S. national interests. The Committee on Foreign Investment in the United States (CFIUS) investigates the national security implications of mergers and acquisitions by foreign investors of U.S. assets.

- Investigations by CFIUS and other national security review and mitigation mechanisms may be hampered by limited resources or limited statutory authority.
- Investments made by Chinese state-owned or -controlled companies can also pose economic security threats. The Chinese government provides significant financial and logistical support. This puts U.S. firms, which receive no such support, at a competitive disadvantage. When Chinese SOEs invest abroad, they do not necessarily seek profit and may instead pursue government goals such as resource acquisition or technology transfer.
- Chinese investments in the United States are subject to the same set of rules and regulations as investment from other foreign countries in the areas of foreign corrupt practices, export administration, sanctions, and antitrust. If Chinese firms run afoul of these rules, they will be subject to legal sanction. But gaps exist in the U.S. government's ability to address the competitive challenges posed by SOEs.
- In areas where there are no national security considerations, and when the investment is driven by economic rather than strategic rationale, Chinese FDI can benefit the U.S. economy through creation of jobs and other positive spillovers.

Addendum I: Select Controversial Chinese Investments in the United States, 1990–2013

Year	Investor	Target	Summary
1990	China National Aero Tech (CATIC)	Mamco Manufacturing Co.	CFIUS found that the acquisition of Mamco, which manufactured machines and fabricated metal parts for aircraft, would pose national security risks. Formally blocked by presidential order.
1995	China National Non-Ferrous Metals Import & Export Corp, San Huan, Sextant	Magnequench Inc.	The initial takeover of Magnequench, producer of high-tech magnets from rare-earth minerals, by a Chinese-led consortium and the following acquisition of Ugimag Inc. in 2000, received regulatory approval from the Clinton Administration. However, the deal drew widespread criticism in the U.S public for the transfer of technology and jobs to China when the firm's facilities in the United States were shut down in 2002 and 2006, respectively.
1999	China Ocean Shipping (Group) Company (COSCO)	Long-term lease of former Naval Base, Long Beach, CA *	Congress banned COSCO from leasing a formal naval base in Long Beach through a provision in the 1998–1999 defense authorization bill. Legislators cited national security concerns as a reason for blocking the deal through ad hoc legislative action.
2005	China National Offshore Oil Corporation (CNOOC)	Unocal Corp.	The deal was rejected by shareholders before a CFIUS determination was made. The 2005 bid attracted significant opposition from domestic interest groups and Members of Congress. After Congress threatened to enact an amendment that would have imposed significant additional costs and risks for the buyer (the Pombo Amendment: CFIUS would be prohibited from concluding its national security review of an "investment in energy assets of a United States domestic corporation by an entity owned or controlled by the government of the PRC" until after a period of 141 days—or 51 days longer than the maximum of 90 days established under the Exon-Florio Amendment), CNOOC abandoned the bid. The U.S. competitor Chevron ultimately acquired Unocal.
2005	Lenovo	IBM's personal computer division	Domestic interest groups, the security community, and Members of Congress voiced concerns after Lenovo's plans to purchase IBM's personal computer unit became public. The deal was cleared by CFIUS after the company signed extensive security agreements.

* This project is included, although a lease would technically not be counted as direct investment.

Addendum I: Select Controversial Chinese Investments in the United States, 1990–2013—Continued

Year	**Investor**	**Target**	**Summary**
2008	Huawei, Bain Capital	3Com	CFIUS signaled a negative recommendation based on national security risks posed by the sale of network gear. Huawei and Bain Capital withdrew the bid.
2009	Northwest Nonferrous International Investment Co.	Firstgold Corp.	CFIUS signaled a negative recommendation based on national security risks due to Firstgold's proximity to Fallon Naval Air Station, among other concerns. Northwest Nonferrous withdrew the bid.
2010	Tangshan Caofeidian Investment Co. Ltd (TCIC)	Emcore	CFIUS expressed concerns over TCIC's acquisition of Emcore, a provider of photovoltaic and fiberoptic technology. TCIC withdrew its bid.
2010	Far East Golden Resources Investment Ltd. (FEGRI)	Nevada Gold Holdings, Inc.	After investigating the transaction in 2012, CFIUS proposed that Hybrid Kinetic Group Ltd (the ultimate controlling entity of FEGRI) divest or break up its interests in Nevada Gold as related to the Tempo mine site in north central Nevada, located in proximity to U.S. Naval Air Station Fallon. Hybrid Kinetic and its subsidiaries agreed to divest all their interests in Nevada Gold.
2011	Huawei	3Leaf	CFIUS asked Huawei to submit its purchase of assets from bankrupt 3Leaf, which created technology for cloud computing. Huawei agreed to divest its 3Leaf assets after CFIUS signaled a negative recommendation.
2012	Ralls Corp.	Terna Energy Holding USA Corp.	Ralls bought four Oregon wind farm assets without reporting the transaction to CFIUS. The U.S. Navy objected to the project's proximity to the restricted Naval Weapons Systems Training Facility airspace, where the U.S. government tests drones. CFIUS asked Ralls to submit for review; upon review, CFIUS recommended that Ralls stop operations. Ralls challenged the CFIUS determination, so the president had to formally block the deal by executive order. Ralls challenged the rejection with a lawsuit alleging that the president acted unconstitutionally.

Addendum I: Select Controversial Chinese Investments in the United States, 1990–2013—Continued

Year	Investor	Target	Summary
2012	Wanxiang	A123	Wanxiang purchased the bankrupted A123 at auction for $256.6 million, and the deal was approved by CFIUS despite significant opposition from some Members of Congress. Wanxian excluded A123's defense contracts (A123's defense division, which supplied cutting edge batteries to the U.S. military) from its bid at the auction. Those were sold separately to Illinois-based Navitas Systems for $2.25 million. A123 has never turned a profit and received a $249 million grant from the U.S. Department of Energy to develop lithium-ion batteries, although only about half of the money was used.
2012	CNOOC, Ltd.	Nexen Inc. (U.S. assets)	In 2012 CNOOC agreed to buy Nexen Inc. (a Canadian company) for $15.1 billion as China's largest foreign deal. The Canadian government's Investment Canada Act was used to determine if the sale provides a "net benefit" to Canada. In December 2012, the sale was approved by the Canadian federal government. In addition to Canadian authorities, CFIUS needed to vet the deal because Nexen has U.S. interests. CFIUS approval came in February 2013.
2013	Shuanghui International Holdings Ltd.	Smithfield Foods Inc.	In June 2013, Shuanghui, China's largest meat processor, made an offer for Smithfield, the U.S.'s biggest pork producer, for $4.7 billion in cash (including debt, the deal values Smithfield at $7.1 billion). Smithfield and Shuanghui submitted the deal for CFIUS review, even though the food industry has not been traditionally among those relevant to national security. The proposed deal attracted opposition from some Members of Congress as well as farm, producer, consumer, and rural organizations, due to worries over food safety and the protection of U.S. technologies and intellectual property. CFIUS approved the sale in early September 2013. Smithfield shareholders approved the deal on September 24, 2013.

Source: Rhodium Group; various media reports.

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SECTION 3: GOVERNANCE AND ACCOUNTABILITY IN CHINA'S FINANCIAL SYSTEM

Introduction

This section provides an overview of China's financial system, covering strains in the state banking system; the growth of the shadow banking sector and access to credit; market access issues and operational challenges for foreign financial services firms; and governance, transparency and accountability problems in China's financial sector. It is based on witness testimonies from the Commission's March 7, 2013, hearing; information from the Commission's fact-finding trips to China, Japan, and Taiwan; and additional staff research.

China's Banking System and Access to Credit and Capital

China's 12th Five-Year Plan (2011–2015) calls for less dependence on exports and state-funded infrastructure projects and more domestic consumption to support China's economy. This shift from government-led to private-led growth necessarily requires that Chinese families and private sector businesses have sufficient access to credit and capital. Private small- to medium-sized enterprises (SMEs) already contribute 60 percent of gross domestic product (GDP) and 80 percent of urban employment, according to some estimates.[1,2] Yet bank lending, the traditional source of credit for entrepreneurs and startups in most countries, is largely inaccessible to Chinese individuals and SMEs, because China's financial system is dominated by large, state-owned banks that mainly service government-directed projects and state-owned enterprises. A shadow banking system of unofficial credit has sprung up to fill the gaps left by the big banks' lending practices, but it is largely unregulated, and the proliferation of shadow banking activity poses threats to the country's financial stability.*

Chinese State Banks

Chinese banks hold a unique position. "In China, banks are everything," said Carl Walter, former chief operating officer of JP Morgan China and co-author of *Red Capitalism*, at a March 7 hearing of the Commission.[3] The banks provide the loans and underwrite the bonds that fund government investments in infrastruc-

*A shadow banking system is comprised of the unregulated or loosely regulated lending institutions outside the more familiar model of depository commercial banks. The shadow banking system may include loans from insurance companies, private equity firms, hedge funds, money market funds, venture capital firms, microlending, crowd sourcing, off-balance sheet lending by commercial banks, and even loan sharking.

ture and fixed assets, which have been "the major force driving China's economic growth to near double-digit levels over the past twenty years,"[4] he said. Banks in China are even more important to the national economy than are banks in Europe or North America, where alternative sources of financing through equity and bond markets are available even to small startups. In China, banks provide over 75 percent of the nation's capital, according to the Financial Services Forum's John Dearie, a Commission witness. By contrast, in most developed economies, banks are a source of less than 20 percent of capital, and in other emerging economies, banks typically provide about 50 percent of total capital.[5]

China's financial sector is dominated by five massive, state-owned commercial banks—the Bank of China; the Industrial and Commercial Bank of China; the China Construction Bank; the Agricultural Bank of China; and, to a lesser extent, the Bank of Communications. Though they are categorized as commercial lenders, they function more as an arm of the government. The Commercial Bank Law of 1994 commercialized the operations of these banks by transforming them into retail deposit and lending institutions. The country has a network of other commercial banks, both state owned and semiprivate, which includes ten secondary shareholding commercial banks (the government holds a majority of shares in most of these), a number of city commercial banks (originally founded on the basis of urban credit cooperatives), village and township banks (the primary shareholders of which are often city commercial banks), and rural credit cooperatives.* [6] However, as Lynette Ong of the University of Toronto explained in her testimony, the five big, state-controlled commercial banks comprise the heart of the banking system, collectively accounting for about 50 percent of all deposits and loans.[7] In 2011, total assets of commercial banking institutions were valued at renminbi (RMB) 113.29 trillion ($16.54 trillion), with the biggest four banks alone holding nearly 60 percent of those assets.[8]

Three policy banks were established in 1994 to take over government-directed spending functions like financing of major development projects, which were previously the purview of the newly commercialized state banks. These state-owned policy banks are the Agricultural Development Bank of China, China Development Bank, and the Export-Import Bank of China.† [9] The Chinese Communist Party (CCP) and central government treat the policy banks as "basic utilities" that provide capital to the state sector of the economy.[10] The borrowers are almost exclusively state sector entities undertaking state-directed development projects, such as the construction of dams, highways, and airports. The People's Bank of China (PBOC), China's central bank, sets credit quotas for the big

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*The major, second-tier shareholding commercial banks include the Bank of Communications, China CITIC Bank, China Everbright Bank, Hua Xia Bank, China Minsheng Bank, Guangdong Development Bank, Shenzhen Development Bank, China Merchants Bank, Shanghai Pudong Development Bank, and Industrial Bank.

†The three policy banks—the Export-Import Bank, the Agricultural Development Bank, and the China Development Bank—were respectively charged with promoting exports, assisting with food production, and financing infrastructure projects. In the last decade, the policy banks, particularly the Export-Import Bank, have expanded their undertakings. The Export-Import Bank provides development aid and preferential loans to foreign clients purchasing certain goods and services from China and distributes government-backed loans to foreign nations. Since 2007, it has had a formal, market-oriented division.

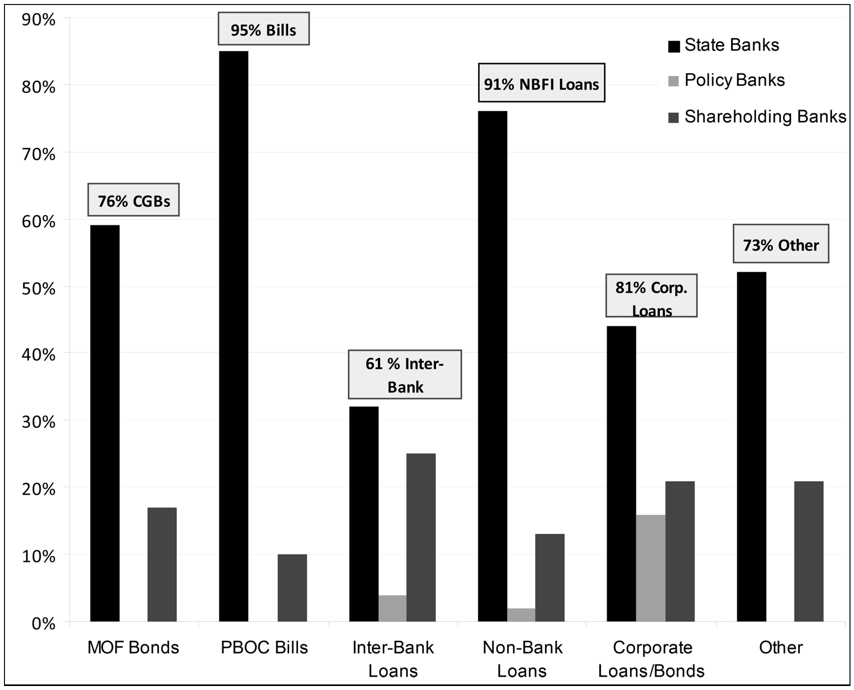
five commercial banks, and PBOC data confirm that loans made by these banks have also historically gone overwhelmingly to the state sector.[11]

A 2013 Brookings Institution report outlines broad rationales behind the big five commercial banks' lending bias, a combination of government directives requiring them to loan to the state sector and a greater sense of confidence on their own part in the credit risks presented by state-owned enterprises (SOEs). State sector borrowers often have "strong business positions, resulting from monopolistic or oligopolistic power, superior business models or other factors;" and it seems relatively unlikely that the government will allow a large, state-owned enterprise to default on its loans.[12] On the other hand, private sector businesses are typically small, possess fewer assets that can serve as collateral, and do not enjoy the implicit backing of the government. As a result, the private sector enjoys almost no assistance from China's largest commercial lending institutions. According to an estimate by Citic Securities Co., only 3 percent of China's SMEs are able to get loans from these banks. Other estimates are even lower.[13]

The policy banks and the big commercial banks are all regulated by the China Banking Regulatory Commission. The policy banks are funded primarily by selling bonds to the big commercial banks, and all are ultimately guaranteed by the Chinese government.[14] The incestuous relationship between the government; the large, state-owned policy banks; and their state-owned commercial cousins provides borrowers a considerable benefit: artificially low interest rates. PBOC sets low interest rates for depositors as well as for borrowers. Rates are approved by the State Council and the CCP's Leading Group on Finance and Banking. By controlling rates rather than allowing the market to determine them, the government ensures that the mainly state sector borrowers are able to access inexpensive capital, which in turn encourages them to borrow. The banks' depositors, meanwhile, are paid very low rates, sometimes below the rate of inflation, to help hold down the rates charged to borrowers. Thus, the state-owned corporate sector receives a subsidy from the bank's depositors (Chinese households) in the form of low interest rates. Renminbi (RMB) 36.7 trillion ($6 trillion) of household savings are deposited into the state-owned commercial banks and receive a savings rate of only about 3 percent. Although this is higher than the average savings rate in the United States, the repressive impact on Chinese household savings is compounded by the fact that there are virtually no viable alternatives for the average Chinese person that offer higher yields.[15,16]

Figure 1 demonstrates the outsized holdings of the large, state-owned commercial banks. Figure 2 shows shares of loans and deposits accounted for by various types of financial institutions in China, also underscoring the dominance of the five key state-owned commercial banks in China's financial system.

Figure 1: Chinese Bank Holdings of Financial Assets, Fiscal Year 2010



* CGB—Chinese Government Bonds; MOF—Ministry of Finance; NBFI—Nonbank financial institution; PBOC—People's Bank of China.

Source: U.S.-China Economic and Security Review Commission, *Hearing on Corporate Accountability, Access to Credit, and Access to Markets in China's Financial System: Rules and their Ramifications for U.S. Investors*, written testimony of Carl Walter, March 7, 2013.

Figure 2: Chinese Financial Institutions by Size of Loans and Deposits, 2010

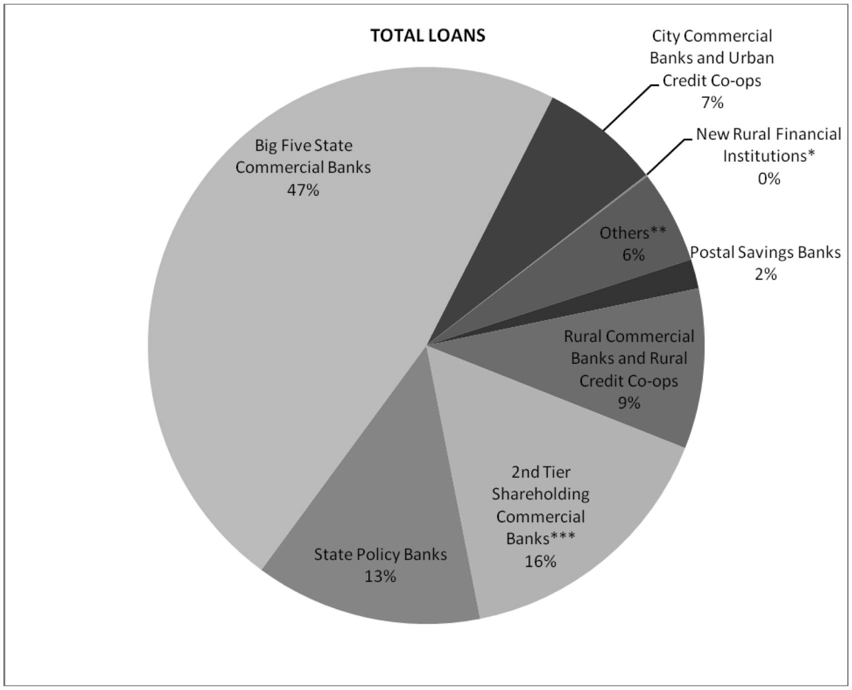
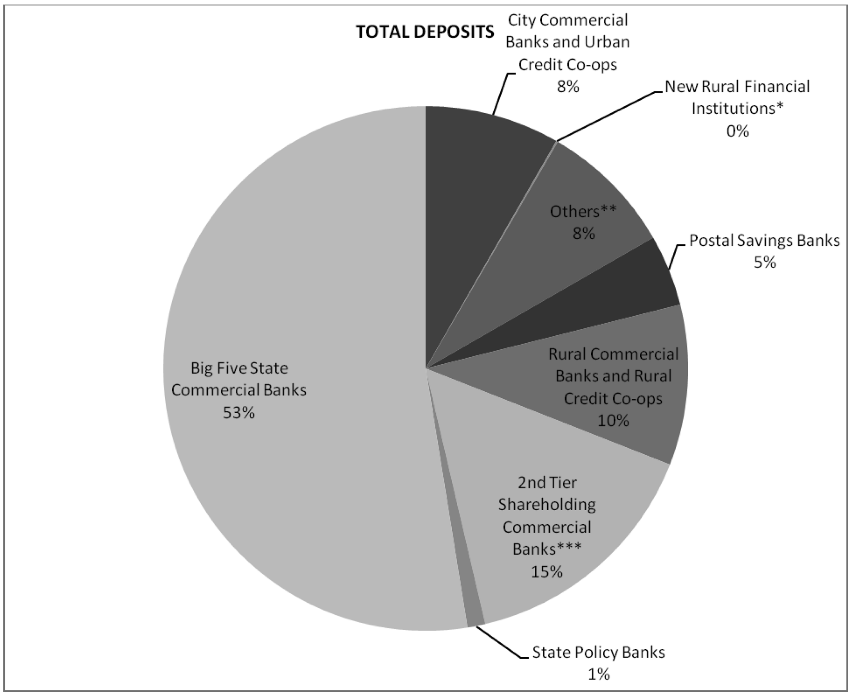


Figure 2: Chinese Financial Institutions by Size of Loans and Deposits, 2010—*Continued*



* New rural financial institutions include township and village banks, microcredit companies, and rural mutual aid funds.

** Others consist of nonbank finance companies and overseas banks.

*** The government owns a majority of shares in most of the second-tier shareholding commercial banks.

Source: U.S.-China Economic and Security Review Commission, *Hearing on Corporate Accountability, Access to Credit, and Access to Markets in China's Financial System: Rules and their Ramifications for U.S. Investors*, written testimony of Lynette Ong, March 7, 2013.

The Stock and Bond Markets

Shareholder rights are limited in China, and many publicly traded firms are majority owned by the government. "Lacking the ability to influence business choices and dividend levels, or to sell the firm as a whole, shareowners place less reliance on underlying firm value and focus more on likely stock price movements in the short run." [17] As a result, Chinese markets are dominated by volatile speculative trading, and are often compared to casinos. The two Mainland stock exchanges, the Shanghai Stock Exchange and the Shenzhen Stock Exchange, have undergone significant development in recent years but are not comparable to the U.S. or European stock exchanges in scale, importance, or regulation and still largely exclude private Chinese enterprise. The Hong Kong exchange is the sixth-largest exchange globally and the most popular destination for Chinese companies seeking to list outside the Mainland, but it has a backlog of Chinese firms waiting for approval to list.[18]

Like the state banks, China's stock markets most reliably generate capital for the state sector.[19] The Chinese government uses the domestic stock markets "to create oligopolies and monopolies—the so-called national champions—run by high-ranking political appointees," said Dr. Walter.[20] As with bank interest rates, the equity market system for initial public offerings (IPOs) is controlled by the government. The government "literally sets the prices of new shares based on how much funding it needs to raise, then directs other government-controlled entities to invest."[21]

Equity markets "fail to serve as a venue for capital-raising by the private entrepreneurial companies critical for the innovation and job creation that will be necessary for China's long-term economic health," Georgetown University law professor Paul Saulski told the Commission.[22] An IPO is "fundamentally a bank loan from a state-controlled bank, not the result of a business owner selling a stake in his company to outside investors seeking the highest return on their capital, as we think of in the West," wrote Dr. Walter.[23]

Compared to the banks, the stock markets play a less important financial role.[24] Chinese equity financing raised a record $123 billion on domestic and foreign exchanges in prerecession 2007. Far larger was the $530 billion in new loans extended by Chinese banks that year and the $581 billion in total debt issues in the bond market.[25] Current imbalances are even more striking. Total debt issuance in the bond market was approximately $1.2 trillion in 2011.[26] Total new loans extended by Chinese banks in 2012 were approximately $1.1 trillion.[27] Meanwhile, IPO approvals ground to a virtual halt in 2012 as a result of new China Securities Regulatory Commission policies, underscoring the fact that "IPOs in China remain not a function of market dynamics, but of political and institutional policies that can change both completely and suddenly."[28]

One means of diversifying credit risk away from the banking system is to encourage companies to raise funds by issuing bonds. China's leadership seems to have recognized the potential utility of a strong bond market and has made rapid headway in developing one. The Chinese bond market is now the world's fourth largest in terms of value. At approximately $3.41 trillion (RMB 20.9 trillion), its size is surpassed only by the United States, Japan, and France.[29] It is also increasingly diverse and includes both public and private debt. But while China's bond market possesses the superficial appearance of a modern bond market, most of the bonds issued and traded are actually issued by other banks rather than corporations. The corporate bond sector was valued at only RMB 548 billion ($89.7 billion), or less than 3 percent of the Chinese bond market's total value, as of December 2012.[30] China also has yet to develop a properly functioning municipal bond market, and it is only beginning to develop a market for high-yield bonds, both of which are important for attracting investment capital. In addition, Beijing restricts foreigners from investing in the bond markets.[31]

Strains on the Banking System

Because lending by the state-owned banks is based on government policy decisions rather than commercial considerations, it is not surprising that the banks have accumulated large numbers of nonperforming loans from lending to poorly run or poorly chosen projects undertaken by SOEs.[32] Chinese banks appear to be undergoing a resurgence of the self-inflicted bad debt crisis that troubled them in the late 1990s and early 2000s.[33]

In 1999, the key Chinese state-owned commercial banks held roughly RMB 2.5 trillion in nonperforming loans, or 31 percent of China's annual GDP at the time. Bad loans accounted for 39 percent of Chinese banks' loans.* [34] China's central government created four asset management companies to bail out the banks by disposing of their loans. The government's recapitalization of the big banks between 1999 and 2005 removed RMB 3 trillion ($400 billion) in bad loans, or 25 percent of total loans, from bank balance sheets in order to compensate for the missed loan repayments from mismanaged and unprofitable state sector projects.[35,36] The banks' nonperforming loans were generally bought at full value by the asset management companies, paid for with ten-year bonds backed by the Ministry of Finance and loans issued to the asset management companies by China's central bank.[37] The central government also launched a variety of other initiatives aimed at curbing the big banks' substandard lending and maintaining asset quality. By the end of 2008, the nonperforming loan ratios of commercial banks had dropped to 2.4 percent of the total.[38,39]

With the Chinese government's response to the global financial crisis, however, the strain of nonperforming loans has returned. Although financial statements provided by international auditing companies show the banks' current nonperforming loan ratios at less than 1 percent, this figure only covers loans that are on the balance sheets, and it strains credulity in light of the banks' central role in carrying out the government's stimulus response to the global economic crisis.[40] In November 2008, the central government announced a $652 billion (in current dollars) stimulus, the equivalent of 12.5 percent of China's GDP that year, and directed the banks to fund the bulk of it by granting loans for infrastructure projects.[41] According to analysis by KPMG, a multinational accounting firm, "Banks extended RMB 9.6 trillion worth of new loans" in 2009, "more than twice the total lending in 2008," and RMB 8.0 trillion in 2010.[42] As the Chinese economy responded, the banks kept boosting their lending. The International Monetary Fund (IMF) estimates that Beijing has relied on the big banks to issue at least $3.8 trillion (RMB 23.4 trillion) in new loans since 2008 to help offset the impact of the global economic crisis on the Chinese economy. Dr. Walter estimated that the unofficial shortfall "could be anywhere from $1 trillion (RMB 6.2 trillion) to $2.3 trillion (RMB 14.2 trillion) against bank capital of $400 billion." [43] As one financial journalist noted, "Either the Chinese government has become extremely skilled at lending in a very short time, and Chi-

* By comparison, Spanish banks' bad loan ratio reached a record high of 12 percent in 2013 as a result of the recession there. The average nonperforming loan ratio for all U.S. banks between 1999 and 2009 was 1.67 percent, according to the Federal Reserve, and is currently 3.16 percent. At the height of the financial crisis, the average nonperforming loan ratio for all U.S. banks was nearly 6 percent. "Banking Brief for Pennsylvania, New Jersey and Delaware," *Philadelphia Fed*, First Quarter 2011. *http://www.philadelphiafed.org/research-and-data/publications/banking-brief/2011/BB1Q2011.pdf*; Charles Penty & Emma Ross-Thomas, "Spanish Banks' Bad Loans Ratio Climbs to Record 12.1%," *Bloomberg*, October 8, 2013. *http://www.bloomberg.com/news/2013-10-18/spanish-banks-bad-loans-ratio-climbs-to-record-12-1-.html*.

nese borrowers have become even better at repaying, or the numbers are too good to be true."[44] Meanwhile, there are questions about whether the asset management companies (AMC) could be used to aid another bank recapitalization. Though at least two of them claim to be profitable today, other evidence strongly suggests that they are still holding a significant amount of the debt they took on in 1999. According to one unnamed financial expert who spoke to *The Economist*, they "seem to be virtual holding-tanks where the debt doesn't stay and doesn't depart either." There is speculation that they are insolvent.* [45]

The lending binge has raised fears of impending inflation and ushered in a clampdown on lending in 2012 and 2013, "with harsh quotas that have made credit available only to those SOEs least likely to default."[46] For example, bank lending to local government financing vehicles has been curtailed.† Local government financing vehicles are companies set up by local governments to facilitate borrowing from state banks, which allows them to spend beyond the limits of their budgets. There are currently more than 10,000 local government financing vehicles in China. These hidden and unregulated companies have been "the unseen hand powering China's investment-led economic growth over the past decade."[47] Bank lending to local government financing vehicles rose from "RMB 1.7 trillion in outstanding loans at the beginning of 2008 to nearly RMB 5 trillion just two years later."[48] In December 2012, outstanding loans to local government financing vehicles reached an estimated RMB 9.2 trillion ($1.4 trillion). The China Banking Regulatory Commission and the Chinese Ministry of Finance began instituting limits on future issuances, first barring local governments from using public assets as loan guarantees on behalf of their financing vehicles and then announcing that new loans extended to local government financing vehicles must be covered by existing cash flows and that the projects they are used for must generate returns.[49] Approximately one-third of the outstanding loans to local government financing vehicles are scheduled to come due in the next three years, and "there are well documented concerns that many of the underlying projects offer insufficient cash generating ability to service the incumbent debt."[50] To avoid potential defaults, banks have begun extending maturities for local governments.[51]

By directing the banks to extend so much cheap credit to local government financing vehicles and SOEs for state sector projects

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* The four asset management companies established to dispose of the banks' nonperforming loans are Orient AMC (which serviced the Bank of China), Great Wall AMC (which serviced the Agricultural Bank of China), Huarong AMC (which serviced the Industrial and Commercial Bank of China), and Cinda AMC (which serviced the China Construction Bank). It is not entirely clear how much the asset management companies have recovered, but in 2009 the ten-year bonds were extended an additional ten years to assist in continued recovery, indicating that the 1999 bank bailout is very much an ongoing job. As of December 2012, Orient AMC had reportedly disposed of $37 billion of these nonperforming assets and recovered $8 billion, achieving a cash recovery ratio of 21.90 percent. Both Huarong and Cinda claim to be making profits, but their claims are not verified.

† Local governments are not permitted to borrow directly from state banks and also are generally not permitted to issue municipal bonds under the 1995 People's Republic of China algorithm law (Chapter 4, Article 28). Thus, in order to fund the infrastructure and development projects that the central government encouraged, local governments have used state-owned resources and assets, especially land, as collateral to set up local government financing vehicles that meet basic asset and cash flow lending requirements and then borrowed from the state banks through the local government financing vehicles.

unlikely to generate revenue in the short term, the central government has encouraged SOEs and local governments to hold too much debt, increasing the likelihood that the banks will require another government bailout or restructuring due to an accumulation of nonperforming loans and a sudden drop in profits.[52] Despite the high ratio of outstanding bad loans to capital, however, the stability of the banks may be relatively assured in the near term because the banks are undergirded by the central government and the central bank. Dr. Walter describes the backstops in the financial system as a shell game with three shells: the government itself, the banks, and the SOEs. "You can move these bad loans anywhere you want," he says, to ensure that the banks remain solvent.[53] But the central government's effort to rein in risky bank loans has fueled a boom in unofficial credit that presents more complex problems for authorities. As the challenges of obtaining bank credit have mounted, local governments and private sector businesses have increasingly relied on alternative, less regulated, and less transparent financing channels to fund investment projects.[54] This explosion of unofficial credit complicates existing challenges for the government's efforts to rebalance the economy and maintain financial stability.

Strains on Rural Credit Cooperatives—The Big State Banks of the Countryside

Rural credit cooperatives are locality-based credit institutions important to banking and credit in rural China. Although they account for only 10 percent of total deposits and loans nationwide, 80 percent of rural deposits and loans are made using rural credit cooperatives. They are the primary providers of credit to rural households and the primary holders of rural household savings.[55] As of 2010, the rural credit cooperative system included 2,646 rural credit cooperative county unions, 223 rural cooperative banks, and 85 rural commercial banks.[56] Rural credit cooperatives have historically been "first and foremost accountable to the party, rather than to depositors or shareholders," and they are frequently urged to support local government enterprises and projects.[57] Since 2003, the rural credit cooperatives have been managed by provincial credit unions that report to provincial governments, but local party leaders also continue to influence loan allocations and decisions.[58]

The financial performance and asset quality of rural credit cooperatives vary, but Dr. Ong notes in written testimony to the Commission that rural credit cooperatives are a longstanding weak link in China's fiscal system, because they are perpetually "saddled with mountains of bad loans." [59] In 2007, the PBOC provided RMB 168 billion in debt-for-bonds swaps and RMB 830 million in earmarked loans to assist rural credit cooperatives in disposing of bad assets and writing off historical losses.[60] The stability of rural credit cooperatives improved after their bailout but, like the state-owned banks, they heavily supported the 2008–2009 stimulus programs and are likely experiencing deteriorating asset values.

Although the central government is not technically under any formal obligation to ensure the stability of the rural credit cooperatives, much like the big, state commercial banks, they are treated as if they are too big to fail. Most likely this is due to the risk of social unrest in the event of a rural financial collapse.[61] Because rural credit cooperatives are locality specific, the collapse of a rural credit cooperative would be less likely to cause cross-regional economic panic and bank runs than would the collapse of one of the big state banks, but rumors of a collapse in one region could potentially incite panic and runs in another.[62]

Shadow Banking

The "shadow banking system" can broadly be defined as lending that falls outside of the official banking system.* [63] It can involve both traditional and nontraditional institutions and is best understood not in terms of the institutions engaged in the system but in terms of the activities that they undertake.[64] It encompasses a "broad range of bank-like activities (often using uninsured, short-term funding) that are lightly scrutinized and only sometimes backed by private sector sources of liquidity." [65] Since shadow banking activity occurs outside of formal banking channels, it does not appear on bank balance sheets and is far less transparent than official lending activity. Chinese shadow banking products include entrusted loans (loans made by a third party to a borrower where a bank or other financial institution serves as the intermediary), investment trusts, wealth management products, credit guarantees, trusts, money market products, and various types of microloans.[66]

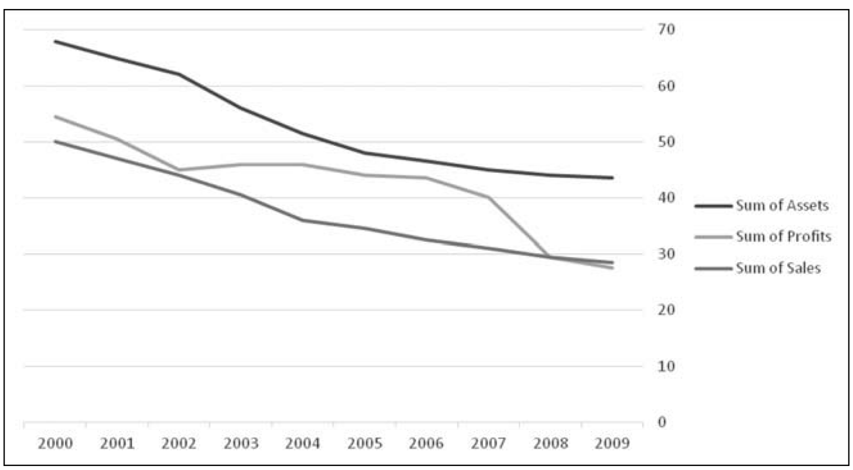
Since shadow banking is dominated by lending to higher-risk borrowers, it is frequently characterized by high fees and high interest rates.[67] Loans are often arranged by middlemen who are paid a fee, and borrowers sometimes pay interest as high as 70 percent or more per year.[68] Such high rates are charged despite the fact that the legal maximum interest rate is currently 23 percent and by law cannot exceed four times the benchmark lending rate, currently 6 percent for one-year loans.[69] Commission witness Regina Abrami, Wharton's director of the Global Program at the Lauder Institute of International Studies and Management, points out that some non-bank-based financing in China, in the form of private money houses, pawnshops, and revolving credit associations, dates back centuries. This financing has long served much as it does today "to aid the economic transactions of firms and individuals who might not otherwise be able to obtain funding or resolve short-term liquidity crises." [70] Chinese demand for shadow banking is largely driven by the growth of China's private sector, a sector with limited access to official bank credit; and the Chinese government's tolerance of shadow banking in recent years has been tied to the reality that the private sector is the increasingly dominant source of the nation's employment. In 1980, the state sector accounted for 76.2 percent of urban employment. But by 2012, official Chinese sources attributed 80 percent of urban employment and at least 60 percent of China's GDP to the private sector.[71]

*The term "shadow banking" refers to "the whole alphabet soup of levered up non-bank investment conduits, vehicles and structures" that are either unregulated or less regulated than conventional bank loans. In the prefinancial crisis U.S. context, this meant money market funds, asset-backed securities, leveraged derivative products, and other nonbank assets in the capital market that featured prominently in the U.S.'s subprime mortgage crisis. Paul A. McCulley, "Global Central Bank Focus: Teton Reflections" (PIMCO, September 2007).

According to written testimony prepared for the Commission by *Bloomberg Businessweek*'s Sheridan Prasso, 97 percent of China's 42 million privately owned SMEs are unable to obtain officially sanctioned loans from the big state banks.[72] According to the official Xinhua news agency, 19 percent of all bank lending went to small businesses in 2011, and KPMG estimates that the size of SME lending in the banking sector may now account for as much as 25 percent of total bank lending, but "these figures are distorted by the lack of differentiation between state-owned and privately owned SMEs."[73] Certainly the majority of China's private sector is comprised of SMEs, many of them unregistered businesses, but there are no data on the percentage of SMEs with significant ties to the state.[74] Chinese businesses "fall into a bewildering variety of legal categories and their respective contributions to GDP are not reported in official statistics," but China's National Bureau of Statistics estimates that enterprises not majority owned by the state now account for at least two-thirds of the country's industrial output.[75]

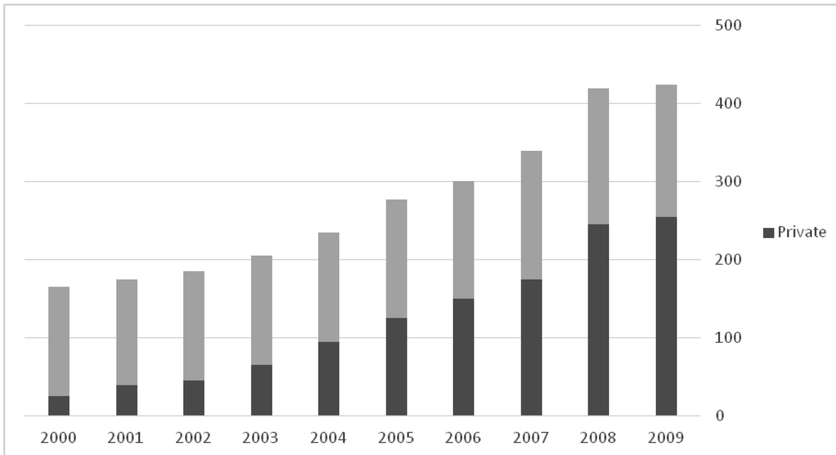
Figure 3, below, shows Chinese state-owned enterprises' declining share of industrial output. Figure 4 depicts the growing market share of private industrial enterprises with revenues exceeding RMB 5 million.

Figure 3: Chinese State-owned Enterprises' Percent Share of Industrial Assets, Sales and Profits, 2000–2009



Source: "Let a Hundred Flowers Bloom," *Economist*, March 10, 2011. *http://www.economist.com/node/18330120*, sourced from hedge fund Keywise Capital Finance.

Figure 4: Growth of Industrial Enterprises with Revenues Exceeding RMB 5 Million, 2000–2009



Source: Economist, "Let a Hundred Flowers Bloom," March 10, 2011. *http://www.economist.com/node/18330120*, sourced from New York City-based research firm China Macro Finance.

Although China's banks continue to control a significant percentage of the country's capital, their percentage of overall lending is shrinking as the private sector grows. Commercial banks accounted for 52 percent of the country's total financing in 2012, down from roughly 90 percent a decade ago.[76,77] Shadow banking is filling in this gap. As a result of their limited access to official sources of credit, private sector businesses seek capital from the unofficial alternative channels in the shadow banking system. "Helping them along on the supply side," Dr. Abrami noted, "are hundreds of millions of Chinese savers, profitable private firms, and state-owned enterprises eager to see better returns on their earnings than is possible through standard deposits within the formal banking system" or investment in the markets.[78]

Successfully channeling credit to China's productive private sector is a necessary precondition for economic rebalancing and among the biggest financial challenges facing China's new leadership.[79] Since the government has undertaken efforts to rein in the risky bank lending that proliferated with the 2008 economic stimulus, it has permitted a boom in the shadow banking system to help maintain the country's macroeconomic growth.[80] In addition, Chinese regulators have regarded shadow banking as "a byproduct of their attempts to unleash more market forces in the allocation of capital in China," a useful "experiment in liberalized interest rates" and "an incubator for risk-based capital allocation and financial innovation."[81,82] In the meantime, the ever-tightening restrictions on access to official sources of credit have shifted more and more borrowers to shadow alternatives. Shadow banking meets important market demands, ensuring that the private sector businesses generating so many of China's jobs are able to access credit when they need it.[83] The growing pool, says Dr. Abrami, has also now "moved beyond small enterprises to include larger firms, local governments

. . . and businesses within politically disfavored sectors, such as property development and mining," effectively circumventing the government's efforts to rein in lending to overdeveloped sectors.[84]

No one knows with certainty the size of China's shadow banking system but, according to Chinese Central Bank estimates and much private sector analysis, it is valued at RMB 2 trillion to 4 trillion ($325 billion to $630 billion), or approximately 7 percent of total lending, four times its estimated size in 2008.[85,86] The China Banking Regulatory Commission has produced a higher estimate of RMB 7.6 trillion ($1.2 trillion) for 2012, which is equal to 14.6 percent of China's 2012 GDP.[87] Total off-balance-sheet banking activity in China, including "credits to property developers, local-government entities and small-and-medium size enterprises (SMEs), individuals and bridge-loan borrowers," has been estimated as high as RMB 17 trillion as of the end of 2012, or roughly one-third of GDP.[88] Even by this largest and most expansive estimate, the shadow banking system is still smaller than China's commercial banking industry, which had an estimated $21 trillion in assets as of September 2012.[89,90] And by comparison with the shadow banking systems of the West, China's shadow banking is also relatively small. According to the Financial Stability Board, shadow banking had $23 trillion in assets in the United States and $22 trillion in assets in the European Union in 2012. Nevertheless, the recent exponential growth of the Chinese shadow banking sector, combined with the continued growth and increasing economic importance of the private sector relative to the state sector, is driving a "reduction in the use of the official banking system to perform basic functions of finance."[91] In some parts of China, informal lending now exceeds official bank lending.[92]

Chinese Shadow Banking Terminology

Bank Trust Products

Bank trust products are packaged by trusts and sold by banks, frequently resulting in a lack of transparency as to whether the bank or the trust is responsible for their performance.[93]

Entrusted Loans

Entrusted loans are products that allow banks to serve as middlemen by identifying high-net-worth individuals who can provide corporate loans. According to Bloomberg News, entrusted loans last year accounted for nearly 8 percent of the RMB 14.27 trillion ($2.3 trillion) raised in private placements—loans and other funding sources, such as returns on stocks and bonds—compared with 0.9 percent in 2002.[94,95]

Passageway Deals

In passageway deals, trusts and brokerages cooperate with banks to act as passive reservoirs for loans that banks originate but cannot keep on their own balance sheets without exceeding lending quotas or transgressing capital requirements or loan-to-deposit ratios. Investors who have purchased wealth manage-

Chinese Shadow Banking Terminology—*Continued*

ment products from the banks often bear the risk if borrowers default on the loans that the trust companies and brokerages have purchased from the banks.[96] Industry executives say at least 50 percent of trust company assets and 80 percent of brokerages' entrusted funds are related to this so-called "passageway business."[97]

Peer-to-Peer Lending

Peer-to-peer lending is a form of microcredit, and the companies that facilitate it online match borrowers with lenders able to offer small, short-term loans. The peer-to-peer lending market is worth approximately $3.2 billion and is comprised of approximately 2,000 online sites.[98] Peer-to-peer loans can be as small as RMB 50. One of the better known Chinese peer-to-peer lending companies, Creditease, reports that its average loan is RMB 50,000 ($8,200), "too small for banks but attractive to online micro-financiers."[99]

Trust Companies

There are 64 Chinese trust companies today, with assets valued collectively at approximately $1.2 trillion.[100] Trust companies have surpassed the insurance industry in China in terms of the value of their assets and are now second only to the banking industry.[101] Bank of America Merrill Lynch estimates that trust companies account for 8.9 percent of all bank loans.[102]

Wealth Management Products

Wealth management products are the fastest-growing investment vehicle in China. Banks funnel money deposited by savers into these riskier investments that are mostly held off of their balance sheets and sell them to support their credit growth, since wealth management products allow them to circumvent the China Banking Regulatory Commission's caps on interest rates for bank loans. These are highly nontransparent products because of a lack of disclosure requirements.[103] Total outstanding issuance of wealth management products was approximately RMB 6.7 trillion ($1.1 trillion) in the third quarter of 2012, an increase of 47 percent from the end of 2011.[104] Bank of America Merrill Lynch estimates that wealth management products comprise 8 percent of all bank loans.[105] Fitch Ratings Agency recently estimated that these products now account for approximately 16 percent of all commercial bank deposits.[106] Wealth management products generally offer 4 to 5 percent yields, roughly 1 percent higher than the ceiling on deposit rates. The China Banking Regulatory Commission was initially supportive of the growth of wealth management products offered by banks, but amid recent concerns over defaults, regulators have cracked down on the practice.[107]

Shadow Banking Risks

According to recent analysis by the Federal Reserve Bank of Dallas, "Shadow banks are [now] at the center of our global market-based financial intermediation system, conducting maturity, liquidity, and credit transformation without explicit public sector credit guarantees or liquidity access." [108] The explosion of new financing vehicles presents risks that investors may not understand and that appear to outstrip government regulatory capacities. In the aftermath of the 2008 financial crisis, there has been a push among regulators, both in the United States and abroad, to increase scrutiny of these financial intermediaries in order to reduce risks in the global financial system as well as in domestic ones.

In December 2012, the IMF released an assessment identifying shadow banking as one of the key risks to China's continued financial stability.[109] According to Ms. Prasso, "The primary risk to the [Chinese] government lies in its potential inability to intervene if a large number of underground loans suddenly go bad in a crisis; there is no centralized place to put the money, as in a bank bailout." [110] Dr. Abrami also notes that the Chinese government may not be able to sufficiently regulate the risks posed by the rapid proliferation of private lending activities.[111]

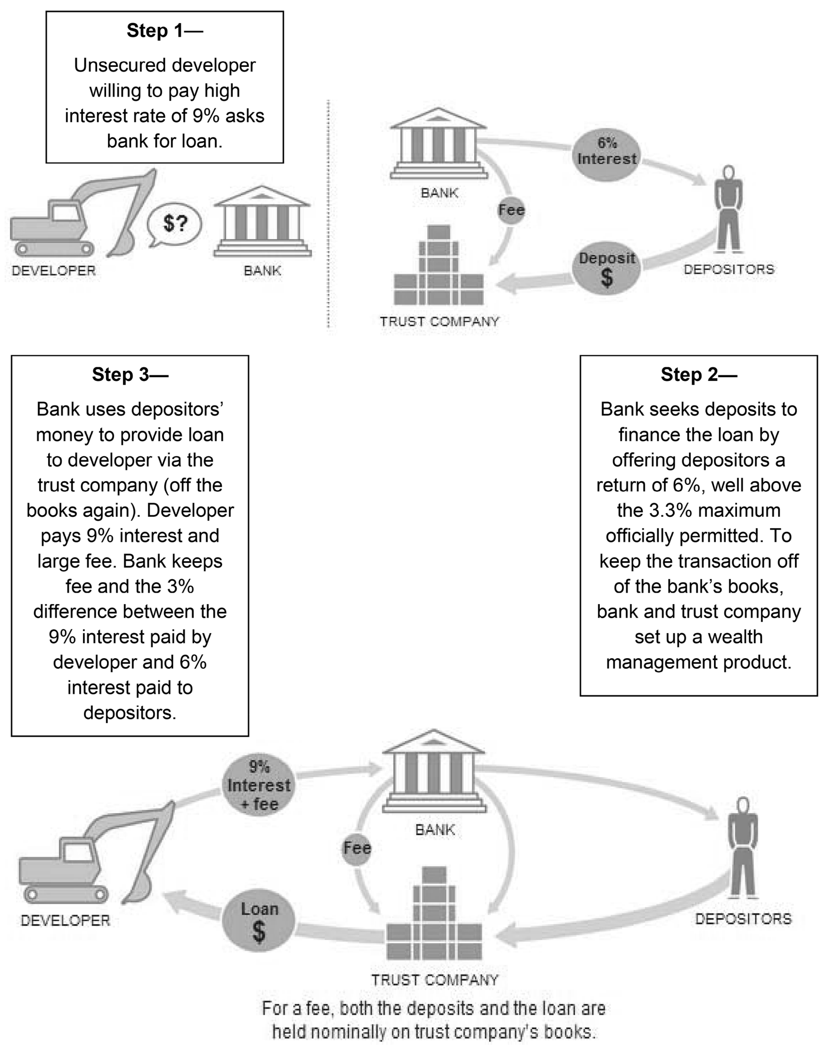
A particular cause for worry is the extent to which traditional Chinese banks may be exposed to the risks of the shadow banking system. Fitch Ratings Agency estimates that about 80 percent of new shadow banking credit is tied to the big commercial banks and that an even bigger percentage of outstanding shadow banking loans is linked to these banks.[112] The banks are moving undesirable assets into the shadow banking system "on an unprecedented scale, reinforcing suspicions that bank balance sheets reflect only a fraction of the actual credit risk lurking in the financial system." [113] Trust companies and brokerages are a vital source of credit for banks seeking to "arrange off-balance-sheet refinancing for maturing loans that risky borrowers cannot repay from their internal cash flow." [114] As the *Financial Times*' Kate Mackenzie explains:

> *The elephant in the room is that the shadow institutions are the co-dependent evil twins to the commercial banks . . . banks are reliant on the shadow institutions to supply their liquidity, and shadow institutions get a lot of their capital from the banks. . . . Not only does the shadow market fund the banks, but banks fund the shadow market: banks are the ultimate source of many 'non-standard' financial products. . . . The whole market is running on the rate arbitrage between official channels, which lend at 6.5–9.5 percent, and gray channels, which lend at 12–60 percent.*[115]

Whenever the central government eases monetary policy, the big banks tend to lend excessively, but when it tightens monetary policy, the shadow banking system steps into the gaps. With the banks so closely tied to the shadow banking system, it appears that tighter official lending rules not only fuel the growth of unofficial lending but also specifically encourage the banks to engage in more risky, less transparent lending.[116] Banks are increasingly pressing customers to shift money from the older, regulated parts of their operations to newer, off-the-books products. "The key question is no longer how much risk banks are carrying," but how many risky loans have been shifted to lightly regulated, shadow banking products offered by the banks and to “lightly regulated shadow banking institutions—mainly trust companies, brokerages and insurance companies.” [117]

Figure 5, below, illustrates one means by which banks create and issue off-balance sheet loans.

Figure 5: Example of Off-Balance Sheet Lending by Chinese Banks



Source: The New York Times, “Questionable Lending in China,” July 1, 2013. *http://www.nytimes.com/interactive/2013/07/02/business/Questionable-Lending-in-China.html?ref=global*. As noted in *The New York Times* article, this is but one example of how shadow banking might work.

China’s leadership is turning a sharper eye toward the risks in the shadow banking system.[118] Regulators have, for instance, begun issuing prohibitions against certain types of lending.[119] In

December 2012, the Ministry of Finance, the National Development Reform Commission, the People's Bank of China, and the China Banking Regulatory Commission issued a communiqué on curbing illegal financing by local governments, banning local government borrowing from individuals or nonfinancial institutions such as trust companies and fund management companies.[120] In June 2013, PBOC dramatically tightened credit in the interbank market, where banks have been lending money to each other and to large shadow financiers to fund higher-yield offerings. Despite signs of a liquidity crunch, the central bank delayed injecting more money into the markets, insisting that "overall bank liquidity conditions are at a reasonable level" and that banks should "prudently manage liquidity risks that have resulted from rapid credit expansion."[121] China's official Xinhua news agency said on June 23 that the cash crunch was engineered to curb risky bank funding of shadow banking activities.[122]

On April 26, the Chinese government announced that more than 1,400 people had been sentenced to prison terms of at least five years for illegal shadow banking activities. A total of 4,170 people have reportedly been convicted of violating shadow banking rules since 2011.[123] People charged in the most recent crackdown were convicted of violations such as illegal fundraising, public advertising to find lenders, and promising excessively high rates of return.* [124] Legal experts complain, however, that the central government has not sufficiently clarified what is and is not legal for lenders and borrowers. They argue that many of those netted in crackdowns and sweeps are engaged in practices that have not been explicitly prohibited.[125,126] Another problem in cracking down on shadow banking in the absence of increased access to official lines of credit is that it threatens to starve China's entrepreneurial companies of capital, which in turn may hinder China's indigenous innovation.[127]

Market Conditions and Access Issues for Banking, Investment, Insurance, and Other Services Firms

Expanding access to traditional bank lending for China's 42 million SMEs would be a key way for Beijing to allow the private sector to thrive without compromising the government's regulatory powers. U.S. financial services firms say China should provide them with greater market access and operating capacity so that they can help to develop the Chinese financial sector. They note that, in contrast with China's bank-dominated financial system, in the United States, more credit is provided by financial markets and nonbank lenders than by banks, and they argue that they offer knowledge, experience, and products that China needs.[128] Though China has taken some steps to expand foreign firms' access to its financial markets since joining the World Trade Organization (WTO) in 2001, this access remains quite limited (see *Chinese Rationales for Market Barriers* later in this section).

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* China's Supreme Court website defines "illegal fundraising" as applying to individuals who receive more than RMB 200,000 ($32,000) of informal loans or cause losses to lenders of RMB 100,000 ($16,000) or more. "Enterprises can face charges if they receive RMB 1 million ($160,000) or cause losses of RMB 2.5 million ($400,000)." Joe McDonald, "China jails more than 1,400 in lending crackdown," Associated Press, April 26, 2013.

China's economy has long been heavy on manufacturing and light on services, but the services sector is growing. Manufacturing accounted for 45.3 percent of China's GDP in 2012, while the services sector (transport, wholesaling, retailing, hotels, tourism, financial services, real estate, scientific research, and other services) accounted for 44.6 percent, according to official statistics.[129] Strengthening this sector is a key goal of China's 12th Five-Year Plan for Economic and Social Development, as its expansion promises the creation of new jobs, increased domestic consumption and decreased dependence on exports and state investment projects for economic growth—all vital to the economic rebalancing needed to reduce the U.S.-China bilateral trade deficit.[130] Unfortunately, the financial services subsector has not been growing as quickly as services overall, despite the fact that the development of this subsector is particularly crucial to China's achievement of its rebalancing goals. As Mr. Dearie told the Commission, "Capital is the lifeblood of any economy's strength and well-being, enabling the investment, research, and risk-taking that fuels competition, innovation, productivity, and prosperity."[131] An obvious way to increase access to capital is to spur development of the financial services sector in China. Fundamentally, the financial services sector struggles to thrive because of the extent of government intervention in the overall financial system. While the explosion of the shadow banking sector and the government's tolerance of it indicate the leadership's recognition of the need for financial liberalization, the government has been slow to embrace financial liberalization. This foot dragging continues even as the risks attendant in shadow banking underscore the importance of developing more comprehensive and well-regulated financial services than the informal shadow banking trend offers. The shortage of financial services inhibits the very consumption that China's leaders have committed to cultivate. While domestic consumption per capita continues to grow, it has actually fallen as a percentage of GDP from more than 60 percent to less than 50 percent between 2000 and 2013, and more than half of the wealth in Chinese households today is still held in the form of low interest rate savings.[132]

Empowering the Chinese consumer requires the broad availability of financial products and services, including personal loans, credit cards, mortgages, pensions, insurance products and services, and retirement security products. This would in turn persuade Chinese citizens to reduce their precautionary savings.[133] U.S. financial services firms have long argued that if China would open its market to more investment, they could grow their own business. China has taken some steps to further open its financial services market in recent years. Foreign direct investment in financial services increased 122 percent between 2007 and 2010, but foreign access to China's financial markets more broadly remains heavily restricted, and this apparent high growth rate belies the fact that investment grew from a very small market share.[134] Foreign ownership in the Chinese banking system, for example, currently amounts to less than 2 percent.[135] And, according to Steve Simchak, director of International Affairs at the American Insurance Association, foreign property-casualty insurers in China currently hold only a 1.2 percent market share as a result of significant market entry barriers and a lack of national treatment.* [136]

U.S. financial services companies complain that even as the United States has taken steps to allow increased Chinese access to its financial services market, China is not reciprocating. The *Wall Street Journal* reported that China's state-run Citic Securities is applying for a license with U.S. regulators, making it the latest Chinese firm to expand into the United States as the Chinese government continues to encourage its financial services companies to invest more of the nation's foreign exchange reserves in foreign markets. Yet within China, foreign banking, securities, and insurance affiliates all continue to be subject to ownership restrictions and regulatory approval processes for their investments that are far more stringent than those that apply to domestic competitors. China's minimum capital requirements for foreign banks seeking to operate in the Chinese market exceed international norms, and foreign banks also cannot open new branches without permission from regulators and face cumbersome and lengthy approval processes.[137] Foreign-owned securities and asset management firms are limited to joint ventures in which foreign ownership is capped at 49 percent, while foreign life insurance companies remain limited to 50 percent ownership in joint ventures and to 25 percent equity ownership of existing domestic companies; and, until a 2012 WTO dispute settlement panel ruling, market access for foreign electronic payment providers was virtually nonexistent.[138]

In his testimony to the Commission, Professor Saulski noted that studies by the Organization for Economic Cooperation and Development and the World Bank ranked China as "one of the most restrictive markets for financial services among the G20." China is also far more restrictive than its fellow major developing economies: Brazil, Russia, and India.[139] Professor Saulski further explained that "the current lack of significant competition in China's financial sector hinders efficiency, limits investor choice, and restricts access to capital by non-state-owned firms. Furthermore, the lack of competition in China's financial markets facilitates destructive rent seeking behavior by special interest groups and well-connected individuals. In its most pernicious form, this creates a perfect environment for fraud, insider dealing, and corruption." [140]

Chinese Rationales for Market Barriers: The General Agreement on Trade in Services (GATS) and the Global Economic Crisis

Though China's restrictions on market access to the financial services sector are significant, they are compatible with the country's 2001 WTO accession agreement, which was largely negotiated by the United States acting on behalf of other WTO members. Under the WTO's General Agreement on Trade in Services, Most Favored Nation (MFN) status and national treatment apply only as specified in a member country's schedule and MFN exemption

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*National treatment is a principle of international law by which states guarantee that they will not favor their own citizens or businesses with treatment better than what they afford to those of their trading partners.

list.*[141] WTO members are explicitly allowed to provide non-MFN treatment if they record the exemptions in their WTO schedule of services commitments, though these exceptions are subject to negotiation in future multilateral trade talks. Members also are not obligated to provide national treatment except for the service categories that they choose and only to the extent recorded in their schedule of WTO services commitments. Agreements to gradually eliminate or reduce limitations to market access are also voluntary, "applying only to those service categories included in a Member's schedule and only to the extent specified."[142] Because many of the obligations under GATS are voluntary, most WTO members, including China, were selective about the service sector categories for which they undertook obligations in their accession agreements.[143]

At the ten-year review of China's WTO accession agreement in 2011, the United States criticized China's lack of progress in fully implementing its financial services obligations, honing in on continued restrictions on foreign ownership of Chinese banks and insurance companies. The Office of the U.S. Trade Representative (USTR) noted in its 2012 report to Congress on China's WTO compliance problems that "China has continued to maintain or erect restrictive or cumbersome terms of entry in some sectors." USTR also underscored problems with "informal bans on new entry, high capital requirements, branching restrictions or restrictions taking away previously acquired market access rights."[144] The Chinese claimed that their refusals to fully open the financial services sector were justified by the 2008 financial crisis, which cast developed nations' financial systems in an unfavorable light. As a senior official at the Shanghai Stock Exchange reportedly put it in 2009, "The master has been proven to be a fool."[145] Mr. Dearie noted in his testimony that a major increase in negative Chinese perceptions of the U.S. financial system due to the global economic crisis damaged the ability of U.S. financial services firms to access the Chinese market and of USTR to negotiate greater access.[146]

In June 2010, China proposed new WTO financial services discussions aimed at examining "the gains and pains" of financial liberalization and financial regulatory practices suited to developing countries. China reportedly noted:

> *While many see liberalization of trade in financial services as an essential contributing factor towards the development of the sector, others regard excessive and premature liberalization of the financial sector as a key ingredient for financial instability. . . . This is a particularly relevant subject in the post-crisis era, as many countries are now concerned about how to develop their financial sector so that it generates real economic growth rather than asset bubbles. . . . There is increasing evidence that the developed Members may also have taken excessive liberalization commitments.*

*Most Favored Nation treatment is a means of establishing equality of trading opportunity between states by ensuring that all nations accorded MFN status are treated equally by any given trading partner. An importing country cannot discriminate against the goods from one MFN country in favor of another MFN country's goods. If an importing country grants any type of concession to one MFN trading partner, this concession must also be given to all other countries with MFN status.

> *Before the financial crisis, deregulation was the main trend in the domestic financial market of the developed countries, and in the international arena, the developed countries pushed for more liberalization commitments to gain greater financial deregulation in the markets of their trade partners. The financial crisis has brought a sharp turn in the way we think about financial deregulation, and now the most popular word for the financial regulators is 'reregulation.'* [147]

China also warned that foreign services firms would dominate the most profitable sectors of the Chinese market, impeding the development and success of domestic firms. In addition, China worried that foreign firms might act as conduits for household savings to be funneled out of the country rather than invested domestically and that the increased linkages with the global financial system could leave China more susceptible to volatilities in the global market.[148]

China's Financial Sector—Foreign Investors Experience Problems with Governance, Transparency, and Accountability

Even if foreign service firms were given access to household savings in China, weak corporate governance, regulatory oversight, and accounting practices in China create problems for potential foreign investors. Investor confidence in China's securities markets and in Chinese companies trading on U.S. and other foreign exchanges is important to the Chinese government's economic rebalancing efforts. Selling shares of Chinese companies to foreign investors has become an increasingly significant means of raising capital. However, China's traditional banking system and its publicly traded corporations are hobbled by poor audit quality and unreliable financial statements. Investor confidence depends on transparent and reliable accounting and audit regimes—to which the Chinese government has shown resistance. Improvements in the governance of China's companies and its capital markets are critical to protecting American shareholders and American investments in China.

China's Corporate Governance Creates Challenges for Investors and Regulators

Demand for credit has led Chinese companies to seek capital overseas even as its shadow banking system has expanded. In the late 1990s, Chinese companies began raising capital on major international stock exchanges. This trend has been driven by large Chinese companies, many state owned, that have sought to broaden their shareholder base, increase the liquidity of their shares, and enhance the visibility of their brand names. In part, it has also been driven by small- and medium-sized private Chinese companies seeking alternative capital options beyond the state-controlled banks that dominate China's financial system, and the limited domestic exchanges.

U.S. stock markets are among the most popular alternate global exchange destinations for Chinese firms. According to Commission witness Paul Gillis, professor at Peking University and Standing Advisory Group member of the Public Company Accounting Oversight Board (a quasi-public entity established by the Sarbanes-Oxley Act that polices auditors and reports to the U.S. Securities and Exchange Commission (SEC)), there are more than 200 Chinese companies that have offered shares of stock on the New York Stock Exchange and NASDAQ in recent years, and hundreds more have entered U.S. over-the-counter markets.[149] However, many of the Chinese companies listing in the United States have proved to be poor investments.

Initially, U.S. investors purchased stock in U.S.-listed Chinese companies in hopes of profiting from China's rapid growth rate. However, investors in U.S.-listed Chinese companies have increasingly found that insufficient corporate governance standards make these companies high-risk investments. Many have been implicated in frauds and accounting scandals, and U.S. regulators have deregistered about 50 Chinese companies in the past two years following fraud probes.[150] The stigma attached to U.S.-listed Chinese companies as a result of this regulatory scrutiny has lowered returns for nearly all of them. The 82 companies in the Bloomberg Chinese Reverse Mergers Index lost 52 percent of their market value between June 2011 and July 2012.[151] U.S.-listed Chinese companies are "deserting U.S. stock markets in record numbers as regulatory scrutiny mounts and the advantages of a U.S. listing slip away."[152] Six U.S.-listed Chinese companies announced plans to go private through buyouts in 2010, but by 2012, 27 Chinese companies had announced they would go private. In addition, approximately 50 mostly smaller U.S.-listed Chinese companies deregistered with the SEC, ending their requirements for public disclosures, in 2012.[153] In addition, far fewer Chinese companies are listing on U.S. exchanges. Only three Chinese companies successfully went public on U.S exchanges in 2012, down from 41 in 2003.[154]

Two types of Chinese companies in particular have sought access to U.S. capital markets: smaller enterprises with limited ability to use Chinese capital markets, and some of the largest state-owned enterprises in industries such as petroleum and telecommunications.[155] Larger Chinese state-owned enterprises have primarily entered the U.S. markets by openly filing IPOs on the New York Stock Exchange and NASDAQ in the form of American Depository Receipts (ADRs) or ordinary shares.*[156] In 1993, state-owned Sinopec Shanghai Petrochemical was the first Chinese company to list on a U.S. exchange by issuing an IPO in the form of ADRs.[157,158]

Smaller private Chinese companies have most commonly sought access to U.S. markets because they lack sufficient domestic sources for capital and have entered the markets by merging with existing, registered U.S. shell companies in reverse mergers. Reverse mergers do not require approval from the China Securities Regulatory Commission (the Chinese counterpart of the U.S.'s Public Company Accounting Oversight Board) and involve much less

*An ADR is a certificate representing one or more shares of a foreign firm's stock, denominated in U.S. dollars.

regulatory scrutiny by the SEC than do IPOs. A reverse merger involves a private company purchasing a publicly traded company and shifting its management into that company. This allows the private company to become publicly traded without going through the regulatory and financial disclosure processes associated with an IPO. Most Chinese reverse mergers are traded on the over-the-counter market until they satisfy various requirements, such as size and capitalization level, that qualify them to list on the New York Stock Exchange or NASDAQ. Between 2000 and 2011, approximately 443 Chinese companies entered U.S. markets via reverse mergers, but relatively few of these have made it off of the over-the-counter market and onto the New York Stock Exchange or NASDAQ.[159]

As of May 2012, there were approximately 112 Chinese companies traded on the New York Stock Exchange or NASDAQ in the form of ADRs, 21 traded in the form of ordinary shares, and 79 that listed via reverse merger transactions.[160] Large Chinese companies entering U.S. markets via IPOs, including state-owned enterprises, have accounted for the greatest share of Chinese companies' market capitalization, but they have been greatly outnumbered by smaller Chinese companies entering U.S. markets via reverse mergers. This latter group has also generated a sizeable portion of Chinese companies' market capitalization. According to the Public Company Accounting Oversight Board, between January 2007 and March 2010, 159 Chinese companies entered the U.S. securities markets using reverse mergers and generated market capitalization of $12.8 billion. In the same period, 56 Chinese companies, including a number of very large, state-owned enterprises, completed U.S. IPOs and had an aggregate market capitalization of $27.2 billion.[161]

Chinese Reverse Mergers Skirt Oversight

Chinese reverse merger transactions have attracted the bulk of the critical attention from U.S. regulators. Companies that enter the U.S. market via reverse mergers are riskier investments, because they do not go through the disclosure processes associated with traditional IPOs and thus offer less information to investors. In response to increasing complaints involving foreign reverse mergers, the SEC issued a bulletin in June 2010 warning investors of the risks of fraud and other abuses involving reverse merger companies. The SEC also set up a task force to investigate the foreign company reverse merger trend and associated investor risks. In November 2011, the SEC approved new NASDAQ, New York Stock Exchange, and American Stock Exchange rules that impose more stringent listing requirements for reverse mergers. Under the new rules, a reverse merger company cannot apply to list on the New York Stock Exchange, NASDAQ, or the American Stock Exchange until it has completed a one-year "seasoning period" of trading on the U.S. over-the-counter market or on another regulated U.S. or foreign exchange following its reverse merger. It also must file all required reports with the SEC, including audited financial statements, and maintain a minimum share price of $2.00 to $4.00 for at least 30 of 60 trading days immediately prior to filing its listing application.[162,163]

An ABC News investigation in January 2013 found that since 2010, more than 70 Chinese companies have been removed from or left NASDAQ and the New York Stock Exchange after reports of alleged fraud and financial irregularities.[164] In 2008 and 2009, there were very few U.S. federal securities class actions filed against companies domiciled in China. In 2010, Chinese companies were the target of 15 such suits, and by 2011, that number had risen to 38 suits—accounting for 17 percent of the 224 U.S. federal securities class actions filed in 2011 and nearly 66 percent of the 60 such suits targeting non-U.S. companies.[165] At least 42 of the Chinese companies targeted by U.S. securities class actions to date were listed on U.S. stock markets via reverse mergers and have been subjects of SEC investigations of financial schemes that former SEC Chairman Mary Schapiro described as "brazen."[166] According to analysis by the Harvard Law School Forum on Corporate Governance and Financial Regulation, "Over 85 percent of U.S. securities class actions filed against Chinese issuers from 2008 to mid-2012 have included accounting-related allegations."[167]

In order to be publicly traded on the U.S. capital markets, companies have to make public certain information about their business strategies, operations, material risks, and financial results. The financial statements contained in companies' annual reports filed with the SEC are required to have an independent external audit for consistency with U.S. accounting standards. These standards are the same for all companies notwithstanding where they are registered. In its *2010 Annual Report to Congress*, the Commission noted that SEC standards for assessing material risks may benefit from singling out certain nations for special scrutiny, based on their domestic accounting standards. For example, there is no reporting requirement that takes note of the unique and politicized role that the CCP plays in the selection of Chinese corporate leadership.

The House Financial Services Committee sent a letter to the Public Company Accounting Oversight Board and the SEC on September 9, 2010, complaining of the quality of auditing of U.S.-listed Chinese companies. The Big Four accounting firms (PricewaterhouseCoopers, KPMG, Deloitte Touche Tohmatsu, and Ernst & Young) audit 88 percent of all U.S.-listed Chinese companies, including a number of the companies named as defendants in U.S. government-filed law suits.[168] Public Company Accounting Oversight Board standing advisory group member and Commission witness Paul Gillis noted in a recent report that fraud and accounting issues associated with U.S.-listed Chinese companies have brought mounting pressure for these accounting firms to verify that they have conducted their audits properly.[169]

SEC Cracks Down on Accounting Firms of Chinese Companies

During recent probes, the SEC has sought audit work papers from the accounting firms, a common request during fraud investigations. To date, the firms have refused to produce these documents, arguing that doing so would put them in violation of Chinese state secrets laws. In China, sharing accounting information with foreign regulators and removing audit papers from the country violates state secrets laws. Chinese authorities also do not permit non-Chinese regulators to conduct investigations in China.[170] Chinese law "prohibits firms from producing audit working papers directly to any foreign regulator and requires those foreign regulators to seek such documents through the China regulator," according to Commission testimony by Cynthia Fornelli, executive director of the Center for Audit Quality.[171] China has several times amended its Law on Guarding State Secrets to be more inclusive of a variety of information, including economic statistics.[172] China is also applying its State Secrets Law to private companies. In the SEC's investigation of Deloitte Touche Tohmatsu's auditing of China-based Longtop Financial Technologies, for instance, Deloitte said Chinese regulators had warned them that turning over working papers to the SEC could lead to sentences of life imprisonment for the partners involved and to the banishment of their firm from conducting further business in China.[173] In the United States, however, withholding foreign public accounting paperwork of U.S.-traded companies violates both the Securities Exchange Act and the Sarbanes-Oxley Act, which require foreign audit firms to produce documents concerning U.S.-listed clients at the SEC's request.[174]

In December 2012, the SEC charged five firms with breaking U.S. securities laws by refusing to turn over the requested audit work papers. The defendants in the case are Beijing-based BDO China Dahua, Ernst & Young Hua Ming, KPMG Huazhen, Shanghai-based Deloitte Touche Tohmatsu Certified Public Accountants, and PricewaterhouseCoopers ZhongTian. China-based affiliates of these accounting firms face the possibility of losing both their right to practice and their registration with the Public Company Accounting Oversight Board.

Initially, U.S. audit firms entered the Chinese market as joint ventures with Chinese partners. The Big Four in most countries are owned by local partners, operating more like a franchise than a typical multinational corporation. China has required the Big Four to convert into limited liability partnerships as their 20-year joint venture terms began to expire in late 2012. In May 2012, the Chinese government announced that by December 31, 2017, the Big Four must evolve into partnerships in which Chinese-qualified accountants are a majority of the firm's accountants. The new regulation will cap the level of foreign-qualified accountants at the firms at 40 percent initially and at 20 percent by the end of 2017. In addition, the regulation will limit the voting rights of all partners with foreign qualifications and require that all senior partners be Chinese citizens. This change will limit U.S. corporate opportunities to manage audit operations, further complicating SEC enforcement efforts in China.[175,176]

Accounting Fraud Impacts U.S. Companies Operating in China

Fraud and accounting problems associated with China are not limited to U.S.-listed Chinese companies. U.S. companies have directly invested $54 billion in Chinese businesses, factories, and property, most of it in the past decade, according to the Department of Commerce. U.S. corporations' China operations are facing increasing problems. For example, on January 18, Caterpillar disclosed "deliberate, multi-year, coordinated accounting misconduct" at a unit of ERA Mining Machinery Ltd., a company it paid $654 million to acquire in June 2012. Caterpillar has disclosed inventory discrepancies, inflated profits, and improperly recorded costs and revenue at the ERA Siwei unit, located in Zhengzhou, China. The Caterpillar experience and the growing catalog of smaller instances of deception and abuse involving U.S. companies' China corporations indicate that U.S. companies' Chinese investments experience unique accounting and governance challenges. The financial and legal advisors for Caterpillar and ERA included Citigroup, Freshfields Bruckhaus Derringer LLP, Blackstone, and DLA Piper. It appears that they did not detect the fraud prior to the deal closing.[177]

Risk Management and Bilateral Cooperation

All accounting firms that audit U.S.-traded public companies and their employees must register with the Public Company Accounting Oversight Board. The Public Company Accounting Oversight Board sets auditing standards and rules for U.S.-listed companies and is charged with inspecting and regularly reviewing the audits of all public accounting firms that audit U.S.-listed companies, including those firms that audit foreign-domiciled, U.S.-listed companies and are themselves domiciled outside of the United States.[178] According to Ms. Fornelli, as of June 2011 there were 54 Chinese mainland auditing firms and 55 Hong Kong firms registered with the Public Company Accounting Oversight Board, and the board had performed more than 200 inspections of non-U.S.-domiciled accounting firms in over 35 jurisdictions, including Brazil, India, Japan, and Russia.[179,180]

Recognizing a need to improve U.S. financial regulators' ability to gauge the financial health of companies domiciled in other jurisdictions, Congress empowered the Public Company Accounting Oversight Board to negotiate agreements for reciprocal inspections with audit regulators outside the United States as well as the confidential exchange of information with other regulators. This was part of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. Such cooperation between the board and foreign auditing oversight bodies was intended to encourage jurisdictions to better harmonize auditing standards and requirements. The goal was to eliminate such conflicts as the SEC's requests for documents that U.S. accounting firms cannot produce under Chinese law but must produce under U.S. law.[181] Ms. Fornelli testified that the Public Company Accounting Oversight Board now has cooperation agreements with 16 nations and that after the 2010 Strategic and

Economic Dialogue, the United States and China announced their intent to negotiate such an agreement on the sharing of confidential information for regulatory purposes.[182] However, the Public Company Accounting Oversight Board and the China Securities Regulatory Commission have yet to achieve that goal.

The inability of the Public Company Accounting Oversight Board to inspect in China creates a gap in investor protection. This lack of an information-sharing agreement with China does not just limit U.S. regulators' ability to ensure proper conduct at the Big Four accounting firms. It also limits their ability to ensure proper conduct at the Chinese-domiciled accounting firms that audit or play a substantial role in auditing U.S.-listed Chinese companies and the Chinese operations of U.S. companies. Though U.S. securities law requires overseas auditing firms that audit U.S.-listed companies to undergo inspection by the Public Company Accounting Oversight Board to ensure that they are following U.S. standards, China wants the United States to allow the China Securities Regulatory Commission and the Chinese Ministry of Finance to conduct and control all investigations of accounting firms in China, via an audit oversight agreement similar to the one it struck with the European Union. According to a statement by Mr. Gillis:

> *In a 2009 letter commenting on the PCAOB's* [Public Company Accounting Oversight Board] *proposed delay in the deadline for foreign inspections, the CSRC* [China Securities Regulatory Commission] *said that any oversight of Chinese accounting firms should rely solely on the CSRC. In 2011, the European Union recognized the equivalence of the audit oversight systems in 10 third countries, including China. The third countries and EU* [European Union] *member states can now mutually rely on each other's inspections of audits. Chinese regulators want the same treatment from the United States, but U.S. laws do not permit the PCAOB to rely on foreign regulators.*[183]

Chinese regulators have been reluctant to offer joint inspections, as they view such access as a breach of national sovereignty. If they do agree to some form of joint inspections between Chinese and U.S. regulators, they will likely insist on retaining full control over punishment of violations by Chinese auditors. The Public Company Accounting Oversight Board has been in negotiations with Chinese regulators since 2010 to try to work out an agreement and previously set a December 31, 2012, deadline to complete inspections of Chinese accounting firms. With this deadline passed, failure to reach a breakthrough in negotiations in the near future "could lead to the deregistration of Chinese accounting firms and a mass delisting of Chinese stocks," since U.S.-listed Chinese companies would no longer have a registered auditor and thus would have to delist.[184]

On May 24, 2013, the United States and China announced a deal for limited information-sharing between their regulatory agencies when there are questions regarding audits of U.S.-listed Chinese companies. Under the agreement, the U.S. Public Company Accounting Oversight Board will be permitted access to audit documents from Chinese accounting firms to use in board investigations. This deal to facilitate information-sharing during investigations related to possible sanctions is a step in the right direction, but it does not resolve the board's challenges with regard to regular inspections of Chinese auditing firms, and it is inspections, rather than investigations, that are the Public Company Accounting Oversight Board's main function. Under U.S. law, "firms that issue reports on public companies are to be inspected at least every three years" to ensure that they are in compliance with U.S. auditing standards, but Chinese law still prohibits auditors from providing documents to the Public Company Accounting Oversight Board for such inspections.[185] At the July meeting of the Strategic and Economic Dialogue, U.S. Treasury Secretary Jack Lew announced that Chinese regulators had agreed to turn over to the SEC certain requested audit work papers of some Chinese companies listed on U.S. stock exchanges, a move that will assist the SEC in ongoing investigations.* However, no further progress has been made toward achieving more general direct access to documents for U.S. regulators conducting investigations or inspections. The May deal also permits China to withhold documents from the Public Company Accounting Oversight Board "on grounds of public interest or essential national interest."[186] As Mr. Gillis explained in a May 2013 Op-Ed for the *Wall Street Journal*, failure to resolve these issues more fully could lead the SEC and the Public Company Accounting Oversight Board to ban Chinese accounting firms from auditing U.S.-listed companies, which could in turn lead to Chinese companies being delisted from U.S. exchanges. However, this is a "nuclear option" that U.S. regulators are likely reluctant to pursue.[187,188]

Implications for the United States

The rate of China's economic growth over the last 30 years, and its integration of a fifth of the world's population into the global economy, has profound implications for economic growth and job creation in the United States. China is currently America's third-largest export market and its fastest-growing export destination. U.S. exports to China have increased sixfold since 2001, with 48 states experiencing at least triple-digit growth in their exports to China and 20 states experiencing quadruple-digit growth. That is seven times the pace at which U.S. exports to the rest of the world have increased over the same time period.[189] However, the growth of U.S. imports from China still far surpasses this growth in exports to China. (For further discussion of the deficit, see chap. 1, sec. 1, of this Report.) A more consumption-driven Chinese economy would mean an expansive growth in Chinese demand for American products and services. But China lacks the modern and sophisticated financial sector needed to accomplish the shift to greater domestic consumption.[190] Without a more open and mar-

*Achieving direct access to documents that the Big Four auditing firms have refused to turn over will aid the SEC in moving forward with its investigations into certain Chinese companies listed on U.S. exchanges, including specifically the Deloitte-audited company, Longtop Financial. As of the drafting of this Report, the SEC's administrative trial against Chinese affiliates of Deloitte and the other Big Four audit firms in response to their refusals to turn over audit documents is ongoing. The presiding judge has reportedly requested a 100-day extension in the case, pushing the due date for a decision to January 7, 2014.

ket-oriented financial system, China cannot deliver on its promised economic rebalancing, and the costs of the imbalances in the U.S.-China economic relationship will continue to accrue.

While available measures indicate that China's shadow banking sector remains smaller than that of the United States, its size relative to China's formal banking sector continues to expand, and Beijing's efforts to curb the risky lending in this sector to date may perversely be fueling it. Expressing concerns about wealth management products in January 2013, Xiao Gang, former chairman of the Bank of China and current head of the Chinese Securities Regulatory Commission, reportedly characterized the shadow banking sector as "a potential source of systemic financial risk," whose model is "fundamentally a Ponzi scheme." [191] In September, the G20 echoed this view when it endorsed new global rules for shadow banking issued by the Financial Stability Board.[192] While the potential risks of China's shadow banking sector are not fully understood, to the extent that it poses systemic risks to China, it is fair to surmise that it poses risks for international financial stability more broadly. It is in the interest of the United States for Beijing to succeed in its efforts to curb risky, off-balance-sheet lending and establish greater regulatory control over nonbank financial institutions.

China's opaque policies and practices with regard to corporate accountability present serious challenges for U.S. companies and U.S. investors seeking information on the risks entailed in their transactions.

Conclusions

- The Chinese economy weathered the first few years of the global economic downturn by doubling down on its time-tested strategy of funneling capital into domestic development projects. But five years on, global demand for Chinese exports remains too weak to sustain the country's factories, much less new ones, and the merits of massive infrastructure projects have more than run their course. The policy decisions that kept the Chinese economy chugging over the last few years have also sped it closer to a reckoning that economists have long forecast would eventually be necessary.[193] If a rebalancing of the U.S.-China economic relationship is to be achieved, China must reform its financial system to support newer, nonstate sources of economic growth, which will require that China's banks better service its private sector.

- As long as China's official, regulated channels of credit do not possess the flexibility to meet the needs of the Chinese economy's main job creators, China will be at risk of depressed economic growth, which in turn may limit the growth of U.S. exports to China and the prosperity of U.S. investments in China, slowing economic recovery here at home. The shadow banking system that Beijing has allowed to step into this credit gap is insufficiently regulated and, if left unchecked, will pose an increasingly serious threat to Chinese and global economic stability.

- The opacity of Chinese corporate governance and accountability policies, as well as conflicts with U.S. securities laws and regulations, hurts investor confidence in Chinese companies trading on U.S. exchanges. The current situation threatens U.S. investors with unforeseeable and unmanageable losses and may lead to a broad delisting of Chinese companies. China's lack of sophisticated banking, corporate governance, and auditing policies and practices also hinders much-needed growth and opportunity for the very U.S. financial services firms that could help China to restructure its system if they were allowed greater access to the Chinese market.
- Insufficient transparency and accountability in China's financial sector put U.S. firms at risk of violating laws in both China and the United States; pose unreasonable hazards for U.S. investors with shares in Chinese companies; and render some U.S. laws and regulations unenforceable. Without greater regulatory transparency and assurance of China's regulatory, oversight, and enforcement capabilities, Chinese firms also risk curtailment or even revocation of access to the U.S. market.

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SECTION 4: CHINA'S AGRICULTURE POLICY, FOOD REGULATION, AND THE U.S.-CHINA AGRICULTURE TRADE

Introduction

China's World Trade Organization (WTO) accession in 2001 was a watershed event for U.S. agriculture. China is now the primary export market for U.S. agriculture products.[1] While the United States ran a $315 billion trade deficit in goods with China in 2012, it achieved a $21 billion surplus in agriculture.[2] Since full implementation of the WTO accession in 2005, China's agriculture imports from the United States have risen by an average of $2.5 billion each year, exceeding the U.S. Department of Agriculture's (USDA) initial estimate of $2 billion.[3]

A prime beneficiary of this farm trade boom is Iowa, one of the nation's largest agricultural states.[4] Twenty years ago, China and Taiwan accounted for 6 percent of Iowa's agricultural exports. By 2012, they accounted for over 20 percent. That has helped sales of Iowa's agricultural products triple to $30 billion in just a decade.[5] Iowa farm real estate is now worth three times the national average.[6] Moreover, Iowa has enhanced the U.S.'s agriculture diplomacy with China. Iowa officials claim a "special relationship" with China's new president, Xi Jinping, who spent time in the state as a young official.[7] U.S. Agriculture Secretary Tom Vilsack in February 2012 hosted Mr. Xi and Agriculture Minister Han Changfu at the first U.S.-China Agricultural Symposium in Des Moines. The two countries signed the first U.S.-China Plan of Strategic Cooperation in Agriculture (2012–2017).[8] Weeks after the symposium, the USDA led the largest ever agricultural trade mission to the Mainland.[9]

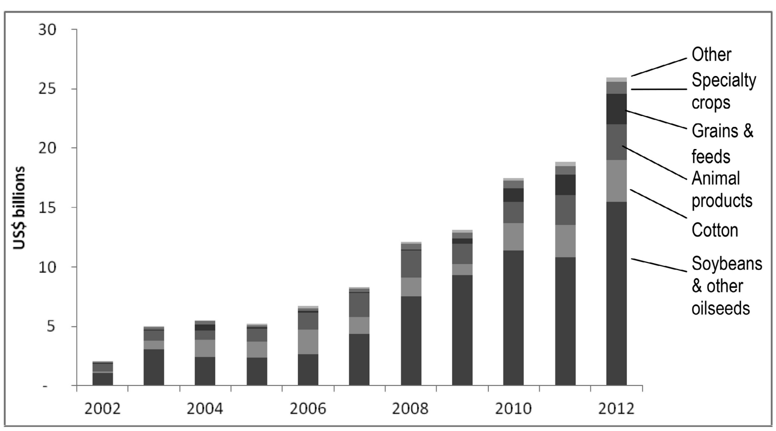
The Commission consequently chose Iowa State University in Ames as the location for an April hearing on China's agriculture policy and the U.S.-China trade in agriculture products. Among the witnesses was Iowa Secretary of Agriculture William Northey. The Commissioners also traveled to China in July to meet with Chinese officials, researchers, and producers as well as U.S. food companies. These activities complemented the Commission's 2008 hearing in New Orleans, which examined the economic and safety impacts of China's seafood exports to the United States.[10]

The hearing and trip illustrated the potential for deepening U.S.-China agriculture ties. China must feed a fifth of the world's population with less than a tenth of its arable land and potable water.[11] As China transforms into an urban society with a growing middle class, per capita food consumption is rising and, with it, the demand for higher-protein diets—a demand that U.S. farmers are well positioned to fill. China also seeks to make its farmers more productive, and U.S. agencies, companies, and universities are helping China to do that. The United States, with its distinct advantages in resources, productivity, and quality, should benefit from a free market in farm goods.

However, the Commission takes note of serious problems in the bilateral relationship. These problems are detailed in this section. Many in the U.S. agriculture industry lobbied Congress in 2000 to grant China permanent normal trade relations, because they expected China to become a major purchaser of U.S. food products once it joined the WTO.* But yesterday's farm belt advocates have been disappointed that China has concentrated its purchases on bulk commodities, such as soybeans used as animal feed for China's outsized livestock industry (see figures 1 and 2). China's agriculture policy favors domestic production, even when it is unsustainable and nonessential to food security. In trade, China has used nontariff barriers to restrict imports of higher value-added products from the United States. Of particular concern are antidumping duties on U.S. broiler chickens; a ban on U.S. beef; and zero tolerance for even the small amounts of growth-inducing chemicals used in U.S. pork feed lots. For the bulk goods that China does import, such as soybeans, cotton, and corn, value-added processing largely takes place in China, costing the United States opportunities to create new jobs.

Figure 1: Value and Composition of U.S. Agricultural Exports to China, 2002–2012

US$ billions

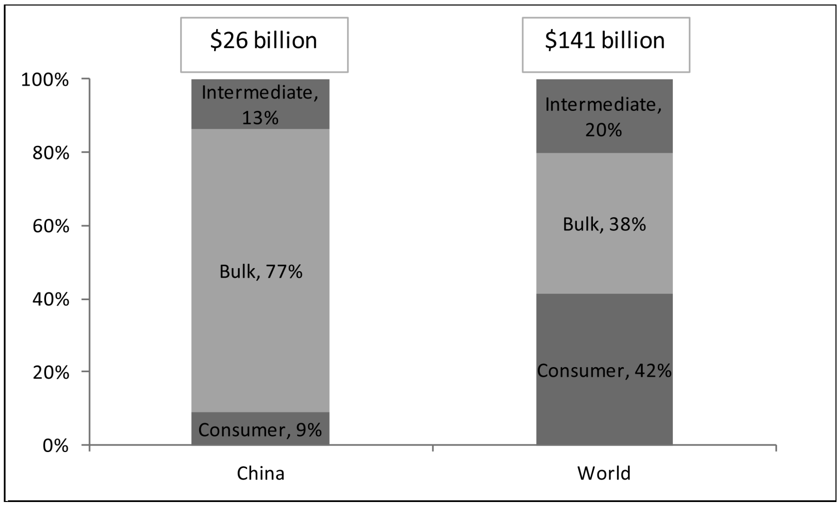


Source: USDA (Washington, DC: Foreign Agricultural Service, 2013).

* Granting China permanent normal trade relations, also known as Most Favored Nation status, was a precursor to China's admission to the WTO the following year. President Bill Clinton also pushed for permanent normal trade relations as a way to widen access for U.S. agricultural exports to China. The White House, "Clinton Says U.S. Has Key Role in China" (Washington, DC: Office of the Press Secretary, February 24, 2000). For a comprehensive forecast of market access by product, see Jonathan R. Coleman, Jonathan T. Fry, and Devry S. Boughner, "The Impact of China's Accession to the WTO on U.S. Agricultural Exports" (Washington, DC: U.S. International Trade Commission, September 2002).

Figure 2: Basic Composition of U.S. Agricultural Exports to China and to the World, 2012

Share (%)



Notes: Due to a rounding error, totals may not add up to 100.

Under the USDA's classification system, "bulk commodities" refer to crops shipped in raw form, such as wheat, coarse grains, rice, soybeans, and cotton; "intermediate goods" refer to processed crops, such as flour, soybean meal, and feeds and fodders as well as products not directly for consumer use, such as live animals, planting seeds, hides and skins, and sweeteners; "consumer-oriented products" include, among others, meat and dairy products, fruits and vegetables, and snack foods.

Source: USDA (Washington, DC: Foreign Agricultural Service, 2013).

The emerging trade relationship with China also poses risks to the food industry on U.S. shores. China has not done enough to promote food safety for its own people but maintains a trade surplus with the United States in consumer foods. U.S. consumers eat large amounts of fish, fruits, and vegetables, as well as vitamins and food supplements, produced in China.* U.S. government food safety inspectors have been unable to sufficiently monitor the safety of these imports and have been restricted, too, in their access to food production sites within China. At the same time, Chinese food companies, led by pork producer Shuanghui Group, are beginning to acquire productive assets in the U.S. food sector. Such investments could improve China's food production by helping its companies to adopt best practices. For the United States, they also have implications for net economic benefits, intellectual property, and reciprocal market access.

China's Changing Consumption Needs

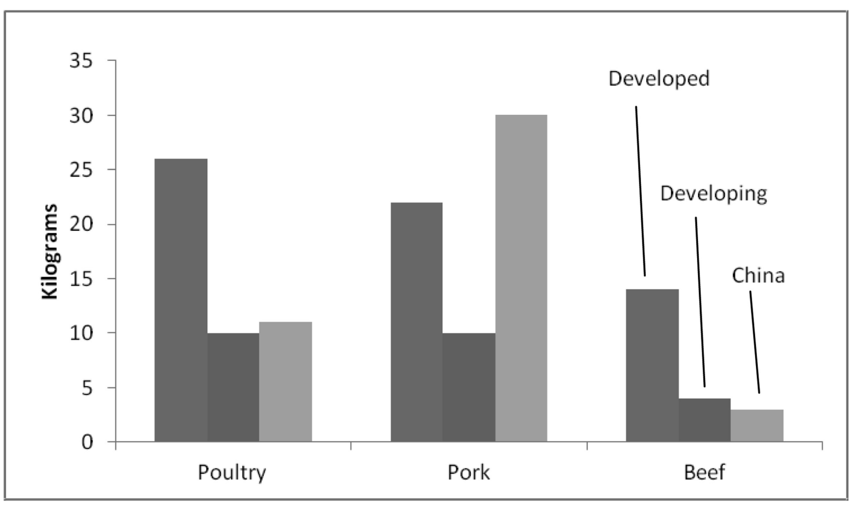
China's economic development over the past 30 years has caused a structural shift in the country's dietary habits. In 1980, China consumed 68 percent less meat per capita than the world average;

* For more information, see U.S.-China Economic and Security Review Commission, *Hearing on China's Enforcement of Intellectual Property Rights and the Dangers of the Movement of Counterfeited and Pirated Goods into the United States* (Washington, DC: June 7–8, 2006).

today, it consumes 19 percent more.[12] There is still room for additional meat consumption. Although economic growth is slowing, China's population of 1.3 billion is seeing a faster rise in real wages than previously, and just over half of the population now lives in cities. Urbanization and higher incomes tend to correlate with protein-based diets.* Owing to income inequality among regions, rural and urban areas, and individual households, meat is enjoyed mostly by a small segment of China's population.

Chinese consumers could also diversify their dietary intake. China currently consumes around half of the world's pork, equivalent to 30 kilograms of pork per capita each year, far higher than the rest of the world. In contrast, its consumption of beef and poultry is relatively low. Poultry consumption per capita is about ten kilograms per year, compared to 42.4 kilograms in the United States (see figure 3). Poultry is a lower-cost option for increasing protein intake. Speaking on behalf of the U.S. Poultry and Egg Export Council, which represents 95 percent of the U.S. poultry industry, DTB Associates' Kevin Brosch forecast the impact that China would have on world markets if it increased its annual per capita consumption of poultry: at Japan's modest level of 17 kilograms per annum, China would require an amount equal to all current world exports of poultry.[13]

Figure 3: Per Capita Meat Consumption: China vs. Other Countries, 2012
Kilograms per capita per year



Source: Organization for Economic Cooperation and Development (OECD)/Food and Agriculture Organization (FAO), *Agriculture Outlook*, June 2013, via U.S. Meat Export Federation (Denver, CO).

*A more technical explanation of this phenomenon is the income elasticity of demand, or how much demand for a given product rises or falls with increases in income. Income elasticities in China, as in many other countries, have been negative for rice, wheat, and coarse grain, such that China consumes less of these products as it becomes wealthier. By contrast, its consumption of pork, poultry, and especially beef and fish will continue to rise rapidly with added income. Scott Rozelle, "Overview of China's Agricultural Development and Policies" (Center for Chinese Agricultural Studies, January 2010).

China's distinct dietary preferences provide additional opportunities to U.S. producers. The United States has a surplus of exactly those parts of the animal, such as pork offal and chicken paws, that Chinese consumers prize. These products can be sold at a much higher price in China than the United States.[14] The U.S. meat products exported to China are predominantly in these categories.[15] As Dermot Hayes of Iowa State University told the Commission, if U.S. producers could sell the other half of the carcass in China at a premium, they could double their revenue without significant production cost increases.[16]

As Chinese consumers change their diets, they are seeking safer food as well. Some of this vigilance has resulted in suspicion of new technologies, such as genetically modified foods.* A spate of food safety scandals in China has also made consumers justifiably worried about what they are eating. China's food production industry is highly fragmented. Many producers at the farming, processing, and distribution levels forgo safe practices in order to cut costs.[17] Food is adulterated, among other things, by the excessive use of fertilizers and pesticides; growth-enhancing antibiotics for livestock; and toxic chemicals that artificially enhance the freshness, appearance, or nutritional value of food. Due to false or incomplete labeling, harmful ingredients are often not disclosed.[18]

In response, Chinese citizens, with the aid of new social media, are seeking more information about food safety beyond government sources. Many have voiced grievances about a "special food supply" that caters to government officials.† Chinese consumers are also transitioning from wet markets to supermarkets,‡ in the process becoming more attentive to third-party labeling, traceability, and trusted brands.[19] Those with more disposable income are turning to premium food products to ensure safety. Interest in organic food is spreading, ranging from farmers' markets to community farming and organic food clubs.[20] On the outskirts of Xi'an in western China, the Commission visited a company that combines a vegetable seed business with organic food production. Members of the

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*The Chinese public remains very divided about genetically modified (GM) foods. Some critics, inspired by Japan and the European Union, maintain that GM foods are not safe for either production or consumption. Oddly, China has yet to legalize the planting of GM crops, even though it has invested large amounts in developing its own biotechnology. China does, however, import GM crops, such as soybeans and corn, which are fed to China's livestock. Some argue that this intermediate form of GM food consumption is less obvious to consumers and hence less controversial. Jikun Huang et al., "A Consumer Segmentation Study with Regards to Genetically Modified Food in Urban China," *Food Policy* 35 (2010): 456–62.

†"Special food supply" refers to food for Chinese officials grown at special production sites. The system was first established under Soviet influence in the 1930s as a means to protect the Communist Party leadership against famine. Today, special food supply sites in China are associated with organic food production. While the precise quantity and nature of these production sites is unclear, articles in the Chinese media indicate that the "special food supply" has caused some consternation among ordinary Chinese. Barbara Demick, "In China, What You Eat Tells Who You Are," *Los Angeles Times*, September 25, 2011, via Factiva database; Jiang Gaoming, *"Jiang Gaoming: Shipin tegong jidi pinxian tuxian shipin jianguan ganga"* (Jiang Gaoming: The Appearance of New Special Food Supply Sites Is an Embarrassment to China's Food Regulators), *Guangming Wang* (Guangming Net), February 25, 2013. *http://health.gmw.cn/2013-02/25/content_6800842.htm*; *Nandu* online, *"Hu Xingdou: Jianyi quxiao tegong zhidu, jiejue tequan fubai"* (Hu Star: Recommendations on Eliminating the Special Food Supply System, and Resolving the Corruption of Special Privilege), May 14, 2013. *http://ndnews.oeeee.com/html/201305/14/59741.html*; and *Fazhi Ribao* (China Law Daily), *"Tegong shangpin wushi zhengce, xuezhe cheng bufen guojia jiguan tan xiaoli,"* (Special Supply Products Unregulated, Scholars Ascribe It to Greed in Some Government Agencies), February 2, 2012. *http://politics.people.com.cn/BIG5/16998050.html*.

‡A wet market is a fresh food market commonly found in Asian countries. It often sells live animals and raw meat.

company's organic food service pay an annual fee of around $800 to have organic food shipped to their homes.[21]

Worries about food safety are also boosting food imports. A striking example is the dairy sector. The adulteration of infant formula with melamine, a toxic industrial solvent, caused China's dairy imports to grow at an annualized rate of 45 percent between 2009 and 2012—more than double the previous rate and double the rate of increase in total food imports.[22] Mainland Chinese are buying baby formula and ultra-high-temperature milk from the shelves of supermarkets in other countries, where retailers have been compelled to ration sales to limit hoarding.[23]

Reacting to the rise in consumer demand, the Chinese government has begun to allow some imports of U.S. premium consumer foods bearing the "USDA approved" logo. U.S. pear farmers, for example, received import licenses from Beijing in early 2013 and plan to focus on wealthy consumers concerned about the safety of domestic pears.[24] These U.S. products often directly compete with goods produced in China.

Examples of Food Safety Scandals in China

In recent years, food safety scandals in China have affected a variety of consumer food items:

Dairy Products

Melamine mimics the nutritional values of protein. It has been used in China to mask the low protein content of dairy products, such as milk powder and infant formula. In 2008, six infants were killed, and more than 12,000 were hospitalized with kidney and other organ damage from adulterated formula. The scandal led to the execution of two producers and prison terms for dairy company executives. In February 2011, reports emerged of another milk contamination scandal involving leather-hydrolyzed protein. The toxic additive has also been found in such processed products as candy, hot cocoa, and flavored drinks, some of which are exported from China to other countries.

Fruits, Vegetables, and Tea

Police in the northeastern city of Shenyang seized 40 tons of bean sprouts in 2011 that had been treated with sodium nitrite, urea, antibiotics, and plant hormones. Wholesale vegetable dealers in Shandong Province in 2012 were found spraying cabbages with formaldehyde to preserve them during transport without refrigeration. Chinese media in 2012 reported that fruit from 16 companies contained excessive pigments, bleaching agents, and preservatives. Testing by Greenpeace found at least three different kinds of pesticides in each of 18 varieties of tea.

Examples of Food Safety Scandals in China—*Continued*

Meat and Fish

Pork is sometimes adulterated with clenbuterol, a lean meat additive that can cause dizziness, heart palpitations, and diarrhea. Other reports have identified pork contaminated by phosphorescent bacteria, while rat meat has been substituted for lamb sold on skewers in Beijing. A 2012 report revealed that fish vendors in Beijing were using a chemical ordinarily meant for temporary dental fillings in order to tranquilize fish during transport.[25]

China's Unsustainable Agriculture Policy

The Focus on Self-Sufficiency and Domestic Production

China has seen the fastest growth in agricultural output of any major economy over the past 30 years. In the Maoist period (1949–76), agronomists feared that China would place a strain on the world food system by being unable to feed itself. Today, China produces over 20 percent of the world's cereal grains, 25 percent of the world's meat, and 50 percent of the world's vegetables.[26] Based on a common definition of arable land, the United States has more than twice the cropland of China, yet China's output is two-and-a-half times that of the United States.* China feeds not only its own population of 1.3 billion—it is also the world's largest exporter of numerous foods, including apple juice, farm-raised fish, garlic, and vitamin C.[27]

Beijing's agriculture policy has played a role in enhancing China's food productivity. Until the late 1970s, the government mostly procured agricultural goods from farmers at below-market rates. Reforms in the 1980s allowed farmers to sell some production on the open market at a higher return and established a land contracting system that permitted the leasing of land for several decades. Beginning in the 1990s, China's opening to world markets led to more export-oriented production, inbound foreign direct investment, and international development support from aid agencies such as the United Nations and the World Bank.[28]

The government is seeking ways to further modernize the agriculture sector. Crop yields, for instance, are still below potential due to poor planting techniques and postharvest waste.† The government has responded with ambitious measures. Since joining the WTO, China has increased its research and development (R&D) spending on agriculture more rapidly than any other country.[29]

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*China has achieved greater agricultural output than the United States with a smaller share of arable land. As outlined in this section, this phenomenon is mainly attributable to the intensive and unsustainable use of labor, resources, and land. Dense livestock production, double-cropping, overuse of fertilizers and pesticides, and land reclamation in arid regions are some examples of intensive farming methods. Relative to the United States, the productivity of China's farming sector remains very low. U.S.-China Economic and Security Review Commission, *Hearing on China's Agriculture Policy and U.S. Access to China's Market*, testimony of Dermot Hayes, April 25, 2013.

†Postharvest waste refers to the loss in the process of storing grain after it is harvested. In China, grain crops are often exposed to adverse natural elements due to the lack of adequate storage facilities. Shannon Herzfeld (vice president, Archer Daniels Midland), telephone interview with Commission staff, Washington, DC, August 9, 2013.

China's 12th Five-Year Plan (2011–2015) for the first time shifts the explicit focus of agriculture policy from rural development to boosting agricultural output. It lays out a blueprint for consolidating industry, modernizing production facilities, and promoting regional specialization.[30] The 12th Five-Year Plan has been complemented by the No. 1 Document—China's first policy document each year, which since 2004 has been devoted to agriculture. The most recent No. 1 Document, issued in January 2013, summarizes a comprehensive set of policies, including incentives for new farming operations; corporate investment in agriculture; food grain security measures; and credit for farmers.[31] During the Commission's July 2013 trip to China, participants met with top scientists at the Chinese Academy of Agriculture Sciences who are exploring ways to boost productivity through farmer training, satellite mapping, biotechnology, and reclamation of arid and polluted soils.[32]

However, many of China's agricultural policies are inefficient and unsustainable. These policies are driven, in part, by the government's emphasis on attaining self-sufficiency across a broad spectrum of food products, when a more rational policy would be to import products for which China lacks a comparative advantage. Beijing keeps official targets of 95 percent self-sufficiency for corn, wheat, and rice. In practice, it also maintains near self-sufficiency for pork, poultry, and beef (see table 1). According to a typically optimistic forecast by Huang Jikun, a top researcher at the government's Chinese Academy of Science's Center for Chinese Agricultural Policy, China by 2025 will have *no* trade deficit in either meat products or wheat and rice and will continue to be a net exporter of fruits, vegetables, and farm-raised fish.[33]

Table 1: China's Self-Sufficiency in Beef, Pork, and Broiler Chickens, 2009–2012

1,000 metric tons per year

	2009	2010	2011	2012
Beef				
Production	5,764	5,600	5,550	5,540
Consumption	5,749	5,589	5,524	5,597
Surplus/deficit	15	11	26	(57)
Surplus/deficit share of consumption	0.3%	0.2%	0.5%	−1.0%
Pork				
Production	48,905	51,070	49,500	52,350
Consumption	48,823	51,157	50,004	52,275
Surplus/deficit	82	(87)	(504)	75
Surplus/deficit share of consumption	0.2%	−0.2%	−1.0%	0.1%
Broiler chickens				
Production	12,100	12,550	13,200	13,700
Consumption	12,210	12,457	13,015	13,543
Surplus/deficit	(110)	93	185	157
Surplus/deficit share of consumption	−0.9%	0.7%	1.4%	1.2%

Source: USDA, "Livestock and Poultry: World Markets and Trade," (Washington, DC: Foreign Agricultural Service, April 2013). *http://www.fas.usda.gov/psdonline/circulars/livestock_poultry.pdf*.

Misallocation of Resources for Meat Production

A central problem of China's agriculture policy is its concentration on livestock production. China accounts for half of the world's pork output. It is also the world's largest producer of farm-raised fish, second-largest producer of poultry, and third-largest producer of beef.[34] Meat is an inefficient way to deliver calories, as it requires land- and water-intensive production of grain crops to feed animals instead of humans. For example, 1,799 gallons of water may be required over the life of a cow before it is slaughtered.[35] China's low productivity, coupled with its lack of resources, exacerbates these inefficiencies.

China lags far behind the United States in its ability to convert livestock into meat. China last year bred 15 percent more cattle than the United States—104 million head—but produced less than half as much beef. China produced five times more pork than the United States but required seven times as many hogs.[36] Nor is productivity necessarily improving over time. China's hog herd grew by 0.6 percent per annum in the 2000s, compared to 2.7 percent in the 1990s. China's pork output slowed even more over the two decades, from 5.9 percent to 2.2 percent per year.[37] Following an outbreak of blue ear pig disease * that killed off much of the herd, China's pork production actually contracted by 7.8 percent in 2007.[38] In contrast, the United States is achieving record pig herds and pork output, due to improved genetics and swine management techniques that have had more baby pigs survive to maturity.[39]

As a consequence of livestock production, China is using scarce resources to produce grain crops for animal feed. In the 1990s, China began to devote more acreage to horticulture cash crops. Yet over the past decade, that reallocation of land has slowed, such that grain crops still account for 68 percent of sown land (see figure 4). Within the grain sector, corn has overtaken rice as China's most widely planted and produced crop—reflecting the booming demand for corn feed.[40]

China's focus on grain crops has also diverted valuable water resources to what is a less profitable crop. According to Dr. Hayes, it has been bad business for China's farmers:

> *Consider the human resource waste when a skilled farmer spends an entire year growing three acres of corn in a world where a single U.S. farmer can grow three thousand acres. If China were to allow the market to incentivize these farmers to grow high value crops such as flowers, fruits, vegetables and ornamental plants, total farm income and the value of farm output would soar."*[41]

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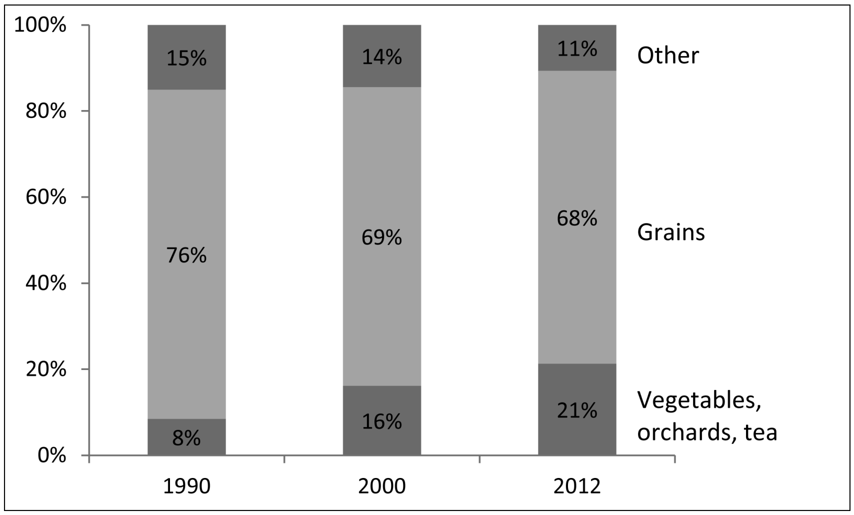
* Blue ear pig disease, also known as porcine reproductive and respiratory syndrome, is a pandemic disease that causes reproductive failure in breeding stock and respiratory tract illness in young pigs. It was first reported in North America in the 1980s.

Figure 4: Distribution of Sown Area in China, 2002–2012
Share (%)

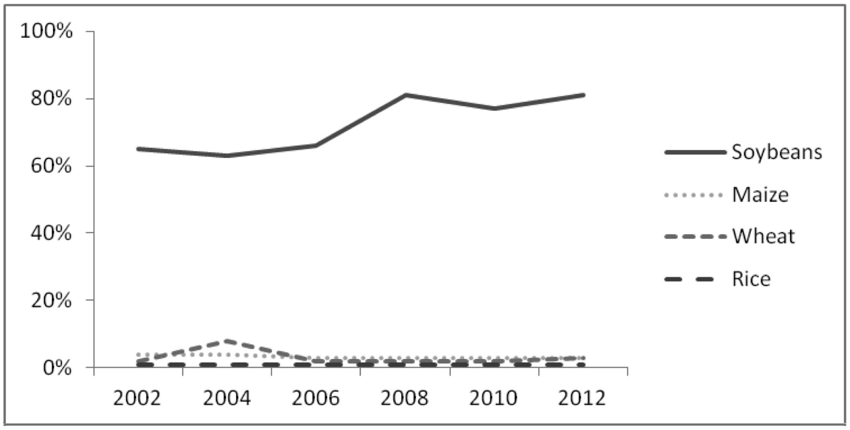


Note: Due to a rounding error, totals may not add up to 100.
Source: National Bureau of Statistics, via CEIC database.

In spite of China's commitment to planting grain crops, domestic crops have not sufficed to feed all of the country's livestock. The government in the late 1990s began to sanction imports of soybeans as an alternative source of animal feed. China now imports four-fifths of the soybeans it consumes (see figure 5).[42] But even soybean imports are proving too little to meet China's need for feed grains. In 2010, China for the first time imported large quantities of corn. A recent Iowa delegation to China testified that corn imports will keep rising.* While these developments may bode well for U.S. corn farmers, the fact is that China is tacitly abandoning its 95 percent self-sufficiency policy for corn, even as it promotes its own large-scale corn production.

* When traveling to southern China in March 2013, a group from the Iowa Soybean Association heard an estimate from a private trader that China would be importing 20 million metric tons of corn in five years, up from small amounts of net corn imports today. U.S.-China Economic and Security Review Commission, *Hearing on China's Agriculture Policy and U.S. Access to China's Market*, testimony of William Northey, April 25, 2013.

Figure 5: Import Penetration of Major Crops in China, 2002–2012
Imports/Domestic Utilization (%)



Source: Food and Agriculture Organization, *Agricultural Market Information System* (Rome, Italy: Agricultural Information System: Secretariat). *http://www.amis-outlook.org/*.

The Impact of Food Production on China's Environment and Public Health

China's land and resources face rapid decline. It is doubtful whether the central government's target of maintaining 120 million hectares under cultivation can be met in the future. According to Dr. Hayes, China will continue to lose about 2.5 million acres, or up to 4 percent of its farm land, each year to urban development.[43] The remaining arable land is also becoming less useful. China's intensive fertilizer use per acre, the highest in the world, reduces soil fertility, causing a vicious cycle of ever more fertilizer application to achieve higher yields. Meanwhile, agriculture irrigation accounts for 65 percent of China's water withdrawal, compared to 40 percent in the United States.[44] Water tables in arid regions are being depleted.[45]

Pollution of China's water, soil, and climate directly impact food quality. Only 6 percent of China's agricultural products were considered pollution free in 2005, according to figures compiled by the USDA. A study released in February 2011 found that 10 percent of all rice sold in China was contaminated with heavy metals.[46] Agriculture is a victim, but also a cause, of pollution. China's first national pollution census, released in February 2010, found that agriculture is a bigger source of water pollution than industry.[47] In order to produce vast quantities of pork, poultry, and farm-raise fish on limited land, China's breeders have resorted to high livestock density. For instance, China has kept five times the number of breeding sows—50 million—as the United States on much less farmland.[48] Consequently, livestock farms in China currently produce about four billion tons of manure annually. Manure could be used as nitrogen fertilizer for cornfields, but in China manure more often ends up as waste, because corn is planted in other regions of the country.* That creates oxygen-depleting algae blooms and nutrient overloads in waterways, including the Yangtze and Yellow rivers. Not least, manure contributes to climate change by emitting methane gas into the atmosphere.[49]

Dense livestock production has increased the incidence of animal diseases as well. In 2013, thousands of diseased pig cadavers were found floating in the river near Shanghai, dumped by illegal pork producers seeking to evade local food inspectors.[50] Similarly, in the poultry sector, the density of fowl has turned China into a breeding ground for avian influenza, with the most recent H7N9 outbreak occurring earlier in 2013.[51] According to Fred Gale of the USDA, these animal disease outbreaks should "drive the [Chinese] leadership to acknowledge that the production of livestock has really grown beyond the carrying capacity of the country."[52]

In contrast, U.S. meat production is more environmentally sustainable than in China. In Iowa, where corn and pork are produced side by side, manure is used as nitrogen fertilizer, and corn is harvested at the source where it is needed, forming a localized, low-cost, and self-sustaining production cycle. Said David Miller of the Iowa Farm Bureau:

> *From an environmental perspective, there is significant room for Iowa to increase pork production. Currently, Iowa farmers apply about one million tons of nitrogen from commercial fertilizer on Iowa farms and about 250,000 tons of nitrogen from manure. About 70 percent of the manure-based nitrogen is from hog production. If all of the commercial nitrogen for corn were to be replaced by nitrogen from hog manure, the Iowa hog herd would need to be currently five times as large as it is for increased production.*[53]

The Cost of Domestic Production for Chinese Consumers

In addition to the food safety risks discussed above, China's consumers worry about prices. Food has been the main driver of consumer inflation, which reached historic highs in the 2000s (see figure 6). Said Dr. Hayes, "They joke over there that the CPI [consumer price index] means consumer pig index, because if you spend 40 to 50 percent of your income on food, the thing you want to do is to upgrade to meat, and when that goes high, the Chinese government senses insecurity."[54] Periods of unrest, such as the 1989 Tiananmen Square protests, have been accompanied by high inflation.[55] The Great Famine in 1958–1961, which killed an estimated 15 million to 40 million people on account of faulty government policy, is etched in China's national psyche.[56]

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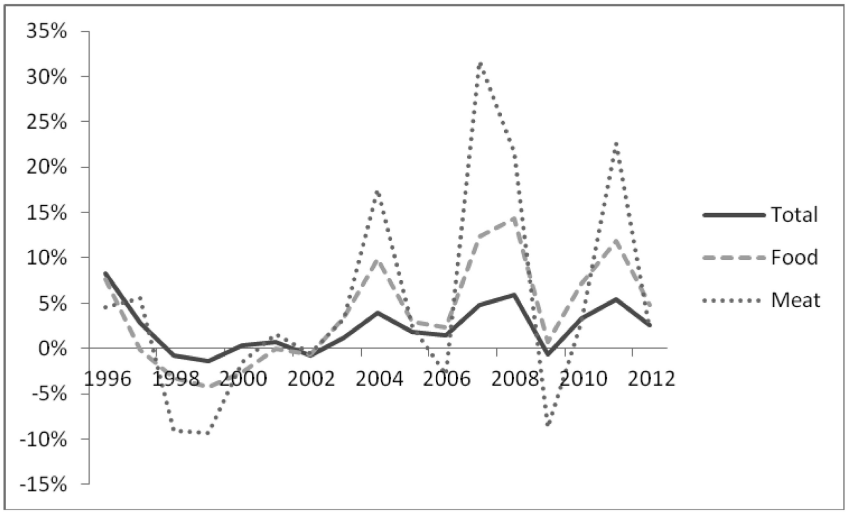
* China has been trying to diversify its hog production out of the Yangtze Delta into other parts of the country, particularly the North, where China's grain crops are grown. However, these efforts have had limited success. Northern China's hog production has remained around one-quarter of hog production since 1995. Kevin Chen and Wang Jimin, "Hog Farming in Transition: The Case of China" (paper presented at *Asian Livestock: Challenges, Opportunities and the Response*, Proceeding of an International Policy Forum, Bangkok, Thailand, August 16–17, 2012), p. 77; Mindi Schneider, "Feeding China's Pigs: Implications for the Environment, China's Smallholder Farms, and Food Security" (Minneapolis, MN: Institute for Agriculture and Trade Policy, May 2011), p. 3.

Figure 6: Annual Consumer Price Inflation in China, 1996–2012
Year-on-year (%)



Source: National Bureau of Statistics via CEIC database.

A policy of domestic meat production further raises costs. According to Dr. Hayes, feed costs alone make China's pork production and farm-level livestock 40 percent more expensive than in the United States. Soy meal prices are typically $100 per ton and corn $3 per bushel higher in China than in the United States, owing to shipping costs.[57] In view of China's widening income gaps, the burden of higher prices is especially harmful to low-income households that are forced to spend more on meat products.[58]

Lack of Support for Rural Livelihoods

An underlying rationale for China to favor domestic production is to support the nation's farmers. According to the Central Intelligence Agency, one in three Chinese workers is still active in agriculture.* Agriculture net output accounts for 10 percent of China's GDP—compared to 1 percent in the United States.† China's market reforms have not done nearly as much to improve the well-being of the rural population as they have for the urban sector. Wages have risen much faster in cities, widening rural-urban disparities. Young people are leaving villages in droves to earn higher wages

*Due to China's large migrant population, off-farm employment in the rural sector, and subpar demographic data, there are varying estimates of the total population economically active in agriculture. See Central Intelligence Agency, *World Factbook* (McLean, VA). *https://www.cia.gov/library/publications/the-world-factbook/fields/2048.html*; Scott Rozelle, "Overview of China's Agricultural Development and Policies" (Center for Chinese Agricultural Studies, January 2010); and Peter Hooper et al, "Demographics and GDP Growth in China" (Frankfurt, Germany: Deutsche Bank, November 16, 2012).

†Net output refers to "agriculture, value added," which the World Bank defines as "the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources." World Bank Indicators (Washington, DC: World Bank). *http://data.worldbank.org/indicator/NV.AGR.TOTL.ZS*.

in factories.[59] China's National Bureau of Statistics estimates that China has 170 million migrant workers.[60]

Maintaining rural livelihoods became a top priority for the Chinese leadership under the administration of President Hu Jintao and Premier Wen Jiabao (2003–2012). A document released at a central work meeting on rural development in December 2005 stated: "Only when the problems relating to agriculture, rural areas, and the farmers have been solved properly, can China's economy develop in the correct direction."[61] The government enshrined these initiatives in the 11th Five-Year Plan for Agriculture (2006–2010), under the theme of "building a new socialist countryside."[62] In 2006, all farmers were exempt from an agricultural tax that had been in place for millennia.[63] These policies built on the agricultural reforms initiated by Deng Xiaoping under the so-called "three rural issues," shorthand for the need to raise agricultural productivity, boost rural incomes, and provide welfare to rural migrants.[64]

The leadership under Xi Jinping is now changing tack by encouraging an ambitious urbanization strategy. The goal is to fully integrate 70 percent of the country's population, or roughly 900 million people, into city living by 2025.[65] With a smaller rural population, agriculture could be concentrated around a core of wealthier farmers. Fewer farm laborers would, in theory, also make farmland more productive. Mechanization of cropland, for instance, could raise planting density, while larger pork feed lots would enhance efficiency and safety.[66]

Nonetheless, a policy of urbanization and agricultural modernization will be difficult to realize. For one, China's successes in food production have relied heavily on labor intensity. Chinese farmers have planted multiple crops on the same land each year. A large portion of the country's livestock has been fed on manually collected food scraps and waste from restaurants. Low-wage farm workers have reclaimed land in rocky areas and hillsides that would not be considered arable in the United States.[67] In areas where bees have become extinct, farmers have pollinated trees by hand.* As farm labor declines, China will have to find means to mechanize and scale up production.

To this end, the government is experimenting with models to consolidate land. Yet, the institutional structures currently in place are not conducive to a U.S.-style system of production. China's average farm size is just 1.5 acres, down from 1.7 acres 20 years ago.[68] U.S. farms average 600 acres. The few large farms that are being established make only a small dent in overall production; in the pork sector, for instance, backyard farmers and small, specialized farms account for four-fifths of output.[69] Further, China's complex system of land distribution, whereby rural collectives led by local officials reserve the right to allocate land to farmers, rural enterprises, and urban developers, is politically contentious and has frequently led to expropriation.† The government took a step for-

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* In line with a global trend, bees in China are becoming extinct. China's farmers therefore pollinate many horticultural crops by hand using artificial pollen substitutes. Stephen Holden, "In Fields and Hives, Zooming In On What Ails Bees," *New York Times*, June 11, 2013. *http://movies.nytimes.com/2013/06/12/movies/more-than-honey-a-documentary-by-markus-imhoof.html*.

† The policy that land should be contracted for 30 years with no adjustments became law when the Land Management Law was revised in 1998. Samuel P.S. Ho and George C.S. Lin,

ward in 2003 by banning large reallocations of land and permitting farmers to lease land to locals and nonlocals. That gave rise to a rental market that allowed less productive farm workers to relocate to cities. But to this day, land is owned at the village level and cannot be mortgaged.[70] Farmers' cooperatives in the United States help farmers to coordinate and scale up their production, but in China, only one in four villages hosts a cooperative. In an authoritarian system that restricts freedom of organization, local officials can curb the independence of cooperatives as well.*

The absence of a functioning welfare state in China poses a further obstacle to modernizing agriculture. The government has yet to reform the system of residence permits (*hukou*) in urban areas that would grant all rural migrants access to urban welfare provision (For more on urbanization, see chap. 1, sec. 1, of this Report.). Independent surveys show that younger family members are migrating to cities temporarily, while the elders stay behind to tend the land.[71] Farmland, leased for 30 years, remains an important form of personal insurance that many migrants are reluctant to give up.

The Impact of China's Agriculture Policy on U.S. Exports

Measuring the Impact of China's WTO Violations

Prior to its WTO accession, China's trade barriers included exorbitant tariffs, quotas, state trading monopolies, and outright bans on some agricultural products. China agreed to eliminate most of these barriers. In 2002–2006, China lowered tariffs on agricultural goods of greatest importance to U.S. farmers and ranchers from a 1997 average of 31 percent to 14 percent. The last tariff reductions occurred in 2008. As Stanford agricultural economist Scott Rozelle has shown, the reduction in tariff rates allowed prices for many commodities in China to converge with world markets. China's average tariffs and supports for agriculture are now below those of several other WTO members, including the European Union, Japan, and South Korea.[72]

The effects of China's trade liberalization are evident in its trade balance. China's net imports of food have surged from near zero to more than $40 billion since 2004. As Colin Carter, professor of Agricultural & Resource Economics at University of California–Davis, told the Commission, China maintains an export-oriented horticulture industry, but imports of these products are outpacing exports.[73] Although China remains largely self-sufficient, a small adjustment in its imports has a disproportionate effect on global markets. Based on unofficial estimates that include Hong Kong, China is already the world's top importer of beef and pork.[74]

Nonetheless, China keeps numerous nontariff barriers in place to restrict U.S. imports. They include excessive subsidies; government control over import quotas; discriminatory taxes; and sanitary and phytosanitary restrictions that are not based on proper scientific

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"Emerging Land Markets in Rural and Urban China: Policies and Practices," *China Quarterly* 175 (September 2003): 689–707.

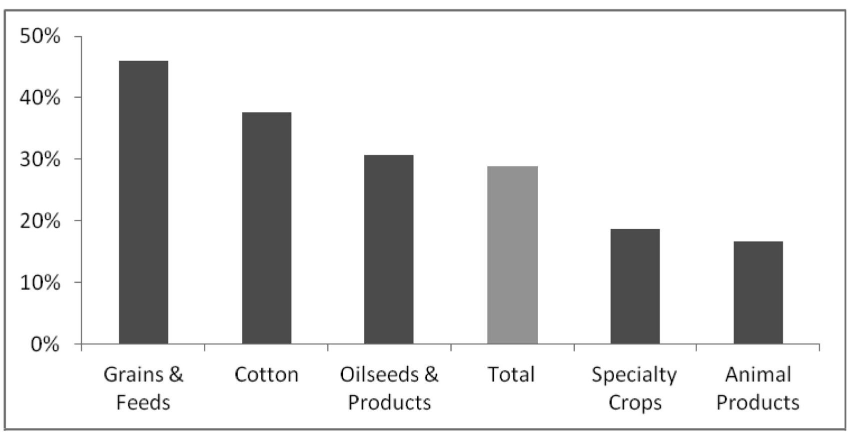
* The technical term for China's cooperatives is "farmers' professional economic cooperative." Data from a 2009 survey by the Center for Chinese Agricultural Policy. Scott Rozelle, "Overview of China's Agricultural Development and Policies" (Beijing, China: Center for Chinese Agricultural Policy, January 2010).

analysis.* These measures have contributed to a very imbalanced food trade between the United States and China. U.S. soy farmers have reaped a windfall, accounting for three-fifths of U.S. agriculture exports to the Mainland in 2012.[75] China buys up to seven times more soybeans from the United States than Japan, the next-largest customer.[76] Yet other crops have not enjoyed fair and stable access. With the exception of dried distillers grains, a corn-based byproduct of U.S. ethanol production,† value-added products based on crops have also had limited success.

Worse still, U.S. consumer foods have entered China at a slower rate than total trade (see figure 7). China has banned U.S. beef for a decade. Although China is currently a top market for U.S. pork, China's pork purchases have been erratic due to unpredictable food safety-related bans. The U.S. Meat Export Federation claimed in 2012 that sanitary barriers posed "the single largest constraint to the expansion of U.S. beef, pork and lamb exports over the next five years."[77] After China placed antidumping duties on U.S. broiler chickens in 2010, poultry exports plummeted as well.

Figure 7: Annualized Growth of U.S. Agricultural Exports to China, 2002–2012

Compound Annual Growth Rate (%)



Source: USDA (Washington, DC: Foreign Agricultural Service).

China's nontariff barriers are often protectionist measures. According to Dr. Gale of the USDA, China's self-sufficiency policy is based on an exaggerated alarm about the risks of import reliance. Beijing presumably worries that the volume of potential Chinese

* Sanitary and phytosanitary regulations restrict or prohibit imports and marketing of certain animal species, or products, to prevent the introduction or spread of pests or diseases that these animals may be carrying. World Trade Organization, "Introduction to the SPS [Sanitary and Phytosanitary] Agreement" (Geneva, Switzerland: 2013). *http://www.wto.org/english/tratop_e/sps_e/sps_agreement_cbt_e/c1s3p1_e.htm.*

† Distillers' grains are a cereal byproduct of the distillation process. There are two main sources of these grains. The traditional sources were from brewers. More recently, ethanol plants are a growing source. Corn based distillers grains from the ethanol industry are commonly sold as a high protein livestock feed that increases efficiency and lowers the risk of subacute acidosis in beef. U.S.-China Economic and Security Review Commission, *Hearing on China's Agriculture Policy and U.S. Access to China's Market*, testimony of Julius Schaaf, April 25, 2013.

demand is so large that food imports would outstrip the capability of world markets to supply the country. There are also strategic concerns that reliance on imports of any particular commodity will leave China vulnerable to global price fluctuations and manipulation of prices by other countries or multinational companies.[78] In addition, China's agriculture policy manifests the government's broader industrial policy. In numerous industries, from furniture to textiles and steel, China imports raw materials for value-added processing. That policy frequently entails heavy subsidies for land, labor, and capital; selective market barriers for imports and foreign investment; and, increasingly, support for strategic enterprises and outbound investment in productive assets overseas.

Sanitary and Phytosanitary Barriers to U.S. Meat Exports

The WTO sets out clear obligations for member states to only use sanitary and phytosanitary restrictions that do not "arbitrarily or unjustifiably discriminate between WTO members' agricultural and food products, and are not disguised restrictions on international trade."[79] China has applied numerous food safety-based restrictions on trade that contravene these principles.

China has persistently banned U.S. meat products following epidemic outbreaks. In the interest of public health, countries customarily impose bans on imports if there is a related epidemic outbreak in the exporting country. China's bans, however, have frequently exceeded any necessary safety precautions. The most egregious case is the beef sector. China joined other countries in closing its market to U.S. beef imports in 2003 due to one discovered case of BSE (bovine spongiform encephalopathy, or "Mad Cow Disease").* But China kept its ban in place even after the United States was classified as a "controlled risk" country by the World Organization of Animal Health in July 2007 and as a "minimal risk" in May 2013.[80] Likewise, U.S. pork was subject to unjust bans in April 2009, under the pretext of an H1N1 virus outbreak, even though the virus is not transmitted by consumption of food products. China's Ministry of Agriculture and the General Administration of Quality Supervision, Inspection and Quarantine only removed the bans in December 2009.[81]

Another form of sanitary restrictions relates to residue levels. It is common for food products to contain some residual level of antibiotics, pesticides, or other potentially harmful substances. In order to facilitate trade, most trade partners agree on allowable maximum residue levels. Residues at low levels pose minimal health risks, according to international agreements. But China has adopted a zero-tolerance approach to ractopamine, a feed ingredient that significantly enhances yield and efficiency in pork production. The

* BSE (bovine spongiform encephalopathy) is a progressive neurological disorder of cattle that results from infection by an unusual transmissible agent called a "prion." The nature of the transmissible agent is not well understood. According to the USDA, the United States has registered four cases of BSE in 2003–2012. The case that first caused the bans on U.S. beef was recorded in December 23, 2003, in an adult Holstein cow from Washington State. On June 24, 2005, the USDA announced receipt of final results from the Veterinary Laboratories Agency in Weybridge, England, which confirmed the first endemic case of BSE in a 12-year-old Texas cow. On March 15, 2006, the USDA confirmed BSE in a ten-year-old cow in Alabama. On April 24, 2012, the USDA confirmed a BSE case in a ten-year-old dairy cow in California. U.S. Department of Health and Human Services, "BSE (Bovine Spongiform Encephalopathy, or Mad Cow Disease)" (Atlanta, GA).*http://www.cdc.gov/ncidod/dvrd/bse/*.

U.S. Food and Drug Administration (FDA) approved ractopamine as early as December 1999, and it is now approved by 26 countries, including several countries in Asia.* The Codex Alimentarius Commission reaffirmed the safety of ractopamine by adopting maximum residue level standards in July 2012.[82] Given that codex determinations serve as a basis for the WTO rules on dispute resolution, China's zero-tolerance policy is inconsistent with its WTO commitments. China began blocking shipments from individual U.S. pork plants after it detected ractopamine in 2006. The issue was raised in 2009–2011 at working group meetings of the Joint Commission on Commerce and Trade, one of the main bilateral dialogue mechanisms between the United States and China. The United States requested that China adopt an interim maximum residue level for ractopamine. Still, China refused, and following the 2012 codex ruling did not take any steps to address its zero-tolerance policy.[83]

Sanitary restrictions have had a considerable impact on U.S. livestock producers. The U.S. Meat Export Federation estimated in 2012 that the decade-old ban on U.S. beef cost producers as much as $350 million a year.[84] The blow has been mitigated somewhat by huge gray markets that transship U.S. beef products through Hong Kong and other neighboring jurisdictions into China, to be sold at a markup price to wealthy diners and shoppers.† But that has not made up for the loss in market share. Australia, a U.S. competitor that is allowed to export its beef to China, saw its exports rise an incredible 1,948 percent year-on-year in the first half of 2013.‡

The barriers have also hurt pork producers, who rely on fixed rearing and slaughtering cycles and hope for predictable demand and prices. For instance, China's decision in March 2012 to disallow third-party audits of ractopamine in U.S. pork suddenly prevented a host of U.S. pork exports from going to China. According to Mr. Miller, that effectively cut the price of Iowa's 30 million hogs by $10 per head.[85] Another factor that makes compliance with the ractopamine ban difficult is that it interferes with the complex segmentation of pork products. As Secretary Northey noted, the United States sends more pork pieces, such as offal, to China than

*As a part of the Codex Alimentarius process, ractopamine hydrochloride has three times been reviewed by the Joint FAO/WHO Expert Committee on Food Additives (JECFA), which has recommended safety standards that align with those within the approved use countries. The most recent review was for consideration of studies conducted and submitted by China. The JECFA scientific statement noted that: "The Committee concluded that, based on the data provided, including those from the three breeds of pigs in the studies undertaken by the People's Republic of China, and corresponding dietary information, the recommended MRLs [maximum residue levels] are compliant with the ADI [acceptable daily intake] as regards consumption of pig tissues of muscle, liver, kidney and fat. The estimated daily intake is approximately 50% of the upper bound of the ADI for a 60 kg person."

†The presence of this gray market was confirmed by numerous parties during the Commission's July 2013 trip to China. Beef is exported legally to Hong Kong, Vietnam, and the Philippines, then recontainerized and shipped to China. Exporters are allegedly willing to pay an additional fee for this transshipping. Because U.S. storage facilities operators in China refuse to harbor illegal imports, the U.S. beef often ends up stored in Chinese facilities, potentially making the product less safe. Many restaurants in Shanghai that serve U.S. beef carry two sets of books in case the authorities come to check on the beef's country of origin.

‡Although Australia is a major beef exporter, it did not send much beef to China until recently. Australia's traditional markets have been Japan, South Korea, the Middle East, and the United States. In the first half of 2013, however, China imported 62,421 tons of Australian beef, up from 3,048 tons a year earlier. Almost overnight, China became Australia's third-largest export destination for beef. Presentation by the U.S. Meat Export Federation (Shanghai, China, July 26, 2013).

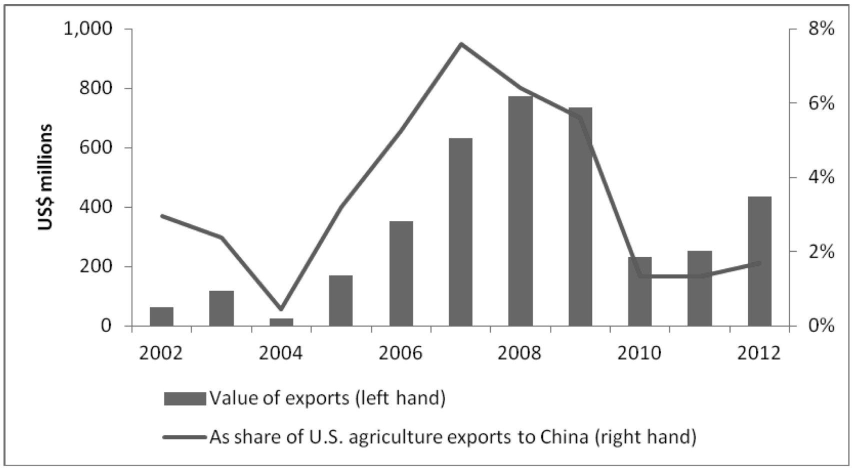
whole hog carcasses. By not using ractopamine in the breeding process, U.S. pork producers incur a higher cost of production for the whole pig. That puts them at a competitive disadvantage when they sell muscle cuts and other parts in the U.S. market.[86]

China's sensitivity to food safety for imports is partly a reaction to the country's internal safety problems. The Chinese government has argued in its defense that it lacks the technology to distinguish harmful from less harmful additives. It has also requested additional research on feed additive residues in the internal organs of pigs, since those parts of the animal are more widely consumed in China than the United States.[87] Still, as Dr. Gale asserted, China's stringency results in double standards. Although the Chinese government outlaws ractopamine, as well as a dangerous alternative, clenbuterol, countless Chinese pork producers continue to use these additives to increase feed efficiency. According to Dr. Gale, "This brings up an issue of a much tighter enforcement of standards and regulations for imports than in the domestic market," a violation of basic trade principles.[88] Mr. Brosch argued that "China's strict, and sometimes unsupportable decisions to impose limitations on U.S. imports are driven primarily by internal pressures on its government as a result of past domestic food safety mistakes. In our view, Chinese health officials are now under a tremendous amount of internal pressure and scrutiny and want to appear to their domestic constituents to be increasingly vigilant."[89]

Antidumping Duties and the Tradeoff between Market Access and Food Safety

Antidumping (AD) and countervailing duties (CVD) disputes have been a point of contention in U.S.-China bilateral trade. The agriculture sector is no exception. China's Ministry of Commerce (MOFCOM) imposed AD and CVD duties on U.S. chicken broiler products in August and September 2010, respectively. The AD duties ranged from 50.3 percent to 53.4 percent for the U.S. producers who responded to MOFCOM's investigation notice, while MOFCOM set an "all others" rate of 105.4 percent. In the CVD investigation, MOFCOM imposed countervailing duties ranging between 4.0 percent and 12.5 percent for the participating U.S. producers and an "all others" rate of 30.3 percent. According to the Office of the U.S. Trade Representative, American exports to China of broiler products fell by 80 percent following the application of the duties (see figure 8).[90]

Figure 8: U.S. Poultry Exports to China, 2002–12
US$ millions



Source: USDA (Washington, DC: Foreign Agricultural Service).

The United States complained to the WTO in September 2011 and was vindicated in August 2013 when a WTO dispute settlement panel found that China's AD/CVD actions against U.S. broiler chickens violated its WTO commitments.* The panel supported nearly all of the U.S. claims, including substantive errors in MOFCOM's calculations and procedures.[91] China decided not to appeal the ruling by the September 10, 2013, deadline.[92] As a next step, China will have to demonstrate that it has complied with the ruling by repealing the duties. At a September 25 WTO Dispute Settlement Body meeting with Chinese officials, U.S. officials said they hoped the decision would force Beijing to fundamentally reevaluate how it proceeds in AD and CVD investigations.[93]

Although the WTO decision marked a victory, the AD/CVD actions against broiler products are emblematic of a broader conflict in bilateral trade that is unresolved. China's actions against broiler products coincided with an escalation in other trade disputes. Beijing threatened to impose the duties on chicken in September 2009, weeks after the United States applied a 35 percent tariff on Chinese-made tires.† Within a week of the U.S.'s announcement that it would challenge the tariffs on broiler products, China applied dumping duties on U.S. automobiles and auto parts.‡ The United

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* Broiler products include most chicken products, with the exception of live chickens and a few other products such as cooked and canned chicken.

† On September 11, 2009, the president imposed additional duties on imports of certain passenger vehicle and light truck tires from China for a period of three years in order to remedy the market disruption caused by those imports, as determined by the U.S. International Trade Commission (USITC). China challenged the imposition of the duties, alleging that the USITC's determination regarding market disruption and the level and duration of the additional duties were inconsistent with the Protocol of Accession and the General Agreement on Tariffs and Trade (GATT) 1994. A WTO panel later rejected all of China's claims, and the Appellate Body rejected all of China's claims on appeal. Office of the U.S. Trade Representative, "United States Prevails in WTO Dispute about Chinese Tire Imports" (Washington, DC: USTR Press Release, September 2011). *http://www.ustr.gov/about-us/press-office/press-releases/2011/september/united-states-prevails-wto-dispute-about-chinese*.

‡ This is now a separate WTO complaint by the United States. See WTO, "China—Certain Measures Affecting the Automobile and Automobile-Parts Industries" (Geneva, Switzerland: Dispute DS450). *http://www.wto.org/english/tratop_e/dispute_/cases_e/ds450_e.htm*.

States also angered China by filing an AD case against Chinese honey in 2000. China's share of U.S. honey imports was around 30 percent when the AD case was initiated, and today that market share is near zero.[94]

Furthermore, the broiler duties were implemented less than two years after Congress passed the DeLauro Amendment, a piece of legislation introduced by Representative Rosa DeLauro (D–OH), chair of the House Appropriations agriculture subcommittee, to the 2008 Farm Bill. The amendment prohibited funding the USDA Food Safety Inspection Service (FSIS) inspection of processed poultry imports from China. China soon challenged the ban in the WTO. The U.S. Trade Representative and the USDA worked with Congress to soften the language of the DeLauro Amendment in the fiscal year 2010 agriculture appropriations bill, opening the door to funding inspections of Chinese-processed poultry if certain conditions could be met by the USDA. [*][95] Nonetheless, China did not withdraw its WTO complaint and a year later won the case.[96] The United States subsequently repealed the amendment. Some U.S. agriculture officials and advocates argue that it left a negative legacy for market access negotiations, particularly in regard to China's bans on U.S. beef. Owing to the USDA's dual functions as a trade negotiator and food safety inspector, certain Chinese officials apparently believe that the agency is capable of influencing U.S. food safety legislation in return for greater market access in China.[97]

U.S. interest groups are divided about the merits of curbing Chinese food imports through legislation such as the DeLauro Amendment. For Patty Lovera of Food & Water Watch and other food safety advocates, U.S. food consumers need to be protected from China's unsafe production and weak regulation. According to this argument, China does not deserve an "equivalence determination," under which its food safety process would be deemed equivalent to the USDA's standards. The USDA audits prospective meat processing plants in China and approves those that meet its standards but then only visits them on a periodic basis for auditing purposes.[98] In the United States, a USDA inspector is always present at each plant. For food safety advocates, these regulatory procedures do not sufficiently guarantee the safety of Chinese poultry imports (See Food Safety section below for more discussion of food safety inspection.)[99]

On the other hand, poultry industry advocates argue that the U.S. government has committed a grave error in interfering with bilateral poultry trade. U.S. agribusinesses have invested heavily in Chinese chicken production and processing—both to feed Chinese consumers and as a future export platform to U.S. consumers—and they have been working to get USDA approval for Chinese poultry exports to the United States. These advocates argue that USDA–FSIS approvals and equivalency procedures of

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*According to a spokesperson at the time, Rep. DeLauro agreed to the amended bill in part because it requires that the USDA: (1) increase inspections and audits of Chinese poultry processing plants once they are certified; (2) make public the list of eligible plants and the outcomes of audits of those plants; and (3) not rush to an equivalency determination for the safety of China's poultry slaughter operations, which are to be subject to a separate approval process from poultry processing. *Inside U.S.-China Trade*, "Compromise Reached on Poultry Ban, Could End U.S.-China WTO Dispute," September 30, 2009, via Factiva database.

Chinese exporting plants are sufficiently stringent, as the United States currently permits poultry imports from only three other countries—Costa Rica, Canada, and Chile. The DeLauro Amendment, they argue, refuses USDA–FSIS the funding to even do its job. By targeting China, it also violates the U.S.'s WTO commitments and sets a bad example for unilateral action against a single trade partner in the WTO system. They further assert that very little processed poultry will be imported, as China has no commercial advantage in this market segment.[100]

On September 5, the USDA-FSIS reaffirmed the equivalence of China's food safety inspection system for processed poultry, which was originally established in 2006. That will enable China to certify plants to export processed poultry products to the United States. The raw poultry used for these products must originate in the United States and Canada, as the USDA-FSIS has yet to provide equivalency status for slaughtered poultry in China. Nevertheless, the decision lays the foundation for negotiating future exports of processed poultry using Chinese-origin birds.[101]

State Trading and Domestic Supports

Another means by which China has restricted the flow of trade in agriculture is by requiring state trading* and providing domestic supports. These policies have done particular damage to U.S. exports of land-intensive crops and meat products. State trading impacts the allocation of tariff-rate quotas. Tariff-rate quotas function as a way of protecting a market from excessive imports and, at the same time, provide a means of liberalizing trade and breaking up monopolies by dividing up the quota among different traders and passing on unfilled quotas. Following WTO accession, China's trading monopoly China National Cereals, Oils and Foodstuffs Corp. agreed to reduce its exclusive rights by allocating some quotas to other traders in a transparent manner.[102]

However, China has been reluctant to comply with these commitments. In 2002, the National Development and Reform Commission, the Chinese agency in charge of implementing the regulations, refused to provide details on amounts and recipients of allocations. It also reserved a significant portion of tariff-rate quotas for the processing and reexport trade instead of the import-competing sector. By 2004, tariff-rate quotas improved after considerable U.S. pressure through the Joint Commission on Commerce and Trade negotiations. Nevertheless, state-owned enterprises still dominate bulk commodity trading, accounting for an estimated 90 percent of the wheat quota, 60 percent of the corn quota, 50 percent of the rice quota, 70 percent of the sugar quota, and 33 percent of the cotton quota. One way that China achieves this is by maintaining stringent licensing requirements to limit the pool of eligible nonstate firms.[103]

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*State trading enterprises are defined as governmental and nongovernmental enterprises, including marketing boards, which deal with goods for export and/or import. Article XVII of the General Agreement on Tariffs and Trade (GATT) 1994 is the principal article dealing with state trading enterprises (referred to as "STEs") and their operations. It sets out that such enterprises—in their purchases or sales involving either imports or exports—are to act in accordance with the general principles of nondiscrimination and that commercial considerations only are to guide their decisions on imports and exports. It also instructs that members are to notify their state trading enterprises to the WTO annually. World Trade Organization (Geneva, Switzerland). *http://www.wto.org/english/tratop_e/statra_e/statra_e.htm*.

Further, Beijing has leveraged its extensive state control over commodity import decisions as a tool of economic diplomacy. In December 2003 and February 2012, then Premier Wen Jiabao and then Vice President Xi Jinping negotiated landmark soybean acquisition deals during state visits to the United States. In both cases, the acquisitions were timed as a "feel-good" deliverable to offset U.S. concerns about the bilateral trade deficit.[104]

While China has agreed to minimize subsidies to meet its WTO commitments, it has found ways to support farmers and processors by subverting the rules. One example is its discriminatory use of the value-added tax (VAT) levied on industry. China signed on to the Article III of the General Agreement on Tariffs and Trade (GATT), which explicitly states, "WTO members shall not be subject, directly or indirectly, to internal taxes or internal charges of any kind in excess of those applied directly or indirectly to [a] like domestic product." In fact, China has not complied with this commitment. In 2009, USDA-funded research found that China imposes a 13 or 17 percent VAT on food and agriculture imports, while China's own farmers and meat producers use a complex rebate system in order to pay almost no VAT at all.* Stated Veronica Nigh of the American Farm Bureau Federation: "The effect of many of China's VAT rebate adjustments is to make larger quantities of primary and intermediate products in a particular sector available domestically at lower prices than the rest of the world, giving China's downstream producers the finished products using these inputs a competitive advantage over foreign downstream producers."[105]

The VAT tax is one of the reasons why value-added production has been transferred from the United States to China. Soybeans, the top U.S. agricultural export, are shipped primarily in bulk form instead of processed feed. According to Iowa Secretary of Agriculture William Northey, China's domestic soybean crushing industry has expanded rapidly, to the extent that it now has 40 to 50 percent overcapacity.[106] Foreign investment has contributed to this capacity buildup—foreign agribusiness firms, including Archer Daniels Midland, Bunge, and Cargill, own about 70 percent of China's soybean crushing industry.[107] Some of this production is also ending up on world markets: statistics compiled by the United Nations (UN) Food and Agriculture Organization show that China's exports of feed, meal, and gluten increased by 63 percent a year in 2001–2011, while U.S. exports declined by 8 percent per annum over the same period. U.S. market share in this trade category declined from 79 percent to 43 percent in 2001–2011.[108]

The Office of the U.S Trade Representative affirms that agriculture is just one of several sectors in which China has used discriminatory taxation to gain a competitive edge:

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*Slaughterhouses and food processors, for example, are given major deductions from the nominal VAT, as they are permitted to "impute" a VAT paid at prior stages of production. The differential VAT rates charged for domestic producers and imports thus constitute a clear violation of Article III of the General Agreement on Tariffs and Trade (GATT) 1994. U.S. Trade Representative, *Hearing on China's Compliance with World Trade Organization Commitments*, written testimony of National Pork Producers Council, September 24, 2012; and U.S. Grains Council, *National Trade Estimates Report Submission* (Washington, DC: October 12, 2012), p. 17.

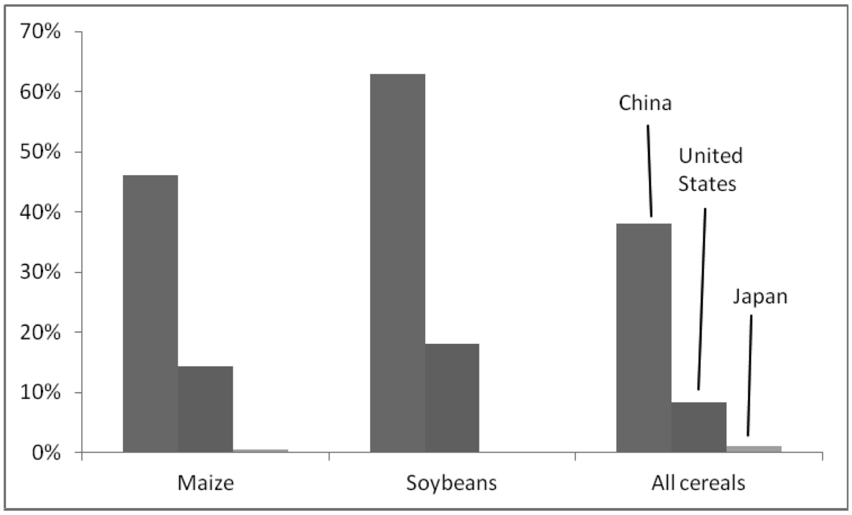
> *China's economic planners attempt to manage the export of many primary, intermediate and downstream products by raising or lowering the value-added tax (VAT) rebate . . . these border tax practices have caused tremendous disruption, uncertainty and unfairness in the global markets for the affected products—particularly when these practices operate to incentivize the export of downstream products for which China is a leading world producer or exporter*.[109]

China has also been able to provide billions of dollars in agriculture subsidies through a series of loopholes. One such loophole is how China defines the "value of production." Farm support under the WTO's de minimis provision is measured as a share of total production value. Agricultural production, according to the Chinese government's questionable statistics,[110] has been expanding at a significant 12 percent a year. Thus, subsidies can be very large in nominal terms but appear small relative to production.[111]

A related form of farm support is China's procurement and stockpiling of commodities to subsidize domestic producers and offset market prices.[112] For nearly all major staple crops, China holds an outsized share of global stockpiles (see figure 9).[113] China has adopted a particularly aggressive stockpiling policy toward three of the largest U.S. exports to China: soybeans, corn, and cotton. The stockpiles are derived not only from imports but also domestic production. In 2008, in view of the rapid price increases and fluctuations of soybeans on the global market, the National Development and Reform Commission began to procure domestic soy at above the world market price, thus establishing a reserve stockpile and also boosting the income of its soy farmers. China announced last year that it would stockpile soybeans for a fifth year running.[114] China's latest No. 1 Document, released in January 2013, lays out policies to raise the minimum purchase prices for wheat and rice; stockpile corn, soybeans, and other crops; and adjust export and import duties as necessary to achieve food (grain) security.[115]

Figure 9: China, U.S., and Japan's Share of Surplus Stockpiles of Key Commodities, 2012

Share (%)



Note: Stockpiles are calculated based on what a country produces, consumes, and trades. The surplus left over at the end of each year is the stockpile.

Source: Food and Agriculture Organization, *Agricultural Market Information System* (Rome, Italy: Agriculture Market Information System Secretariat). *http://statistics.amis-outlook.org/data/index.html#*.

According to testimony from Mark Lange, the president of the U.S. National Cotton Council, China's subsidies to its domestic cotton industry are having a negative impact on U.S. cotton exports, which account for 14 percent of U.S. agricultural exports to China. China in recent years began procuring cotton from its domestic producers for a rate far above world market prices. That has actually hurt China's textile mills, which are forced to buy expensive cotton and are barred by import licensing quotas from increasing imports of cheaper cotton from the United States. The mills are thus turning to manmade synthetic fibers, in turn boosting China's chemical industry. This policy has affected U.S. cotton exports to China, as well as introducing considerable uncertainty into the industry, as cotton prices could plummet once China releases its stockpiles onto the world market.[116]

In the pork sector, the U.S. National Pork Producers Council recently estimated that U.S. pork exports to China would increase by 50 percent if China eliminated its domestic pork subsidies. Pork subsidies rose substantially following an outbreak of swine disease that reduced China's pork production in 2007 and 2008. In January 2009, the Chinese government introduced a price support scheme for pork called the "National Price Alert and Subsidy Program." The program is based on the ratio between China's live hog and corn prices: when the hog-corn price ratio falls below a certain range—either because pork is too cheap or corn too expensive—the government procures pork from the domestic market at generous prices to support pork farmers. Related policies include hog and pork stockpiling; a sow insurance program; and a cash subsidy scheme for large-scale breeding farms.[117]

China's Agribusiness Development and Regulation of Foreign Investment

Restricted Access for U.S. Firms in China's Agriculture Sector

The United States has helped China in diverse ways to develop its agriculture sector. During its July 2013 trip, the Commission met with representatives of Archer Daniels Midland Company, Cargill China, Preferred Freezer Services, and other U.S. companies that have built state-of-the-art production, processing and storage facilities on the Mainland. Cargill China and OSI Group have recently established vertically integrated poultry breeding facilities by consolidating land from local farmers. U.S. companies hire thousands of employees in China and, in some cases, finance training at their facilities in the United States.[118] U.S. food retailers, led by Yum! Brands, Inc. and McDonald's Corp., have transferred best practices in the food service industry. These private sector efforts are being reinforced by technical assistance programs administered by U.S. government agencies and U.S. universities. The United States and China have launched more than 500 science and technology exchange programs since they established the working group on agricultural science and technology cooperation in 1980, with around 3,000 experts involved. In 2011, the two sides held the fourth meeting of the China-U.S. Joint Commission on Agriculture, which developed guidance to the two working groups on agricultural sciences and biotechnology.*

However, in spite of these supportive efforts, U.S. companies have not been granted fair market access in China. A pervasive problem is regulatory uncertainty, in the form of state-run media campaigns targeting foreign brands; stricter oversight than for domestic companies; and corrupt practices by officials at the local level.† U.S. companies are required to enter into joint ventures with Chinese companies as a condition for investing in certain sectors.‡ Although this requirement per se does not violate China's WTO commitments, it often benefits China's state-owned enterprises. For example, Coca-Cola's joint venture partner in China is a subsidiary of China National Cereals, Oils and Foodstuffs Corp., the same conglomerate that dominates China's state trading of

*The Commission, on its July 2013 China trip, met with faculty from the Northwest Agriculture and Forestry University, one of China's top agronomics faculties based in Shaanxi Province, who discussed their partnerships with the University of California-Davis and other U.S. universities. Xinhua China Economic Information Service, "China to Deepen Agricultural Cooperation with U.S.," February 12, 2012, via Factiva database.

†A more optimistic assessment of these problems, voiced by some businesses, is that foreign companies serve as models for the rest of industry and are chosen by Chinese officials to experiment with new policies, such as environmental and food safety standards. U.S. companies, meetings with Commissioners, Shanghai, China, July 25–26, 2013.

‡The relevant rules for joint ventures are laid out in the Catalogue of Industries for Guiding Foreign Investment that was first introduced by the State Council in 1995 and last revised in 2011. The catalogue comprises over 450 industries. In nearly 100 of those industries, foreign investment is subject to ownership restrictions. About half of those restrictions require foreign investors to form joint ventures—equity, cooperative, or contractual—with Chinese partners. State Council, "*Waishang touzi chanye zhidao mulu (2011 nian xiuding)*" (Catalogue of Industries for Guiding Foreign Investment—2011 Revisions) (Beijing, China: 2011). *http://www.gov.cn/flfg/2011-12/29/content_2033089.htm*.

commodities.[119] And although restrictions on foreign investment have been relaxed, major investments still require approval from the Chinese government. In 2009, for instance, China invoked its new antitrust law to prevent Coca-Cola from purchasing the juice maker Huiyuan Juice.[120] Several sectors of China's economy are in fact off-limits to foreign companies; in the agriculture sector, foreign companies are prohibited from buying land; investing in the production of transgenic plant seeds; and constructing and operating large-scale wholesale markets for agricultural products.[121]

U.S. companies are also anxious about guarding their intellectual property in China. Barbara Glenn, vice president of Science and Regulatory Affairs at CropLife America, told the Commission that U.S. agrochemical and seed companies in China have encountered counterfeit goods as well as unauthorized misappropriation of trade secrets that are used to produce infringing products. These practices discourage U.S. agrochemical firms from investing in research and development in China and from deploying their most cutting-edge products there.[122]

Further, U.S. developers of biotechnology are concerned about China's regulatory approval process. For the majority of these companies, which invest heavily in genetically modified seeds, China has become central to their business model, because their customers produce crops for export to China. At present, China only begins the approval process for a foreign biotechnology event when that event has already been approved in the exporting country. Ideally, both countries would conduct the approvals at the same time in order to expedite the process. This system of "asynchronous approvals" has become a pressing concern for U.S. agribusinesses.[123] Julius Schaaf, vice chairman of the U.S. Grains Council, told the Commission:

> *Among the most important factors affecting the near term evolution of U.S. exports of corn is the regulatory treatment of biotechnology. . . . As the importance of biotech crops continues to increase globally, potential disruptions due to inconsistent and sometimes unpredictable national treatment have become a recurring concern. With regard to China, the asynchronous approval process for biotech events is of particular importance.*[124]

China's Agribusinesses and Outbound Investment

In parallel to restricting market access for foreign agribusinesses, Beijing is fostering its own "state champions" to consolidate the agriculture sector. China's leading state-owned agribusiness, China National Cereals, Oils and Foodstuffs Corp., has extended its business from the grain trade to diverse activities along the value chain, from grain crushing to livestock production and beverage making. Meanwhile, quasi-private firms are expanding, especially in the livestock industry. These include Shuanghui Group, China's largest pork producer. The company began as a meat processing plant under a municipal government in Henan Province, in the interior of China. As recently as 2004, Shuanghui Group was taken over by a municipal branch of the government's State-Owned Asset Supervision and Administration Commission, an agency charged with restructuring state-owned enterprises. In 2006, the government divested its interest in Shuanghui Group, selling to a consortium led by Goldman Sachs and CDH, a Chinese private equity fund. Nonetheless, Shuanghui's current chairman, Wan Long, has stayed in charge throughout this "privatization" process. He is a longtime member of China's Communist Party and National People's Congress. Through a management buyout in 2010, he has been able to exercise majority control over the company's shares and voting rights.[125] The Chinese private equity firm New Horizon Capital—cofounded by former premier Wen Jiabao's son Wen Yunsong—is a minority shareholder of Shuanghui.[*] [126]

China's agribusinesses have pursued outbound investment in several countries and sectors (see figure 10). According to Dr. Gale, government policy influences these outbound investments. Of note is what Dr. Gale refers to as the "two markets, two resources" strategy, which "calls for control of overseas farm production, processing and logistics by Chinese companies for commodities that cannot be supplied domestically." The premise is that supply chain control will give Chinese companies a greater cost and price advantage in global markets. The "two markets, two resources" strategy is manifest in a plan, issued by the National Development and Reform Commission, that designates companies for overseas ventures. The two flagship companies chosen to shore up vegetable oil supplies, for instance, are Chongqing Grain Group and Beidahuang, an agribusiness company created by the Heilongjiang Province state farm system. These two companies have plans to invest in soybean and rapeseed production, processing, and logistics in Brazil, Russia, and Canada. Reportedly, Chongqing Grain Group has already begun importing soybeans from its Brazil project. Similarly, China National Cereals, Oils and Foodstuffs Corp. and other state-owned enterprises are to invest in soybean, cassava, rubber, and sugar projects. The strategy is financed by earmarked loans from state banks and public offerings in equity markets.[127] Tax breaks have supported agribusiness growth as well: Article 27 of China's Enterprise Income Tax Law provides that income generated from agriculture, forestry, husbandry, or fisheries may be exempted from the tax.[128]

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*New Horizon is a private equity group cofounded by Wen Yunsong, the only son of former premier Wen Jiabao. According to the *Financial Times*, Wen Yunsong "has been an active participant in Chinese investment since earning an MBA at Kellogg management school at Northwestern University in the US." New Horizon's first fund was incorporated in the Cayman Islands in 2005 with $100 million. A primary contributor to that first fund was Temasek, Singapore's sovereign wealth fund. New Horizon closed its second fund in May 2007 with $500 million. The *Financial Times* reported in January 2010 that New Horizon was close to raising $1 billion from foreign investors for a fund that will invest in Chinese enterprises on the Mainland. Among the contributors to the latest fund are U.S. and European institutions. In addition to Shuanghui, New Horizon's equity investments include Xinjiang Goldwind, China's largest wind power equipment maker, and Zoomlion, China's second-largest construction machinery maker. Jamil Anderlini, "China Premier's Son Nears $1bn Target for Fund," *Financial Times*, January 27, 2010, via Factiva database; U.S. Senate Committee on Agriculture, Nutrition, and Forestry, *Hearing on Smithfield and Beyond: Examining Foreign Purchases of American Food Companies*, testimony of Usha Haley, 113th Cong., 2nd sess., July 10, 2013.

Figure 10: Outbound Investments by Chinese Firms in the Food Sector, 2008–2012

Year	Month	Investor	Investment ($ millions)	Subsector	Country	Type	Share Size	Partner/Target	Land Acquisition
2012	Dec.	Yili Industrial	$210	Dairy	New Zealand	Equity	100%	Oceania Dairy	No
2012	Nov.	Shanghai Zhongfu	$730	Sugar	Australia	Greenfield	—	—	Yes
2012	Sept.	Synutra	$120	Dairy	France	Joint venture	—	Sodiaal	No
2012	Aug.	Complant	$170	Sugar	Jamaica	Equity	100%	State-owned sugar plants	Yes
2012	May	Bright Foods	$1,940	Consumer foods	Britain	Equity	60%	Weetabix	No
2012	Apr.	Shanghai Pengxin	$170	Dairy	New Zealand	Equity	100%	Crafar Farms	Yes
2011	Aug.	Bright Foods	$390	Consumer foods	Australia	Equity	75%	Manassen Foods	No
2011	July	COFCO	$140	Sugar	Australia	Equity	99%	Tully Sugar	Yes
2011	June	Heilongjiang Beidahuang Nongken	$1,510	Soybeans	Argentina	Joint venture	—	Cresud	Yes
2011	March	Chongqing Grain	$1,410	Soybeans	Brazil	Greenfield	—	—	Yes
2010	Oct.	Sinochem	$1,440	Agrochemicals	Israel	Equity	60%	Makhteshim-Agan	No
2009	July	CIC	$370	Consumer foods	Britain	Equity	1%	Diageo	No
2008	June	China National Cereals, Oils and Foodstuffs	$140	Pork	USA	Equity	5%	Smithfield Foods	No

Sources: "China Global Investment Tracker" (Washington, DC: Heritage Foundation, July 2013). *http://www.heritage.org/research/projects/china-global-investment-tracker-interactive-map*; various media sources.

In the United States, China's outbound investments came into focus in June 2013, when Shuanghui International Holdings Limited, a subsidiary of Shuanghui Group, proposed to acquire Smithfield Foods Inc., the largest U.S. pork producer. The deal, valued at $7.1 billion, is the largest-ever acquisition of a U.S. company by a Chinese company. It raises several critical issues. First, Smithfield is the market leader in the U.S. pork industry, and thus acts as a strategic node in the U.S. pork supply chain (see table 2).

Table 2: Top-Ten Pork Producers in the United States by Sows and Slaughtering Capacity

	Sows (2012)			Daily slaughter capacity (2009)	
	Sows	Market share		Slaughter capacity	Market share
1 Smithfield	**862,000**	**28.4%**	**1 Smithfield**	**126,300**	**28.4%**
2 Triumph	378,500	12.5%	2 Tyson	74,550	16.8%
3 Seaboard	217,000	7.1%	3 Swift	47,000	10.6%
4 Maschhoffs	196,000	6.4%	4 Excel	38,500	8.7%
5 Prestage Farms	165,000	5.4%	5 Hormel	37,000	8.3%
6 Iowa Select Farms	160,000	5.3%	6 Seaboard	19,200	4.3%
7 Pipestone System	145,000	4.8%	7 Excel	19,000	4.3%
8 Cargill	136,000	4.5%	8 Indiana Packing Co.	16,500	3.7%
9 Carthage System	103,500	3.4%	9 Hatfield	10,600	2.4%
10 AVMC Management Services	82,000	2.7%	10 J.H. Routh	4,200	0.9%
Other	593,800	19.5%	Other	52,075	11.7%
TOTAL	3,038,800		TOTAL	444,925	

Source: Top U.S. Pork Powerhouses, 2012. *http://www.agriculture.com/uploads/assets/promo/external/siteimages/PP2012.pdf.*

Second, the deal is not guaranteed to improve overall market access for U.S. pork in China. China is unlikely to abandon its policy of self-sufficient meat production. A more likely result is a closed market of intracompany trade between Shuanghui and Smithfield, combined with U.S. soybean and corn imports to feed China's hogs. Given Smithfield's massive output, it could supply the bulk of China's limited imports of U.S. pork. Indeed, Smithfield has developed a special relationship with Shuanghui over several years. At its plant in North Carolina, the largest of its kind in the world, Smithfield already switched over to ractopamine-free pork production at Shuanghui's request, prior to the proposed acquisition.[129] Meanwhile, other pork plants in the United States could still find it tough to export to China, either because the costs of complying with ractopamine restrictions are too high or because they do not enjoy the privileges of a firm owned by a Chinese parent company.

Third, even if China does import more U.S. pork, U.S. meat slaughterers and processors could lose out. Under the 12th Five-Year Plan (2011–2015), China has begun to consolidate and industrialize its meat industry. It is shutting down backyard farms in favor of large, vertically integrated operations. Although technically in private hands, Shuanghui is crucial to the government's efforts to enact this policy. The problem for Shuanghui is that it has built large industrial facilities to slaughter and process pork but lacks the hogs to fill them. Without direct control over hog farms, it sources meat from smaller producers, which leads to erratic quality and output. Importing pig carcasses from Smithfield appears to be an expedient solution. Shuanghui might use Smithfield mainly as a supplier of hog carcasses. Usha Haley told the U.S. Senate Committee on Agriculture, Nutrition, and Forestry:

> *Extrapolating from what has occurred in steel, paper, glass, auto parts and solar, the United States will become an exporter of the commodity of pork to China, and an importer of higher-value-added processed foods from China. . . . Although U.S. exports to China of pork will rise, U.S. imports of processed foods from China will rise even faster, contributing to the trade deficit and loss of manufacturing*

> *capacity. . . . U.S. companies would be unable to compete domestically and in exports against a Shuanghui-Smithfield that does not pursue profits but is heavily subsidized and aims for industry domination.*[130]

Fourth, while Smithfield could become a "raw material" supplier to Shuanghui, it would also transfer substantial intellectual property and branding power to its Chinese parent. Technology transfer* is a salient trend in China's pork industry. Along with consolidation and capacity expansion, the Chinese government is seeking better technologies to improve the productivity of its livestock. According to *Delta Farm Press*, a respected agriculture publication in the United States, China is "capitalizing on decades of cutting-edge U.S. agricultural research."[131] Chinese producers are especially looking to forge uniform herds based on the most efficient breeds, like Duroc, Yorkshire, and Landrace.[132] From 2002 to 2007, China imported a total of 13,000 head of swine; from 2008 to 2011, live swine imports totaled 39,000 head—15,000 in 2011 alone.[133] In 2002-2012, China increased its share of U.S. live swine exports from 5 percent to 51 percent.[134]

Finally, an irony not lost on opponents of the Smithfield acquisition is that, if the situation were reversed, China's laws on foreign acquisitions would allow the government to block the sale on economic and commercial grounds rather than just national security, as is the case with the U.S. laws. Stated Dr. Haley: "As the Chinese government views pork-processing as a strategically important industry, the country is unlikely to open this market to U.S. companies."[135]

Shuanghui and Smithfield submitted their proposed transaction for approval to the Committee on Foreign Investment in the United States (CFIUS) in June. On September 6, the companies received clearance from CFIUS.[136] The shareholders voted September 24 to approve the sale. The transaction is expected to become final toward the end of 2013.[137]

Food Safety: China's Penetration of the U.S. Food Chain

The Safety of U.S. Food Imports from China

China's WTO accession was primarily envisaged as an opportunity for U.S. exporters. But U.S. food imports from China have surged as well, part of a greater reliance on imported food by U.S. consumers.† Food imports from China tripled to 4.1 billion pounds

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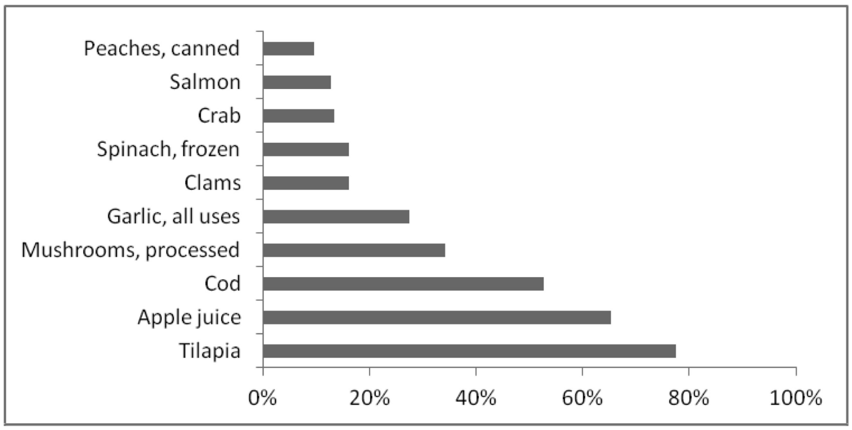
* Owing to its vertically integrated operations, Smithfield has played a pioneering role in modernizing breeding techniques for U.S. hog farms, competing head-on with dedicated genetics and breeding companies. The Smithfield Lean Generation Pork™ Program has been among the nation's leading fresh pork programs, with dozens of branded items in its product line. Already in the 1990s, Smithfield acquired long-term rights for the NPD hog, a breeding line developed by National Pig Development Co., a British firm. In 2000, it bought out the U.S. branch of NPD, forming an in-house unit to undertake research and development. This intellectual property will be transferred to Shuanghui.

† The U.S. Government Accountability Office (GAO) reports that from 2000 through 2011, the percentage of food consumed in the United States that was imported rose from 9 percent to over 16 percent, and food imports increased by an average of 10 percent each year for seven years. "According to the U.S. Department of Agriculture's Economic Research Service, the food groups with the highest share of imports are fresh fish and shellfish (85 percent in 2009) and fruits and nuts (38 percent in 2009)." U.S.-China Economic and Security Review Commission, *Hearing on China's Agriculture Policy and U.S. Access to China's Market*, testimony of Patty Lovera, April 25, 2013.

in 2001–2012 and have reached a high level of penetration for specific products (see figure 11). The majority of imports consists of consumer-oriented products. For these products, the United States accumulated a trade deficit of $5 billion with China in 2008–2012. About a third of U.S. food imports from China are fresh, frozen, and processed fish and seafood products. Another 41 percent is comprised of fruits and vegetables, products that often compete directly with U.S. producers.[138]

Figure 11: Imports from China as Share of U.S. Consumption
Four-Year Average, 2008–2011, share (%)



Sources: USDA, *GATS* [General Agreement on Trade in Services] *Database* (Washington, DC: Foreign Agricultural Service); USDA, *Vegetable and Melon Yearbook 2011* and *Fruit and Tree Nut Outlook* (Washington, DC: Economic Research Service, 2012); and U.S. National Fisheries Institute, "Top 10 Consumed Seafoods," 2012, via U.S.-China Economic and Security Review Commission, *Hearing on China's Agriculture Policy and U.S. Access to China's Market*, testimony of Patty Lovera, April 25, 2013.

Imports from China also comprise a host of processed foods and food ingredients whose provenance may be less obvious to U.S. consumers. Food ingredients include xylitol, used as a sweetener in candy; ascorbic acid, a preservative; and vitamin ingredients, like folic acid and thiamine, frequently added to food products. Processed food imports, in turn, include vitamin C, candy, condiments, pet food, and pasta and baked goods, as well as food supplements and even gel capsules and nonactive pill binders for pharmaceuticals.[139]

For the United States, these imports from China present significant food safety risks. Over the past decade, China's major trade partners have repeatedly banned its food shipments on the basis of food safety. The earliest actions centered on seafood—the European Union and the FDA temporarily blocked imports of shrimp, crayfish, and crabmeat from China in 2002–2004 after discovering high residue levels of chloramphenicol, a broad spectrum antibiotic drug used to treat life-threatening infections in humans.[140] China's food product safety garnered wider attention in 2007, when excessive antibiotic and pesticide residues led several countries, including South Korea, Japan, and the European Union, to impose renewed bans.[141] The most imminent threat to the United States at the time was pet food from China that contained a harmful industrial solvent, melamine. The FDA received reports of 17,000 pet illnesses, including 4,000 dog and cat deaths, believed to be the result of melamine contamination in imported Chinese gluten used to make pet food. Sixty million packages of melamine-contaminated pet food were recalled. That did not prevent a portion of melamine-contaminated products from ending up in other U.S. food products; there were reports that 56,000 hogs ate melamine-tainted pet food and were processed into pork, which was then sold at supermarkets.[142] The melamine threat did not end there. In the fall of 2008, the FDA also recalled candy made by U.S. companies in China due to concerns of melamine contamination in Chinese milk.[143] The FDA in June 2012 and June 2013 twice extended bans on milk products from China, which included chocolate products.[144]

China's Organic Food Exports to the United States

China has become a supplier of organic foods to the U.S. market. According to the USDA's National Organic Program, from 1995 to 2006, the value of organic food exported from China rose from $300,000 to $350 million annually. By 2010, 649 operations in China were certified by the USDA as meeting U.S. organic standards.[145] Ironically, these imports now include organic soybeans. Because organic livestock producers in the United States cannot use the genetically modified soybeans harvested at home, they are turning to China's nongenetically modified beans instead.[146]

Organic foods are generally characterized by methods of farming that do not involve synthetic inputs such as chemical fertilizers. In China bureaucratic infighting has led to the emergence of two competing standards for organic food. The Ministry of Agriculture has promoted a less rigorous "green food" standard since the early 1990s, which comprises foods that have very low levels of chemical residues. The Environment Ministry, in turn, adheres to a more rigorous "organic food" standard, which requires that food products contain no chemical residues at all. To encourage organic food exports, China has lobbied to make these standards equivalent with those of developed country markets like the United States, the European Union, and Japan. At present, however, neither standard has achieved international recognition.[147]

The USDA issues its own approvals for organic food produced in China. It does so by accrediting private, third-party certifiers. Once these certifiers approve a Chinese production facility, that facility's products are "USDA certified" and can be sourced by Whole Foods and other organic food retailers in the United States. Some experts assert that the USDA has exhibited a lack of due diligence in issuing certain approvals. USDA officials three years ago visited China to conduct an audit of four of the ten companies it had accredited as organic food certifiers. The officials reported that conditions "pose challenging oversight duties and responsibilities for certifying agents operating in China." They

China's Organic Food Exports to the United States—*Continued*

discovered, for instance, that a certifier had used Chinese government employees to inspect state-controlled farms, suggesting a direct conflict of interest among different actors in China's government.[148]

Inadequate Food Safety Regulation in China

Current regulation of food entering the United States from China is insufficient. First of all, the Chinese government's own food safety regulation is inadequate. Multiple agencies oversee the food safety regulation process, including the Ministry of Health; the Ministry of Agriculture; the Ministry of Commerce; and importantly, the General Administration of Quality Supervision, Inspection, and Quarantine, which has separate jurisdiction over customs inspections. In the United States, there is no separate agency for customs. The various Chinese agencies also have central and local branches, forming a fragmented and decentralized system of regulation.[149]

The Chinese government in 2009 introduced a comprehensive Food Safety Law to establish a modern framework for food safety regulation. The law was partially successful in handing more oversight power to the Ministry of Health and creating an intraministerial working group. This regulatory consolidation was reinforced in March 2013, when the government created a new China Food and Drug Administration, which took on certain responsibilities from the State Food and Drug Administration; the Ministry of Agriculture; the State Council's Food Safety Committee; and the General Administration of Quality Supervision, Inspection, and Quarantine.[150] The 2009 law also made progress in specifying guidelines for hazard analysis and risk management, in order to track food safety "from farm to plate."[151] During its trip to China, the Commission met with officials from the China Food and Drug Administration to learn more about their activities.[152]

However, it is uncertain whether these reforms will make a substantial difference. The consolidation of agencies has stopped short of full integration. For instance, farm-level production and slaughter is still overseen by the Ministry of Agriculture.* Further, the China Food and Drug Administration has just a few hundred staff at the central government level in charge of overseeing tens of thousands of less-capable inspectors in local agencies.[153] Due to extreme fragmentation of production—with an estimated 450,000 companies in food-processing alone—traceability of food products remains a stiff task.[154]

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*The China Food and Drug Administration will apparently handle the safety of food production as well as distribution, in contrast to its predecessor, the State Food and Drug Administration, which supposedly handled only safety in the food service industry. In spite of this regulatory integration, the General Administration of Quality Supervision, Inspection, and Quarantine Department remains responsible for customs inspections, while the Ministry of Agriculture remains in charge of overseeing "primary" production, including livestock slaughter. Brady Sidwell (vice president, corporate development, OSI Group), e-mail to Commission staff, July 31, 2013.

Academic research has shown that the 2009 Food Safety Law has done little so far to hold producers and officials accountable. According to John Balzano of Yale Law School, Chinese consumers still have difficulty filing coordinated lawsuits against food companies, and the courts rarely investigate public officials.[155] Other experts have argued that illegal food production occurs in China because local officials are responsible for both economic growth and food safety and, in many cases, prioritize the former.[156] As a result, safe and high-quality food production is not consistently rewarded, while unsafe and low-quality production is not consistently punished.[157] The Chinese government has resorted instead to public displays of enforcing food safety rules, inspecting food facilities, and punishing people connected with tainted food, especially in high-profile cases. In July 2007, for example, the former head of the State Food and Drug Administration was executed on conviction of receiving $850,000 in bribes.[158] The melamine scandal in 2009 led the authorities to close down half the country's dairies.[159] Two years later, a concerted crackdown on food safety violations resulted in 2,000 arrests and 4,900 businesses being closed. These actions were widely reported in the state media.[160]

Problems with U.S. Food Safety Inspection

In the absence of effective regulation by the Chinese government, U.S. consumers depend on U.S. food safety inspectors to do their jobs. And yet, there are numerous problems with U.S. food regulation. The system is fragmented, underfunded, and heavily reliant on third-party verification—structural flaws documented through extensive congressional hearings and government reports.[161] The FDA and the USDA divide up food safety inspection by product group, with most seafood, horticulture, and processed foods coming under the jurisdiction of the FDA. Patty Lovera of Food & Water Watch testified: "The USDA is in charge of meat and poultry. The FDA is in charge of basically everything else. We spend a lot of time in this context thinking about the FDA because those are the products that are coming in at this point from China." [162]

Relative to its broad oversight role, the FDA's capabilities are limited. At the Commission's 2008 hearing on food safety in the seafood industry, the FDA's director of the Center for Food Safety and Applied Nutrition acknowledged that the surge of Chinese food imports has "outstretched and outgrown the regulatory system for imports in the [United States]." [163] Based on expert testimony received by the Commission in 2008 and 2013, the FDA inspects less than 2 percent of the food that passes through U.S. borders.[164] Inspection rates in Japan and the European Union are several times higher.[165] Nor does the agency always act forcefully when it discovers a problem; shipments are turned away by the FDA but not destroyed, so that products can potentially reenter the country through another port, a phenomenon known as "port-shopping." [166]

According to Ms. Lovera, weak regulation at the border is compounded in China's case by a lack of cooperation between the two countries' authorities. During the melamine-tainted pet food crisis in 2007, for example, it took the FDA one month to identify and communicate with its regulatory counterparts in China.[167] A USDA Economic Research Service report from 2009 asserts that the Chinese government guards the food safety data it collects, making it difficult to impartially evaluate China's food safety performance.[168] Kelli A. Giannattasio, the FDA's deputy country director in China, told the Commission that some progress has been made since then to widen channels of communication. Nonetheless, China's balkanized system of regulation, in which food production and distribution is overseen by different agencies at the central and local levels, has made it difficult to identify the right counterparties once a risk is identified.[169]

The FDA has made substantial efforts to improve its border inspections. These were outlined by the FDA's associate director for Global Operations and Policy, Steven M. Solomon, at a May 2013 hearing of the Congressional-Executive Commission on China. Mr. Solomon pointed out that the 2011 Food Safety Modernization Act, the most wide-reaching reform of U.S. food safety laws in 70 years, lays the foundation for a more prevention-based approach to regulating imports. He also noted that, while the FDA does not "physically inspect all imports" that enter the country, it does "electronically screen all imports using an automated risk-based system to determine if shipments meet identified criteria for physical examination or other review." To enhance its ability to target high-risk products, the agency recently developed the Predictive Risk-based Evaluation for Dynamic Import Compliance Targeting application, a screening system that uses intelligence from many sources to provide the entry reviewer with risk scores on every import line.[170]

The FDA is also trying to involve U.S. importers more directly in food safety oversight. Under the Foreign Supplier Verification Program, introduced in August, food importers in the United States must assess which types of safety risks are posed by the food they are importing and obtain documentation from the exporter that show how those risks are being mitigated. Importers will be required to conduct or obtain results of annual on-site audits of the exporter's facility. One loophole in the new regulations is that they do not apply to aquaculture products, one of the U.S.'s top imports from China. Aquaculture products are subject only to the less stringent Hazard Analysis and Critical Control Points program, under which importers are not required to retain detailed documentation to show how their foreign suppliers are controlling risks.[171]

To supplement the efforts to improve food regulation at home, U.S. food safety inspectors have attempted to step up their on-the-ground presence in China. According to Ms. Lovera, the FDA visited just 46 food firms on the Mainland in 2001–2008—less than six a year.[172] Since then, the agency has devoted more resources to its food safety oversight in China. Initial budget increases were enacted in 2009. The fiscal year 2013 Continuing Resolution added $10 million to the FDA's base to fund the addition of seven food and nine drug inspectors permanently posted in China.[173] Under a memorandum of agreement that the U.S. Department of Health and Human Services signed with China in December 2007, the Chinese government permitted more FDA inspectors to enter the country and allowed the FDA to open offices in Beijing, Shanghai, and Guangzhou.[174] Commission witness William Westman, who served as agricultural attaché to the U.S. embassy in Beijing in the mid-2000s, noted that 11 FDA attachés were installed at the various

U.S. consulates by the end of his tenure.[175] According to the FDA's fiscal-year 2013 appropriations report, its inspections in China increased from 16 in 2009 to 55 in 2011, a tangible improvement.[176]

Still, U.S. food safety regulation in China has many shortcomings. Even with additional inspectors on the Mainland, the agency may find it difficult to monitor China's vast and fragmented food processing industry.[177] Regulatory barriers imposed by Chinese authorities have added to the problem. Stated Ms. Giannattasio:

> *Currently, our main challenge stems from delays in issuance of visas for additional FDA staff in China. . . . To date, China's Ministry of Foreign Affairs has not issued diplomatic visas that would enable the deployment of these inspectors to China on a full-time basis. In order to continue its inspection efforts, FDA's China Office is working with FDA's Office of Regulatory Affairs to deploy inspectors on temporary assignment to carry out the inspections FDA needs to do in China.*[178]

Another impediment is China's reluctance to grant access to plants. Under the memorandum of agreement signed with the United States in 2007, the Chinese government promises FDA inspectors better access to Chinese facilities but reserves the right to control their movements and access.[179] These restrictions appear to still be in place—during August 2012 visits to Chinese processing plants that export pet treats to the United States, U.S. inspectors were not permitted to collect samples for independent analysis.[180]

The United States and China are working together to improve food safety. Examples of collaboration include:

- The USDA and the FDA, along with major U.S. companies, participate in the China State Council's annual China International Food Safety and Quality Conference and Expo, inaugurated in 2007.[181]
- A working group on economically motivated adulteration meets on a regular basis by video, linking Washington-based experts with the China Food and Drug Administration's key decisionmakers.[182]
- In November 2012 and May 2013, the FDA and China's General Administration of Quality Supervision, Inspection and Quarantine held workshops for members of Chinese industry to address concerns regarding aquaculture practices for fish farms. These workshops have significantly enhanced the FDA's understanding of China's oversight system for aquaculture products and have provided Chinese industry with a clearer understanding of the FDA's requirements and practices.[183]
- The China-U.S. Plan of Strategic Cooperation in Agriculture (2012–2017), signed in February 2012 by the USDA and China's Ministry of Agriculture, states that the two countries will develop "mutually beneficial international standards on food safety"; ensure implementation of science-based laws, regulations, policies, and standards; ensure transparency of the regulatory decision-making process and food safety initiatives; and

improve institutions and working mechanisms of emergency response. To this end, both sides "propose to more actively engage" in bilateral and international meetings.[184]

Implications for the United States

China is now the top market for U.S. agricultural exports, but not everyone in the U.S. farming community is benefitting equally. China's imports from the United States have been concentrated in bulk commodities, a trade pattern quite different from U.S. agricultural exports to the rest of the world. U.S. soybean exporters have gained disproportionately, to the extent that they have become quite dependent on the Chinese market. A problem for all bulk commodity exporters to China is that nation's policy of using taxes and subsidies, in combination with stockpiling and state trading, to control commodity trade flows. Therefore, much of the value-added processing of commodities is taking place in China rather than in the United States, which is hurting U.S. manufacturers and contributing to U.S. unemployment.

Among consumer foods, U.S. meat products have the most to gain in China. Chinese consumers are shifting to a higher-priced, protein-heavy diet, while China's domestic livestock industry is reaching its capacity limits. The United States enjoys a comparative advantage in resources, productivity, and quality for meat production. And yet, U.S. beef and pork producers have been affected by China's heavy subsidization of domestic production and, even more, by its stringent sanitary barriers. Many sanitary measures appear designed either to protect domestic producers or to shift the blame for domestic food safety lapses onto foreign products. A complicating factor for the United States is that China is not alone in abusing health and safety measures. Some of the U.S.'s best beef export markets have been slow to lift BSE-related restrictions. Japan, South Korea, and Taiwan will only accept U.S. beef from animals less than 30 months of age.[185] The European Union and Taiwan ban imports of U.S. pork treated with ractopamine.[186] By the same token, the intensifying competition from other agricultural exporters, such as Australia, Brazil, and Argentina, allows China to hedge its import strategy in ways that can damage U.S. interests.[187]

A key challenge for the United States is to treat China as a major market rather than a developing country in need of development assistance. The United States and China are engaging in extensive bilateral cooperation in agriculture. The USDA has signed a Plan of Strategic Cooperation with its Chinese counterparts on agricultural science, trade, and education. U.S. universities and companies are also actively engaged in China. But this outreach is not always conducive to improving market access for U.S. exporters and foreign investors, who view China as a strategic market for their business.

Another challenge is to reconcile different interests in U.S. trade policy. In regional terms, Iowa has profited the most from trade with China, given its extensive production of crops to feed China's livestock. The Iowa state government has been very proactive in fostering bilateral diplomacy. Conversely, specialty crop growers in the Pacific Northwest, beef producers in the Central Plains, and cotton and poultry producers in the South have been more critical of the evolving relationship. There is also a need to recognize the actors in China that might be for and against trade with the United States. For example, the Ministry of Agriculture, which prioritizes the interests of Chinese farmers, and the Ministry of Commerce, which seeks to implement China's WTO commitments, do not always share common interests.

The case of poultry illustrates the tradeoffs of negotiating bilateral trade deals. U.S. poultry producers have been the unfortunate targets of Chinese retaliation in a broader trade dispute involving auto parts and tires. U.S. government efforts to support domestic producers and protect consumers in the food sector have not always achieved to their intended effects and, in some cases, have worked at cross purposes. Food safety advocates argue that allowing China to export processed poultry to the United States is too high a price to pay for greasing the wheels of bilateral trade deals.

WTO accession has allowed China to export vast amounts of fruits, vegetables, fish, and processed foods to the United States, causing health scares and overstretching the U.S. food inspection regime. In the future, the U.S. government will have to strike a balance between expanding a rules-based trading regime that favors exporters and taking action to block Chinese imports if safety cannot be assured. It will also need to enhance the capacities of the USDA and the FDA to screen food imports at the border and on the ground in China. That will require better cooperation from the Chinese authorities—the U.S. State Department last October formally notified the Chinese Ministry of Foreign Affairs about obtaining visas for additional FDA inspectors, but as of September 2013, the visas had not been granted.[188]

The proposed acquisition of Smithfield by a Chinese pork producer, Shuanghui, was approved by CFIUS and by Smithfield's shareholders in September. The case illustrates that Chinese companies can make major acquisitions of U.S. companies in the agriculture sector without being blocked on national security grounds. At the same time, the case elicits important questions about U.S. policy toward foreign investors from China. Smithfield is the largest pork producer in the United States and hence a strategic supplier of food to U.S. consumers. While Shuanghui is a quasi-private company, it maintains strategic ties to the Chinese government. The case also has a bearing on intellectual property protection, net economic benefits, and reciprocal market access.

Conclusions

- For the past three years, China has been the largest export market for U.S. agricultural goods. However, trade is far from free, and enormous opportunities are being withheld. China's WTO accession has not been as productive to the United States as initially expected. In contrast to U.S. agricultural exports to the rest of the world, most U.S. exports to China are bulk commodities, particularly raw soybeans that supply China's outsized livestock sector. Conversely, processed commodities, meat products, consumer foods, and other higher value-added products have not kept pace with the overall growth in bilateral trade.

- Since the 1980s, China has developed into the world's largest agricultural economy, producing a fifth of the world's grains, a quarter of its meat, and half of its vegetables. But demand in China is beginning to outstrip supply. As more people move to cities and earn higher incomes, China's population is demanding safer food and a more diverse, protein-rich diet at an affordable cost. The United States is well-positioned to meet that demand. U.S. farmers enjoy a comparative advantage in resources, productivity, and quality, particularly in meat production.
- China's agriculture policy favors domestic production over imports. China maintains ambitious self-sufficiency targets that are unsustainable and unjustifiable in terms of food security. This policy is now being challenged by the decline in China's farm labor surplus, deteriorating land and resource endowments, and fragmented producer and land use systems. A related problem is that efforts to modernize agriculture conflict with rural welfare aims. Millions of rural migrants continue to rely on farmland and smallholder agriculture for insurance in the absence of a functioning welfare state.
- China has failed to fully perform its obligations under the WTO. It has erected a series of nontariff barriers that include state trading; excessive domestic subsidies and stockpiling of commodities; discriminatory taxes; uncalled-for antidumping duties; and slow approvals of biotechnology applications for U.S. crops. Damaging to U.S. interests as well are sanitary and phytosanitary restrictions, especially BSE-based bans on beef and zero tolerance for ractopamine in pork. Although China has significantly lowered its tariffs and increased its agricultural imports since accession, numerous trade restrictions remain in place.
- U.S. companies, universities, and government agencies are helping China to improve the quantity and quality of its food output. In a sign of deepening bilateral ties, the United States and China signed the first U.S.-China Plan of Strategic Cooperation in Agriculture (2012–2017) in February 2012, and in March of that year the largest-ever U.S. agricultural trade mission visited China. However, U.S. companies operating in China are hamstrung by regulatory uncertainty, restricted market access, and weak intellectual property enforcement.
- China is fostering globally competitive agribusinesses, in the process becoming an active acquirer of agricultural assets overseas. In June 2013, China's largest pork producer, Shuanghui, proposed a $7.1 billion acquisition of Smithfield, the leading pork producer in the United States. While the deal has been approved by CFIUS and Smithfield's shareholders, it raises critical issues regarding net economic benefits, intellectual property, reciprocal market access, and the treatment of quasi-private Chinese companies that maintain links to the Chinese government.
- China accounts for a large share of the fruits, vegetables, fish, and processed foods that Americans consume, but the United States has little assurance that the food imports coming into the

United States from China are safe. China's own food safety regulation is still ineffective, in spite of recent efforts to consolidate agencies and improve legislation. U.S. consumers rely on U.S. food safety inspectors to do their jobs, but U.S. regulation is also fragmented and underfunded. U.S. regulators have increased their presence within China but have struggled to obtain work visas and to gain access to food production facilities. Although the United States does not permit raw meat imports from China, the USDA has granted equivalence status to Chinese poultry processors, which will permit them to process poultry raised in the United States and Canada and ship it to the United States.

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RECOMMENDATIONS

Trends in Chinese Investment in the United States

The Commission recommends:

- Congress assess the extent to which existing laws provide for inadequate or ineffective remedies against the anticompetitive actions of Chinese state-owned or state-invested enterprises operating in the U.S. market. Additional remedies may be required to account for the fact that these enterprises may not be operating based on commercial considerations.
- Congress assess whether to amend the Committee on Foreign Investment in the United States (CFIUS) statute to allow review of greenfield investments for threats to U.S. national security.
- Congress direct the Department of Commerce to develop a comprehensive ongoing inventory of Chinese foreign direct investment (FDI) in the United States and, on an annual basis, update the inventory. The inventory should identify the ownership structure of the entity engaging in the investment. In preparing the inventory, the department should call on private sector entities engaged in monitoring Chinese investments in the United States and such other entities to ensure that its report is complete and accurate. The department should prepare a comprehensive report to Congress on an annual basis identifying the FDI by Chinese entities that were made in the previous calendar year. In its report, the department should indicate those investments that received any assistance from the "Select USA" program. The department should also identify, on an ongoing basis, the lines of commerce that each of the investments are engaged in.

Governance and Accountability in China's Financial System

The Commission recommends:

- Congress direct the Administration to press China for more cooperation with the international community in order to address the global economic risks of unregulated and underregulated shadow banking and ask the Department of the Treasury to provide an annual report to Congress on the risks of shadow banking
- Congress direct the Administration, in any bilateral investment treaty negotiations, to make fair and equitable market access and treatment for financial services firms a priority.
- Congress direct the Administration to assist the Securities and Exchange Commission (SEC) and the Public Company Accounting Oversight Board by encouraging China to develop better reg-

ulatory oversight enforcement capabilities and more transparent markets, during annual and biannual bilateral dialogues, as well as multilateral dialogues.

- Congress empower the SEC to set minimum standards for companies listing and maintaining listings on U.S. exchanges and enable the SEC to directly delist foreign companies not in compliance with these standards.

China's Agriculture Policy, Food Regulation, and the U.S.-China Agriculture Trade

The Commission recommends:

- Congress monitor the implementation of the U.S.-China Plan of Strategic Cooperation in Agriculture (2012–2017) to ensure that U.S. funding is being allocated in such a way as to improve the safety, sustainability, efficiency, and security of food production in China and the United States.
- Congress require the U.S. Department of Agriculture (USDA) and the U.S. Trade Representative (USTR) to conduct a comprehensive review of China's agricultural subsidies, discriminatory taxes, state trading, and procurement practices; take account of the damages incurred by U.S. farmers and downstream industries; and suggest appropriate remedies.
- Congress urge the Secretary of Agriculture to engage, as part of the Joint Committee on Commerce and Trade and the Strategic and Economic Dialogue, with his/her Chinese counterparts to address those Chinese policies and practices that limit U.S. exports of value-added products.
- Congress direct the Interagency Trade Enforcement Center (ITEC) to conduct a review of the selective use of value added tax (VAT) rebates by China and determine whether they have a trade-distorting effect and whether the selective use of VAT rebates is consistent with the original intent of the General Agreement on Tariffs and Trade (GATT) provision allowing for VAT rebates. The ITEC should prepare a report for the U.S. Trade Representative and the relevant Committees of jurisdiction and identify what steps should be taken to address any GATT inconsistencies, should they be found.
- Congress direct the USDA to negotiate with China to synchronize approvals of biotechnology to ensure stable and predictable market access for U.S. seed companies and crop growers in the Chinese market.
- Congress require that the USDA prepare an annual report on competitive factors in the pork industry. In preparing such reports, the department shall evaluate the impact, if any, of the recent purchase of Smithfield Foods on the ability of other U.S. producers to export pork products to China. In addition, the report shall identify any changing pricing structures throughout the pork production chain to determine whether there is price or profit suppression as a result of the Smithfield transaction.

- Congress direct the USDA to exercise extreme caution in negotiating equivalency status for Chinese exports of processed poultry using Chinese-origin birds. Congress should also increase its support of USDA's Food Safety and Inspection Service in its role as protector of meat and poultry food safety so that the United States serves as a world model for high-quality, science-based regulations.
- Congress ensure that the Food and Drug Administration makes it a priority to increase the number of physical inspections of Chinese food imports at the border; to increase the rigor of those inspections to include testing for pathogens and chemical, pesticide, and drug residues, and processed food ingredients; and to conduct more frequent and thorough inspections in food facilities in China. Congress should also urge the USDA to permanently assign inspection personnel to China so that the exporting plants receive regular visits by USDA inspectors.
- Congress require the Secretary of Agriculture to prepare a report to Congress identifying those organic food products being imported into the United States from China. The report should include a comprehensive evaluation of the different methodologies employed by the United States and China to certify that a product is organic and what steps, if any, are being taken to harmonize any discrepancies that might exist.
- Congress evaluate whether a requirement that U.S. food importers purchase insurance against food-borne illnesses and pathogens from Chinese imports would improve food safety. Such a program would involve private sector risk insurance with insurance companies evaluating the safety of various sources and charging risk-based premiums based on the methods employed by Chinese exporters to address food-borne illnesses and pathogens.

CHAPTER 2

CHINA'S IMPACT ON U.S. SECURITY INTERESTS

SECTION 1: MILITARY AND SECURITY YEAR IN REVIEW

Introduction

This section—based on a Commission hearing, discussions with outside experts and U.S. Department of Defense (DoD) officials, and independent research—examines China's late 2012 national and military leadership transition, China's 2012 defense white paper, China's 2013 defense budget, China's military modernization, security developments involving China, and the U.S.-China security relationship. The section concludes with a discussion of China's impact on U.S. security interests. See chapter 2, section 2 and chapter 2, section 3, for coverage of China's cyber activities and China's maritime disputes, respectively.

Leadership Transition

President Xi Jinping Assumes Central Military Commission Chairmanship

China's late 2012 leadership transition brought the largest turnover to the Central Military Commission (CMC)* in a decade. Xi Jinping assumed the position of both CMC chairman and Chinese Communist Party (CCP) general secretary at the CCP's 18th Party Congress on November 15, 2012. President Xi then completed his accession as China's senior leader by becoming the People's Republic of China (PRC) president on March 14, 2013. Although President Xi was widely expected to eventually assume all three of China's top leadership posts, many observers were surprised by the speed of his elevation to CMC chairman. Official Chinese press described President Xi's early promotion as an "unusual twist to China's leadership transition" and praised outgoing CMC Chairman Hu Jintao for his decision to step down.[1] Mr. Hu broke with the pattern established by his two predecessors, who retained the CMC chairmanship for two years after finishing their terms as CCP general secretary.

Cheng Li, director of research and a senior fellow at the Brookings Institution's John L. Thornton China Center, testified to the

* The CMC is China's highest military decision-making body. Its main responsibilities are to set military policy and strategy, interpret Chinese Communist Party guidance for the military, and oversee the People's Liberation Army's senior staff and service arms.

Commission that Mr. Hu's decision to fully cede power signals a strengthening of CCP succession procedures.[2] In addition, James Mulvenon, vice president of Defense Group Inc.'s Intelligence Division, told the Commission that President Xi's strong and enduring ties with senior military leaders likely contributed to his rapid promotion. President Xi served as an aide to former Defense Minister Geng Biao from 1979 to 1982. He also is the son of Xi Zhongxun, a former Politburo member and revolutionary leader.[3]

Factional Imbalance Emerges in China's Senior Leadership

During China's 2012 leadership transition, the "elitist coalition" of the CCP prevailed over the "populist coalition" in personnel selections to China's highest decision-making body, securing six of seven seats on the Politburo Standing Committee (PSC).* The elitist coalition, which had been headed by former President Jiang Zemin and is now led by President Xi, mainly consists of the children of Chinese revolutionary leaders and former high-level officials. The populist coalition, which had been headed by Mr. Hu and now is led by current Chinese Premier Li Keqiang, primarily consists of former Chinese Communist Youth League leaders.

Dr. Li testified to the Commission, "Although the CCP monopolizes power in China . . . these two coalitions have been competing for power, influence, and control over policy initiatives since the late 1990s . . . This dynamic structure of 'one Party, two coalitions' . . . has created something approximating a mechanism of checks and balances in the decision making process."[4] Dr. Li then explained the "landside victory" by Mr. Jiang and President Xi's camp upsets the "roughly equal balance of power between these two coalitions" and signals a "profound change in the power equation." He speculated scandals during the runup to the leadership transition involving two prominent populists—then Chinese Premier Wen Jiabao and then Secretary of the CCP Central Secretariat Ling Jihua—bolstered the elitist coalition's leverage in the PSC personnel negotiations.[5]

The concentration of elitists on the PSC probably strengthens President Xi's ability to pursue his policy agenda and allows Mr. Jiang and his allies to continue to compete for influence. However, Dr. Li stressed, "This does not mean . . . the winner now takes all in Chinese elite politics." He explained the "balance between the two camps in the 25-member Politburo, the Secretariat (the organization that handles daily administrative affairs), and the CMC have largely remained intact."[6] Furthermore, prominent populist coalition leaders are well-positioned for seats on the next PSC in 2017, as five of the seven current PSC members can serve only one term before reaching mandatory retirement age.

*The PSC consists of the CCP's top-ranking leaders and is China's highest decision-making body. The PSC guides and oversees the work of the Politburo.

Since becoming CMC chairman, President Xi has used public speeches and visits to People's Liberation Army (PLA) units to reaffirm China's long-term military modernization goals; emphasize the importance of a strong military to the fulfillment of the "China Dream," his new political slogan and party campaign; and signal his intent to focus on increasing combat readiness and reducing corruption in the PLA.

"China Dream": In November 2012, President Xi introduced the "China Dream" concept, which envisions the "great renewal of the Chinese nation" and the advancement of an international system in which China's successful rise provides an attractive alternate political model to Western ones. Achieving the dream means building a "moderately prosperous society" by 2021 and a "modern socialist society that is strong, democratic, cultured, and harmonious" by 2049.[7] Although President Xi has emphasized that "peaceful development" and a stable regional environment are essential to create the conditions for this vision, he linked its fulfillment to a strong military in a December 2012 speech while aboard a PLA Navy destroyer.[8] In June 2013, official PLA media explained, "To the armed forces, the China dream is the strong-army dream, the China dream leads the strong-army dream, and the strong-army dream supports the China dream."[9] According to Daniel Hartnett, research scientist at the CNA Center for Naval Analyses, the PLA's role in the China Dream is a significant and "potentially worrisome development." Mr. Hartnett explained:

> *[The policy] reflects Xi's attempt to exert his control over the military and establish a break between himself and his predecessors. It also provides further justification for resources for PLA modernization in any internal 'guns versus butter' debate among China's leadership . . . It may also signify a harder turn in China's military policy under Xi. If the PLA is being required to improve its combat capabilities in response to changes in China's security environment, it could indicate that the Chinese leadership increasingly feels that it may have to resort to force to counter what it sees as growing national security concerns.*[10]

Combat readiness: During his first reported visit to a PLA base as CMC chairman in December 2012, President Xi called for the PLA to increase "combat readiness" through "realistic training."[11] Combat readiness has been a central theme of subsequent speeches to the military by President Xi and now features prominently in official PLA statements and documents. For example, official PLA media in January 2013 said the military needs to prevent and overcome the "harmful" practice of training "for show."[12] Furthermore, describing the PLA's 2013 training priorities, Xiao Yunhong, deputy director of the PLA's General Staff Department Military Training Department, said: "The 'scent of gunpowder' in the 'fighting' will be stronger. The entire military will make 'training like real war' . . . the main theme of the entire year's training, powerfully strengthening training of mission topics, ensuring that as soon as there is a situation, the military will be able to go forward and fight to victory."[13]

As part of its effort to strengthen realism in training, the PLA in January 2013 announced it had designated a mechanized infantry brigade in the Beijing Military Region as its first dedicated "blue force" unit. The brigade is charged with simulating the "combat methods and tactics" of foreign forces during PLA training and exercises, according to official PLA media.[14] The PLA has used "blue force" units in training since the 1980s,* but previously these units served on only a temporary basis and so did not have sufficient time to learn foreign combat methods and tactics. This new brigade is headquartered in northern China at Zhurihe Training Base, the PLA's largest training center and experimental site for joint operations and "informationized"† warfare. Official Chinese media explained the blue force brigade has "carefully selected classic cases of local warfare around the world in recent years, devoted itself to studying the advanced operational styles of foreign armed forces, and even [simulated] the armed forces ... exactly in terms of personnel organization and issuance of oral commands."[15]

Corruption: In a meeting shortly after becoming the CMC chairman, President Xi urged senior PLA officers "to take a firm stand against corruption" and to maintain a "strict work style" and "iron discipline."[16] Since then, reducing corruption and waste in the PLA has been one of President Xi's most consistent messages in his public speeches to the military. In addition to rhetoric, President Xi has announced stronger anticorruption regulations for the PLA, including restrictions on military personnel holding banquets, drinking excessive alcohol, and using luxury hotels.

President Xi's focus on combating corruption in the PLA is part of the CCP's larger national effort to boost its image to mitigate growing public disillusionment with politics and governance in China.[17] He also is attempting to end practices such as paying for promotion and graft, which some observers have suggested reduces the quality of officers, perpetuates opposition to reforms, threatens PLA modernization and readiness, and undermines loyalty to the CCP. In an unusually candid December 2011 speech, PLA Logistics Department Political Commissar General Liu Yuan, son of former Chinese President Liu Shaoqi (1959–1968) and potential friend of President Xi Jinping,[18] reportedly said, "No country can defeat China ... Only our corruption can destroy us and cause our armed forces to be defeated without fighting."[19] General Liu in a later speech reportedly explained, "Certain individuals exchange public money, public goods, public office, and public affairs for personal gain, flouting the law and party codes of conduct, even resorting to verbal abuse and threats, clandestine plots and set ups ... They deploy all of the tricks of the mafia trade within the army itself."[20]

Nevertheless, empirical evidence of PLA corruption remains limited. Only two high-profile PLA corruption cases have become

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* Official PLA press frequently refer to the U.S. National Training Center at Fort Irwin, California, in discussions about PLA "blue force" training, suggesting U.S. practices may have influenced the PLA's development and implementation of the concept. PLA officers have visited Fort Irwin to observe U.S. training on at least four occasions (1985, 1994, 1997, and 2011). Shirley Kan, *U.S.-China Military Contacts, Issues for Congress* (Washington, DC: Congressional Research Service, July 30, 2013).

† In Chinese military doctrine, "informationization" refers to the application of advanced information technology to military operations. The PLA views informationization as a required enabler of its goal to be able to win "local wars under informationized conditions."

known since 2005. Admiral Wang Shouye was sentenced to life in prison in 2006 for embezzling approximately $20 million. General Gu Junshan was removed from his post in 2012, and the investigation apparently is ongoing.[21] Both Admiral Wang and General Gu had served as the deputy director of the PLA General Logistics Department, suggesting officers in logistics positions may be more susceptible to corruption, or corruption charges, due to their involvement in infrastructure and natural resources.

Uniformed Members of the Central Military Commission

In the weeks prior to the CCP's 18th Party Congress, seven new uniformed PLA officers were appointed to the CMC. In his testimony to the Commission, Dr. Mulvenon speculated that "some of the choices were short-term compromises," as five of the seven appointees can serve only one term on the CMC before reaching mandatory retirement age. Dr. Mulvenon also noted the elevation of two vice chairmen with strictly operational backgrounds allows China observers to dispense with the popular misconception that one of the positions is set aside for a political officer.[22] Roy Kamphausen, senior advisor for political and security affairs at the National Bureau of Asian Research, stressed to the Commission that the PLA remains a "party army" * even without the presence of a political officer in one of the CMC's top positions, because all PLA officers interact extensively with CCP leaders and eventually serve on the CCP Central Committee after joining the CMC.[23]

The new uniformed CMC members likely are more professional than previous CMC officers due to their more diverse careers, advanced education, more sophisticated training, and increased exposure to foreign militaries. Their predecessors tended to have specialized careers, less education and training, and limited interactions with foreign militaries outside the Soviet Union. However, because China has not fought a major war since the Sino-Vietnam War in 1979, the new uniformed CMC members have limited combat experience. In contrast, most of their predecessors participated in long and large-scale campaigns during the Chinese Civil War (1946 to 1949) and Korean War (1950 to 1953).[24]

Figure 1: Members of the 18th Central Military Commission †

CMC Member	***Position***
Xi Jinping	Chairman
General Fan Changlong * ‡	Vice Chairman

* The PLA is the armed branch of the CCP, not the military force of the PRC.

† CMC members are listed according to official protocol order. An asterisk indicates the officer is a new CMC member.

‡ General Fan Changlong's promotion to CMC vice chairman surprised many observers. Not only did General Fan have a relatively low public profile until 2012, but also he was promoted from Military Region commander to CMC vice chairman without first serving as a CMC member. General Fan will reach mandatory retirement age at the CCP's 19th Party Congress, so will serve only one term. U.S.-China Economic and Security Review Commission, *Hearing on China's New Leadership and Implications for the United States*, written testimony of James C. Mulvenon, February 7, 2013.

Figure 1: Members of the 18th Central Military Commission †—*Continued*

CMC Member	*Position*
General Xu Qiliang	Vice Chairman
General Chang Wanquan	Minister of National Defense
General Fang Fenghui *	General Staff Department Chief
General Zhang Yang *	General Political Department Director
General Zhao Keshi *	General Logistics Department Director
General Zhang Youxia *	General Armament Department Director
Admiral Wu Shengli §	PLA Navy Commander
General Ma Xiaotian *	PLA Air Force Commander
General Wei Fenghe *	Second Artillery Corps Commander

Source: Open Source Center, *OSC Graphic: Organizational Chart of China's Military Leadership 2013* (Washington, DC: May 22, 2013). OSC ID: CPF2013 0521017002. *http://www.opensource.gov*.

Defense White Paper

In April 2013, China released the latest version of its biennial defense white paper.¶ [25] This is the first defense white paper published since President Xi became CMC chairman. Although Chinese military leaders likely began to draft the document before President Xi assumed the position, official Chinese press suggests it contains strategic priorities specific to him.[26]

Unlike previous iterations, which provided a comprehensive overview of Chinese military and security issues, the 2012 defense white paper focuses on a theme—the PLA's growing role in military missions other than war. The current version also is shorter and less formal and ideological than previous ones. Major General Chen Zhou, a senior fellow at the PLA Academy of Military Science and the document's coordinating author, said China in the future plans to alternate between "subject-specific" defense white papers, such as the 2012 iteration, and the traditional "comprehensive" format.[27]

Official Chinese media hailed the 2012 defense white paper as a milestone in transparency, citing the "declassification" of military details.[28] However, most of this was widely-known information that Beijing had never officially acknowledged, such as the designations of Group Armies under the Military Regions and the breakdown of how the PLA distributes personnel among its service arms. Furthermore, as in previous iterations, the 2012 defense white paper offers no substantive information on important defense issues, in-

§ Admiral Wu Shengli, who has served as PLA Navy Commander since 2006 and was a member of the 17th CMC, was widely expected to be elevated to CMC vice chairman or minister of defense. Dr. Mulvenon in his testimony to the Commission speculated Beijing may have considered Admiral Wu's role in leading the PLA Navy's modernization program—a top priority for Beijing—too critical to move him into a different position. U.S.-China Economic and Security Review Commission, *Hearing on China's New Leadership and Implications for the United States*, written testimony of James C. Mulvenon, February 7, 2013.

¶ Defense white papers—China's most authoritative statements on national security—are published by the State Council's Information Office and approved by the CMC, Ministry of National Defense, and State Council. Beijing primarily uses these documents as a public relations tool to help ease deepening international concern over China's military modernization and answer calls for greater transparency.

cluding the defense budget; nuclear weapons; and the types and numbers of weapon systems already fielded, being developed, or under consideration for acquisition.

Defense Budget

In March 2013, China announced its official defense budget for 2013 rose 10.7 percent in nominal terms to 720.168 billion RMB (approximately $117.39 billion), signaling the new leadership's support for the PLA's ongoing modernization efforts. This figure represents 5.3 percent of total government outlays [29] and approximately 1.3 percent of estimated gross domestic product (GDP).[30] China's official annual defense budget now has increased for 22 consecutive years and more than doubled since 2006. Most Western analysts agree Beijing likely will retain the ability—even with slower growth rates of its GDP and government revenue—to fund its ongoing military modernization for at least the near term.[31]

It is difficult to estimate China's actual defense spending due to a number of reasons, including (1) the uncertainty involved in determining how China's purchasing power parity affects the cost of China's foreign military purchases and domestic goods and services and (2) Beijing's omission of major defense-related expenditures—such as purchases of advanced weapons, research and development programs, domestic security spending, and local government support to the PLA—from its official figures. The Institute of International Strategic Studies assesses China's actual defense spending is 40 to 50 percent higher than the official figure.[32] DoD estimated China's actual defense spending in 2012 fell between $135 billion and $215 billion, which was approximately 20 to 90 percent higher than China's announced defense budget.[33]

Military Modernization

Aircraft Carrier Developments

In September 2012, China commissioned its first aircraft carrier, the *Liaoning,* after approximately six years of renovation work on the former Soviet hull and one year of sea trials. China continues to develop a fixed-wing carrier aviation capability, which is necessary for the carrier to perform air defense and offensive strike missions. The PLA Navy conducted its first successful carrier-based takeoff and landing with the Jian-15 (J–15) in November 2012, certified its first group of aircraft carrier pilots and landing signal officers on the carrier's first operational deployment from June to July 2013, and verified the flight deck operations process in September 2013.[34] The PLA Navy will continue to conduct short deployments and shipboard aviation training until 2015 to 2016, when China's first J–15 regiment is expected to become operational.

China plans to follow the *Liaoning* with at least two indigenously built aircraft carriers. The first likely will enter service by 2020 and the second by 2025. As China's aircraft carrier force expands and matures, Beijing will improve its ability to project air power, particularly in the South China Sea, and to perform a range of other missions, such as airborne early warning, antisubmarine warfare, helicopter support to ground forces, humanitarian assistance, search and rescue, and naval presence operations.[35]

Sea-based Nuclear Deterrent Nears Initial Operational Capability

China's Julang-2 (JL–2) submarine-launched ballistic missile (SLBM) is expected to reach initial operational capability by late 2013.[36] The JL–2, when mated with the PLA Navy's JIN-class nuclear ballistic missile submarine (SSBN), will give China its first credible * sea-based nuclear deterrent. The JIN SSBN/JL–2 weapon system will have a range of approximately 4,000 nautical miles (nm), allowing the PLA Navy to target the continental United States from China's littoral waters.[37] China has deployed three JIN SSBNs and probably will field two additional units by 2020.[38] China also is developing its next generation SSBN, the Type 096,[39] which likely will improve the range, mobility, stealth, and lethality of the PLA Navy's nuclear deterrent.

Submarine and Surface Fleets Modernizing and Expanding

The PLA Navy continues to steadily increase its inventory of modern submarines and surface combatants. China is known to be building seven classes of ships simultaneously but may be constructing additional classes.[40] See figures 2–5 below for more information on PLA Navy orders of battle from 1990 to 2020.

- In 2012, China began building four improved variants of its SHANG-class nuclear attack submarine (SSN). China also continues production of the YUAN-class conventional submarine (SS), some of which include an air-independent propulsion † system that allows for extended duration operations, and the JIN SSBN. Furthermore, China is pursuing two new classes of nuclear submarines—the Type 095 guided-missile attack submarine (SSGN) and the Type 096 SSBN—and may jointly develop four advanced conventional submarines with Russia.[41] The PLA Navy's growing inventory of modern nuclear and conventional submarines will significantly enhance China's ability to strike opposing surface ships throughout the Western Pacific and allow it to protect future sea-based nuclear deterrent patrollers and aircraft carrier task groups.[42]
- In 2012, China launched two new surface combatants—the LUYANG III-class guided-missile destroyer (DDG) and the JIANGDAO-class corvette—and resumed construction of the LUYANG II-class DDG after a brief hiatus. China also continues serial production of the JIANGKAI II-class guided-missile frigate. Most of these units likely will be operational by 2015. The expanding and modernizing surface force will improve Beijing's ability to project power in the East and South China Seas and the Western Pacific. It also will help the PLA

* The PLA Navy operates one SSBN/SLBM weapon system with the XIA-class SSBN and the JL–1 SLBM. However, the status of this weapon system is unclear, and DoD does not consider it to be a credible threat. U.S. Department of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2013* (Washington, DC: May 2013), p. 6; U.S. Office of Naval Intelligence, *The People's Liberation Army Navy: A Modern Navy with Chinese Characteristics* (Suitland, MD: 2009), p. 23.

† Air-independent propulsion (AIP) is a method of generating electrical power in a conventional submarine while it operates submerged. The use of an AIP system reduces the need for a submarine to surface or come to periscope depth—where it is easier to detect—to recharge its batteries.

Navy fulfill its growing set of nontraditional missions beyond China's immediate periphery. These missions include defense of distant maritime trade routes, humanitarian assistance, and counterpiracy.[43]

- In 2012, the PLA Navy commissioned two YUZHAO-class amphibious transport docks (LPD), bringing its LPD inventory to three. The YUZHAO LPD can carry a mix of air-cushion landing craft, amphibious armored vehicles, helicopters, and marines. This will provide the PLA Navy with additional flexibility while performing missions such as amphibious assault, humanitarian assistance, and counterpiracy and improve China's ability to seize and hold Taiwan's offshore islands. China may build additional YUZHAO LPDs and probably will field a new landing helicopter assault ship, called the Type 081, by 2018.[44]
- In 2013, China added two upgraded FUCHI-class auxiliary replenishment oilers (AOR) to its fleet, raising its number of AORs from five to seven. The increased number of naval support ships better equips the PLA Navy's surface fleet, including future aircraft carrier task groups and expeditionary forces, to sustain high-tempo operations at longer ranges.[45]

According to Chinese military experts Andrew Erickson and Gabe Collins, "by 2015, China will likely be second globally in numbers of large warships built and commissioned since the Cold War's end . . . by 2020, barring a U.S. naval renaissance, it is possible that China will become the world's leading military shipbuilder in terms of numbers of submarines, surface combatants and other naval surface vessels produced per year." [46] The Office of Naval Intelligence projects China will have between 313 and 342 submarines and surface combatants by 2020, including approximately 60 submarines that are able to employ submarine-launched intercontinental ballistic missiles or antiship cruise missiles and approximately 75 surface combatants that are able to conduct multiple missions or that have been extensively upgraded since 1992.[47]

Figure 2: PLA Navy Submarine Orders-of-Battle 1990–2020

Type	**1990**	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**
Diesel Attack	88	43	60	51	54	57–62	59–64
Nuclear Attack	4	5	5	6	6	6–8	6–9
Nuclear Ballistic	1	1	1	2	3	3–5	4–5
Total	**93**	**49**	**66**	**59**	**63**	**66–75**	**69–78**

Sources: Numbers from 1990 to 1995 are based on information from various editions of the International Institute for Strategic Studies' *The Military Balance* series, reprinted in Anthony H. Cordesman et al., *Chinese Military Modernization and Force Development: A Western Perspective* (Washington, DC: Center for Strategic and International Studies, 2013), pp. 157–163. Numbers from 2000 to 2010 and projections for 2015 and 2020 were provided by the U.S. Office of Naval Intelligence. U.S. Office of Naval Intelligence, *PLA Navy Orders of Battle 2000–2020*, written response to request for information provided to the U.S.-China Economic and Security Review Commission, Suitland, MD, June 24, 2013.

Figure 3: PLA Navy Submarine Orders-of-Battle 1990–2020, Approximate Percent Modern *

Type	1990	1995	2000	2005	2010	2015	2020
Diesel Attack	0%	0%	7%	40%	50%	70%	75%
Nuclear Attack	0%	0%	0%	33%	33%	70%	100%

Sources: Approximate percentages from 1990 to 1995 are based on information from various editions of the International Institute for Strategic Studies' *The Military Balance* series, reprinted in Anthony H. Cordesman et al., *Chinese Military Modernization and Force Development: A Western Perspective* (Washington, DC: Center for Strategic and International Studies, 2013), pp. 157–163. Approximate percentages from 2000 to 2010 and projections for 2015 and 2020 were provided by the U.S. Office of Naval Intelligence. U.S. Office of Naval Intelligence, *PLA Navy Orders of Battle 2000–2020*, written response to request for information provided to the U.S.-China Economic and Security Review Commission, Suitland, MD, June 24, 2013.

Figure 4: PLA Navy Surface Orders-of-Battle 1990–2020 †

Type	1990	1995	2000	2005	2010	2015	2020
Aircraft Carriers	0	0	0	0	0	1	1–2
Destroyers	19	18	21	21	25	28–32	30–34
Frigates	37	37	37	43	49	52–56	54–58
Corvettes	0	0	0	0	0	20–25	24–30
Amphibious Ships	58	50	60	43	55	53–55	50–55
Coastal Patrol (Missile)	215	217	100	51	85	85	85
Total	**329**	**322**	**218**	**158**	**214**	**239–254**	**244–264**

Sources: Numbers from 1990 to 1995 are based on information from various editions of the International Institute for Strategic Studies' *The Military Balance* series, reprinted in Anthony H. Cordesman et al., *Chinese Military Modernization and Force Development: A Western Perspective* (Washington, D.C: Center for Strategic and International Studies, 2013), pp. 157–163. Numbers from 2000 to 2010 and projections for 2015 and 2020 were provided by the U.S. Office of Naval Intelligence. U.S. Office of Naval Intelligence, *PLA Navy Orders of Battle 2000–2020*, written response to request for information provided to the U.S.-China Economic and Security Review Commission, Suitland, MD, June 24, 2013.

Figure 5: PLA Navy Surface Orders-of-Battle 1990–2020, Approximate Percent Modern ‡

Type	1990	1995	2000	2005	2010	2015	2020
Destroyers	0%	5%	20%	40%	50%	70%	85%
Frigates	0%	8%	25%	35%	45%	70%	85%

Sources: Approximate percentages from 1990 to 1995 are based on information from various editions of the International Institute for Strategic Studies' *The Military Balance* series, reprinted in Anthony H. Cordesman et al., *Chinese Military Modernization and Force Development: A Western Perspective* (Washington, D.C: Center for Strategic and International Studies, 2013), pp. 157–163. Approximate percentages from 2000 to 2010 and projections for 2015 and 2020 were provided by the U.S. Office of Naval Intelligence. U.S. Office of Naval Intelligence, *PLA Navy Orders of Battle 2000–2020*, written response to request for information provided to the U.S.-China Economic and Security Review Commission, Suitland, MD, June 24, 2013.

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* Modern submarines are those able to employ submarine-launched intercontinental ballistic missiles or antiship cruise missiles. U.S. Office of Naval Intelligence, *PLA Navy Orders of Battle 2000–2020*, written response to request for information provided to the U.S.-China Economic and Security Review Commission, Suitland, MD, June 24, 2013.

† Totals do not include all types and sizes of surface ships, such as mine warfare and auxiliary ships.

‡ Modern surface ships are those able to conduct multiple missions or that have been extensively upgraded since 1992. U.S. Office of Naval Intelligence, *PLA Navy Orders of Battle 2000–2020*, written response to request for information provided to the U.S.-China Economic and Security Review Commission, Suitland, MD, June 24, 2013.

Sustaining the U.S. Military's "Rebalance" to Asia

In June 2010, then U.S. Secretary of Defense Robert Gates announced the "U.S. defense posture in Asia is shifting to one that is more geographically distributed, operationally resilient, and politically sustainable." [48] In January 2012, DoD's *Defense Strategic Guidance* declared the U.S. military will "of necessity rebalance toward the Asia" by emphasizing existing alliances, expanding its networks of cooperation with "emerging" partners, and investing in military capabilities to ensure access to and freedom to maneuver within the region.[49] The rebalance is a whole-of-government effort that also includes diplomacy, trade, and development.

However, there is growing concern in the United States and among U.S. allies and partners that DoD will be unable to follow through on its commitment to the rebalance due to declining defense budgets and emerging crises elsewhere in the world. U.S. Defense Secretary Chuck Hagel in July 2013 said Washington would have to choose between a smaller, modern military and a larger, older one if sequester-level funding continues.

> *In the first approach, we would trade away size for high-end capability. This would further shrink the active Army [from 570,000]*[50] *to between 380,000 to 450,000 troops, reduce the number of carrier strike groups from 11 to 8 or 9, draw down the Marine Corps from 182,000 to between 150,000 and 175,000, and retire older Air Force bombers. We would protect investments to counter anti-access and area denial threats, such as the long-range strike family of systems, submarine cruise missile upgrades, and the Joint Strike Fighter, and we would continue to make cyber capabilities and special operations forces a high priority. This strategic choice would result in a force that would be technologically dominant, but would be much smaller and able to go fewer places and do fewer things, especially if crisis occurred at the same time in different regions of the world.*
>
> *The second approach would trade away high-end capability for size. We would look to sustain our capacity for regional power projection and presence by making more limited cuts to ground forces, ships, and aircraft. But we would cancel or curtail many modernization programs, slow the growth of cyber enhancements, and reduce special operations forces. Cuts on this scale would, in effect, be a decade-long modernization holiday. The military could find its equipment and weapons systems—many of which are already near the end of their service lives—less effective against more technologically advanced adversaries.* [51]

U.S. Chief of Naval Operations Admiral Jonathan Greenert explained the U.S. Navy's role in the rebalance: "as directed by the 2012 *Defense Strategic Guidance* . . . the [U.S.] Navy formulated and implemented a plan to rebalance our forces, their homeports, our capabilities, and our intellectual capital and partnerships toward the Asia Pacific." [52] Specifically, the U.S. Navy

Sustaining the U.S. Military's "Rebalance" to Asia—*Continued*

aims to increase its presence in the Asia Pacific from about 50 ships in 2013 to 60 ships by 2020 and "rebalance homeports to 60 percent" in the region by 2020.[53] However, Admiral Greenert has warned constraints in the current budget environment could delay or prevent the U.S. Navy from achieving these objectives. In a September 2013 hearing held by the U.S. House Committee on Armed Services, Admiral Greenert testified:

> *. . . If fiscally constrained to the revised discretionary caps, over the long term (2013–2023), the Navy of 2020 would not be able to execute the missions described in the [Defense Strategic Guidance] . . . One potential fiscal and programmatic scenario would result in a '2020 Fleet' of about 255–260 ships, about 30 less than today, and about 40 less than the [U.S. Navy's 2014 budget] submission. It would include 1–2 fewer [carrier strike groups], and 1–2 fewer [amphibious readiness groups] than today. With regard to the [Defense Strategic Guidance] and presence, in this particular scenario the '2020 Fleet' would not increase presence in the Asia-Pacific, which would stay at about 50 ships in 2020. This would largely negate the ship force structure portion of [the U.S.] plan to rebalance to the Asia Pacific region directed by the [Defense Strategic Guidance] . . . Overall, in this scenario, development of our capabilities to project power would not stay ahead of potential adversaries' [anti-access/area denial] capabilities.*[54]

Developing Sea-based Land Attack Capability

China currently does not have the ability to strike land targets with sea-based cruise missiles. However, the PLA Navy likely is developing a land attack capability for its Type-095 SSGN and LUYANG III DDG. Modern submarines and surface combatants equipped with land attack cruise missiles (LACMs) will complement the PLA's growing inventory of air- and ground-based LACMs and ballistic missiles, enhancing Beijing's flexibility for attacking land targets throughout the Western Pacific, including U.S. facilities in Guam.[55]

Antiship Ballistic Missile Update

In 2010, China deployed the Dong Feng-21D (DF–21D) antiship ballistic missile (ASBM). The DF–21D, which has a range exceeding 810 nm, provides Beijing with the ability to threaten large surface ships, such as U.S. Navy aircraft carriers, throughout the Western Pacific. China is fielding additional DF–21D missiles and may be developing a longer-range variant.[56]

Possible Test of New Antisatellite Capability

On May 13, 2013, China fired a missile into space from the Xichang Satellite Launch Center in western China.* The missile "appeared to be on a ballistic trajectory to nearly geosynchronous Earth orbit," according to DoD.† Geosynchronous Earth orbit can be achieved at about 22,000 to 23,000 miles above the Earth's equator.‡ This launch is the world's highest known suborbital launch since the U.S. Gravity Probe A in 1976 and China's highest known suborbital launch to date, according to Jonathan McDowell, a scientist at the Harvard-Smithsonian Center for Astrophysics.[57]

U.S. defense agencies reportedly assess the launch was the first test of a new antisatellite (ASAT) capability, according to two U.S. press reports citing unnamed U.S. officials.[58] Beijing, however, claims the launch was part of a high-altitude scientific experiment for China's National Space Science Center. A Chinese Ministry of Foreign Affairs spokesperson said he was "not aware" of an ASAT test and then reiterated China's "longstanding stance to make peaceful use of the outer space and oppose weaponization and arms race in the outer space."[59] DoD did not comment on the U.S. press reports or provide information on its assessment of the relationship between the May missile launch and China's ASAT program.

Although it is difficult to draw a definitive conclusion about the nature of the missile launch without more information from China or DoD, available data suggest it was intended to test at least the launch vehicle component of a new high-altitude ASAT capability.[60] If the launch is part of China's ASAT program, Beijing's attempt to disguise it as a scientific experiment would demonstrate a lack of transparency about its objectives and activities in space. Furthermore, such a test would signal China's intent to develop an ASAT capability to target satellites in an altitude range that includes U.S. Global Positioning System (GPS) and many U.S. military and intelligence satellites.§ In a potential conflict, this capability could allow China to threaten the U.S. military's ability to detect foreign missiles and provide secure communications, naviga-

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* China's Academy of Sciences National Space Science Center issued the following statement regarding China's May missile launch: "This test used a high altitude space probe rocket, which carried a payload of multiple scientific detectors such as Langmuir probes, high energy particle detectors, magnetometers, and barium powder release test devices, etc. to perform original state detection of high energy particles and electromagnetic field strength in the ionosphere and near earth space." Xinhua, "China Successfully Carries out a High Altitude Scientific Measurement Test," May 14, 2013. OSC ID: CPP20130514003004.

† DoD issued the following statement regarding China's May missile launch: "We detected a launch on May 13 from within China. The launch appeared to be on a ballistic trajectory nearly to geosynchronous Earth orbit. We tracked several objects during the flight but did not observe the insertion of any objects into orbit and no objects associated with this launch remain in space. Based upon observations, we assess that the objects reentered the atmosphere above the Indian Ocean. We defer any further questions to the government of China." Jonathan McDowell, "Kunpeng-7," *Space Report*, May 21, 2013. *http://www.planet4589.org/pipermail/jsr/2013-May/000051.html*.

‡ For an overview of the different classes of orbit, see NASA Earth Observatory, "Three Classes of Orbit." *http://earthobservatory.nasa.gov/Features/OrbitsCatalog/page2.php*.

§ It is not clear from U.S. press reports which type of attack mechanism the potential new ASAT capability would employ. For example, it could use a "kinetic kill vehicle" to disable or destroy a satellite through the force of a direct collision. The new ASAT capability also could employ electronic warfare or directed energy weapons to temporarily degrade a satellite's capabilities without permanently destroying or damaging it. For an overview of the different types of ASAT attack methods and technologies, see David Wright, Laura Grego, and Lisbeth Gronland, *The Physics of Space Security: A Reference Manual* (Cambridge, MA: American Academy of Arts and Sciences and Union of Concerned Scientists, 2005). *http://www.ucsusa.org/assets/documents/nwgs/physics-space-security.pdf*.

tion, and precision missile guidance. Beijing's January 2007 destruction of an aging Chinese FY–1C weather satellite demonstrated it has the capability to target satellites in low Earth orbit (an altitude between about 100 to 1,200 miles), such as remote sensing satellites.

Developing Operationally Responsive Space Capability

On September 25, 2013, China launched a satellite into space from the Jiuquan Satellite Launch Center in western China. Official Chinese press claims the satellite, carried on a missile called the "Kuaizhou," will "monitor natural disasters and provide disaster relief information" for China's National Remote Sensing Center.[61] However, Gregory Kulacki, China project manager and senior analyst at the Union of Concerned Scientists, explains that, in addition to orbiting a weather satellite, the launch served to test a new solid-fueled launch vehicle. Solid-fueled rockets are simpler to operate, cheaper, and have fewer logistical requirements than liquid-fueled rockets, making them ideal for quick launches with minimal preparation. According to Dr. Kulacki, "This capability would allow [the PLA] to rapidly replace satellites that might be damaged or destroyed in an anti-satellite attack with small but 'good enough' satellites able to restore at least some of the functions of the satellites lost." The U.S. military has been developing a similar capability, which it refers to as "Operationally Responsive Space," since at least 2006.* [62]

Beidou Regional Satellite Navigation System Complete

On December 27, 2012, China's Beidou regional satellite navigation system † became fully operational and available for commercial use. Using 16 satellites and a network of ground stations, Beidou provides subscribers in Asia with 24-hour precision, navigation, and timing services, as well as the ability to send and receive text messages up to 120 Chinese characters.[63] China plans to expand Beidou into a global satellite navigation system by 2020.[64]

China's Satellite Navigation Office emphasized Beidou's importance to the PLA and Chinese commercial interests, stating the system meets the "demands of China's national security, economic development, technological advances and social progress . . . safeguard[s] national interests . . . enhance[s] the comprehensive national strength . . . promote[s] the development of satellite navigation industry . . . make[s] contributions to human civilization and social development . . . [and] serve[s] the world and benefit[s] mankind." [65]

* DoD's Operationally Responsive Space Office, established in 2007, is charged with planning and preparing "for the rapid development of highly responsive space capabilities that enable delivery of timely warfighting effects and, when directed, develop and support deployment and operations of these capabilities to enhance and assure support to Joint Force Commanders' and other users' needs for on-demand space support, augmentation, and reconstitution." U.S. Operationally Responsive Space Office, *Mission Statement*. *http://ors.csd.disa.mil/mission/*.

† The regional Beidou system, which China refers to as Beidou-2, grew out of an earlier satellite constellation, known as Beidou-1. Beidou-1 provided limited precision, navigation, and timing services in China and a small portion of East Asia but served primarily as a developmental platform for future projects. For more information on China's civilian and military space activities, see U.S.-China Economic and Security Review Commission, *2011 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2011), pp. 198–222.

- Beidou is a critical part of China's stated goal to prepare for fighting wars under "informationized conditions," which includes an emphasis on developing the PLA's C4ISR* and electronic warfare capabilities. The PLA is integrating Beidou into its systems to improve its command and control and long-range precision strike capabilities and to reduce the PLA's reliance on foreign precision, navigation, and timing services, such as GPS.[66]
- Beijing seeks to use Beidou to gain 15–20 percent of China's domestic satellite navigation market share by 2015 and 70–80 percent by 2020. GPS currently has about 95 percent of China's market.[67]
- Beijing is marketing Beidou's services to countries throughout Asia and has already reached agreements with Thailand, Laos, Brunei, and Pakistan to provide precision, navigation, and timing services for government and military customers at heavily subsidized costs.[68] These agreements include provisions allowing Beijing to build satellite ground stations outside of China, which will be used to increase Beidou's range and signal strength.[69]

Manned Space Program Reaches Milestone

In mid-June 2013, three astronauts aboard China's Shenzhou-10 space shuttle docked with the Tiangong-1, which is a small orbiting experimental space lab that China launched in 2011. Shenzhou-10 was China's fifth manned spaceflight, second manned mission to the Tiangong-1, and longest human spaceflight to date. Over the 15-day mission, the crew conducted both automatic and manual dockings, as well as medical, technological, and scientific experiments while aboard the Tiangong-1.[70] China's second-ever female astronaut, Wang Yaping, gave a physics lesson from the space lab to more than 60 million Chinese students via live broadcast.[71] President Xi attended the Shenzhou-10 launch and later told the crew in a video conference: "The space dream is a crucial part of our nation-building dream. With the rapid development of China's space industry, a great step forward will be made by the Chinese people in the exploration of space."[72]

According to Vice Premier Zhang Gaoli, Shenzhou-10's multiple successful dockings with the Tiangong-1 mark the achievement of the second phase of China's three-phase manned space program. In phase one, China launched several unmanned missions to develop technologies necessary for its first manned spaceflight in 2003. In phase two, China honed its spacecraft rendezvous and docking capabilities. In phase three, scheduled for completion by 2023, China plans to launch a permanent manned space station into orbit.[73]

Official Chinese statements emphasize the civilian aspects of China's space program and only implicitly refer to the PLA's role in China's space strategy. Beijing's 2011 Space White Paper states China's objectives in space are the following:

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*C4ISR refers to command, control, communications, computers, intelligence, surveillance, and reconnaissance.

to explore outer space and to enhance understanding of the Earth and the cosmos; to utilize outer space for peaceful purposes, promote human civilization and social progress, and to benefit the whole of mankind; to meet the demands of economic development, scientific and technological development, national security and social progress; and to improve the scientific and cultural knowledge of the Chinese people, protect China's national rights and interests, and build up its national comprehensive strength.[74]

However, the PLA has a significant role in most aspects of China's space activities. Scott Pace, director of the Space Policy Institute at George Washington University's Elliott School of International Affairs, testified to the Commission: "China's human space flight efforts are managed by elements of the PLA and require industrial capabilities that are the same as those used for military programs. Thus it might be more accurate to say that China has civil space activities, such as science and exploration, but does not have a civil space program."[75] This suggests even ostensibly civilian projects, such as the Shenzhou missions and the Tiangong-series space labs, support the development of PLA space, counterspace, and conventional capabilities.

Indigenous Large Transport Aircraft Conducts First Flight Test

In late January 2013, China conducted the first test flight of its indigenously developed cargo transport aircraft, the Yun-20 (Y–20). China previously was unable to build heavy transports, so it has relied on a handful of Russian Ilyushin-76 (Il-76) aircraft for strategic airlift since the 1990s. Following the exposure of key shortcomings in the PLA's ability to conduct disaster relief after China's 2008 Sichuan earthquake, official Chinese media highlighted the PLA's lack of strategic airlift is an "obvious insufficiency" that "affects the overall elevation of [China's] core military capability."[76]

Aircraft specifications provided by official Chinese media indicate the Y–20 can carry about twice the cargo load of the PLA's only operational transport, the IL–76, and about three times the cargo load of the U.S. C–130. Although the Y–20 currently uses Russian engines, the plane's chief designer said China ultimately plans to replace these with Chinese engines that feature better fuel efficiency and thrust-weight ratio.[77] China also may produce variants of the Y–20 aircraft for specialized missions, such as airborne refueling, airborne early warning, command and control, and electronic warfare.[78]

Once large-scale deliveries of the new plane begin, the Y–20 aircraft will be able to support a variety of domestic and international military operations. The Y–20 will enhance the PLA's ability to respond to internal security crises and border contingencies, support international peacekeeping and humanitarian assistance operations, and project power in a regional conflict.[79]

New Bomber Deployed

In June 2013, the PLA Air Force began to receive new Hongzha-6K (H–6K) bomber aircraft.[80] The H–6K—an improved variant of the H–6 (originally adapted from a late-1950s Soviet design)—has extended range and can carry China's new long-range LACM. The bomber/LACM weapon system provides the PLA Air Force with the ability to conduct conventional strikes against regional targets throughout the Western Pacific, including U.S. facilities in Guam.[81] Although the H–6K airframe could be modified to carry a nuclear-tipped air-launched LACM, and China's LACMs likely have the ability to carry a nuclear warhead, there is no evidence to confirm China is deploying nuclear warheads on any of its air-launched LACMs.[82]

Marketing New Armed Unmanned Aerial Vehicle

At China's major biennial airshow in November 2012, the Chengdu Aircraft Design Institute, which falls under the state-owned Aviation Industry Corporation of China, presented for the first time a static display of the Wing Loong armed unmanned aerial vehicle (UAV).[83] The Wing Loong appeared again at the Paris Air Show in June 2013, marking China's first display of an armed UAV at an international defense exhibition.[84] A representative of China's largest defense aviation exporter at the air show revealed that as many as six countries in Africa and Asia are negotiating with China to purchase the Wing Loong.[85]

Press observers noted the Wing Loong's close resemblance to the MQ–9 Reaper, one of the U.S.'s chief attack UAVs, leading some analysts to speculate Chinese espionage may have contributed to the Wing Loong's development.[86] Furthermore, U.S. cybersecurity company FireEye in September 2013 exposed an extensive PLA cyber espionage campaign targeting top aerospace and defense firms for information on U.S. drone technology.[87] FireEye attributed the campaign to a cyber threat group known as "Comment Group," which U.S. cybersecurity company Mandiant has linked to the 2nd Bureau of the PLA General Staff Department's Third Department.[88] This suggests cyber espionage may have played a role in the new UAV's design. For more information on China's cyber actors and operations, see chapter 2, section 2, of this Report, "China's Cyber Activities."

Security Developments

Expanding Military Operations in Foreign Exclusive Economic Zones

In 2012, the PLA Navy for the first time began to conduct maritime intelligence collection operations in foreign exclusive economic zones (EEZs)* without providing advance notification.[89] In one instance, the PLA Navy operated near Hawaii during a major U.S.-led multilateral exercise.[90] This activity runs counter to Beijing's insistence that foreign militaries provide notification and receive approval prior to operating in China's claimed EEZ. In June 2013,

* According to the United Nations Convention on the Law of the Sea, a coastal state is entitled to an EEZ, a 200 nautical mile zone extending from its coastline within which that state can exercise jurisdiction to explore and exploit natural resources, but not full sovereignty.

a senior PLA official confirmed China's naval deployments to foreign EEZs and said China is "sort of reciprocating America's reconnaissance in our EEZ by sending our ships to America's EEZ for reconnaissance." The PLA official added China has done so only "a few times," in contrast to the U.S. and Japan's "almost daily reconnaissance" of China.[91]

Although the United States and China agree on the basic role and right of a coastal state to explore, exploit, conserve, and manage natural resources within its EEZ, the two countries have conflicting views on a coastal state's right to regulate foreign military activity in its EEZ, whether they are exercises, military surveys, reconnaissance, or other military operations.[92] Differences on this issue emerged in the 1970s during United Nations Convention on the Law of the Sea (UNCLOS) negotiations,[93] reflecting the contrast in priorities between coastal states with interests in the control and security of their coastal waters and seagoing states with interests in the freedom of the seas. When UNCLOS negotiations concluded in 1982, China was a coastal nation with a littoral navy, whereas the United States was a global maritime power with a blue water navy that operated regularly outside its coastal waters.*

Today, China continues to assert its right to regulate foreign military activities in its claimed EEZ, a minority practice among the world's nations.† China's position is based largely on its view that it has the right to prevent any activity that directly or indirectly threatens its security or economic interests. The United States, maintaining military vessels have high seas freedoms in EEZs, contends China must have due regard for the rights and duties of other states exercising those freedoms in a manner compatible with UNCLOS.[94] Viewing its own position as one based on international norms, the United States "encourage[s]" similar operations by China, according to U.S. Pacific Command Commander Admiral Samuel Locklear.[95]

China also asserts jurisdiction of its domestic laws in its claimed EEZ. The 1998 *Law of the People's Republic of China on the Exclusive Economic Zone and Continental Shelf* requires foreign entities to obtain Chinese government approval prior to conducting fishing, natural resource exploitation, and marine scientific research in China's claimed EEZ.[96] China classifies U.S. military and hydrographic surveys as marine scientific research falling under the jurisdiction of this law.‡ The United States considers both types of survey high seas freedoms.

The different interpretations of maritime rights and freedoms in the past decade have led to bilateral tensions and occasionally incidents between U.S. and Chinese maritime and air forces.

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* China ratified UNCLOS in 1996. Although the United States has not ratified UNCLOS, it contends the binding principles of UNCLOS conform to customary international law.

† According to the U.S. Navy, only 27 countries share this view, including China, Bangladesh, Burma, Cambodia, India, Malaysia, Maldives, North Korea, Pakistan, Sri Lanka, Thailand, and Vietnam. Ronald O'Rourke, *Maritime Territorial and Exclusive Economic Zone (EEZ) Disputes Involving China: Issues for Congress* (Washington, DC: Congressional Research Service, April 2013), p. 4.

‡ UNCLOS also addresses marine scientific research in the EEZ and continental shelf. United Nations Convention on the Law of the Sea, "Article 246: Marine scientific research in the exclusive economic zone and on the continental shelf." *http://www.un.org/depts/los/convention_agreements/texts/unclos/part13.htm*; U.S.-China Economic and Security Review Commission, *2008 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2008), pp. 143–147.

One Chinese scholar has suggested the PLA's acknowledgement of its foreign EEZ operations demonstrates that Beijing's "changing concept of maritime affairs" is "moving [China] towards international norms."[97] Nevertheless, it is unlikely China will completely abandon its existing policy on military activities in EEZs, as doing so would undermine the legal foundation it has sought to build over time as an objector to the international norm. Therefore, in order to avoid being accused of holding contradictory positions, as well as to manage regional perception of its expanding naval activity, Beijing probably will seek to justify its activities using some of the following approaches:

- Continue to rely on domestic law to legitimize a coastal state's authority to regulate foreign military activities in its EEZ. Under this view, which is at odds with state practice by an overwhelming majority of the world's nations, the PLA could justify operating in foreign EEZs absent a coastal state's legislation addressing this matter.
- Seek to distinguish U.S. activity from its own by continuing to classify U.S. operations as marine scientific research that requires coastal state approval.
- Differentiate between U.S. activity off the coast of the Chinese mainland and Chinese operations along the outer reaches of the U.S. geographic periphery.
- Portray such Chinese operations as mere reciprocation of similar U.S. activities.
- Contrast China's less frequent operations with what it describes as the U.S.'s "almost daily reconnaissance."[98]

First Deployment of Infantry to Support UN Peacekeeping Operation

In July 2013, the PLA began to deploy its first peacekeepers to the UN Multidimensional Integrated Stabilization Mission in Mali (MINUSMA).*[99] The PLA contingent, which together consists of nearly 400 troops that were dispatched in two groups, includes what Beijing calls a "security force" from the PLA's 16th Group Army.[100] This marks the first time Beijing has deployed infantry to support a peacekeeping operation since it began participating in UN missions in 1990.[101] The PLA's security force in Mali is responsible for providing force protection for "MINUSMA headquarters and the living areas of peacekeeping forces."[102] China previously had limited the PLA's participation † in peacekeeping operations to noncombat troops—mainly military observers; staff officers; and engineering, medical, and transportation personnel. For example, China in January 2012 deployed a "guard" unit—consisting of

* MINUSMA took over peacekeeping responsibilities from the African-led International Support Mission in Mali (AFISMA) on July 1, 2013. AFISMA had been providing security since January 2013 when Islamic rebels were ousted from the country. United Nations, *MINUSMA: United Nations Stabilization Mission in Mali. http://www.un.org/en/peacekeeping/missions/minusma/background.shtml*.

† Since 2004, China has been contributing police units to UN missions. However, these police units consist of civilians—usually drawn from provincial-level border police units—and are not under the command of the PLA. Bates Gill and Chin-Hao Huang, *China's Expanding Role in Peacekeeping: Prospects and Policy Implications* (Stockholm, Sweden: Stockholm International Peace Research Institute, November 2009), p. 8.

about 50 PLA troops—to the UN Mission in South Sudan.[103] However, the unit's mission was limited to protecting China's own noncombat troops. Beijing explained the guards were needed because the United Nations was not providing protection for Chinese peacekeepers.[104]

Official Chinese statements have downplayed the PLA's deployment of infantry to Mali, likely to avoid raising international concerns about Beijing's intentions and the PLA's growing military capabilities. These statements also have emphasized that China's participation in MINUSMA is consistent with its long-espoused non-interference policy, because Mali requested military assistance. Beijing distinguishes between international action requested by a sovereign state and international action it perceives as designed to overthrow a sovereign state. Beijing fears the latter could legitimize regime change and external intervention and thus threaten China's own core interests of sovereignty and territorial integrity.

China and Russia Hold Large Naval Exercise

In early July, the PLA Navy and the Russian Federation Navy held "Joint Sea-2013" in the Sea of Japan, outside of Vladivostok, Russia. Seven PLA Navy ships—six modern surface combatants and a replenishment ship—participated in the exercise, which included training for antisubmarine operations, antisurface operations, air defense, replenishment at sea, counterpiracy, and search and rescue and concluded with a maritime parade. Official Chinese media highlighted Joint Sea-2013 as the largest deployment of Chinese forces in any joint foreign exercise and the first time the PLA Navy has participated in an "overseas joint exercise far away from [a] naval base and without [a] support system."[105]

China and Russia have conducted military drills bilaterally or under the auspices of the Shanghai Cooperation Organization since 2005, but this was only the second naval exercise between the two countries. The first exercise occurred in April 2012 in the Yellow Sea. According to a PLA Navy official, "From now on, the friendly cooperation between Chinese and Russian navies will be further developed, and the exercise will gradually develop towards normalization and institutionalization."[106] Furthermore, during an interview with an official Chinese television station, a Chinese commentator noted, "The antisubmarine subject should be said to be an important subject of this China-Russia joint exercise because antisubmarine exercise has always been a top-secret exercise of various countries . . . this shows the military cooperation between the two countries has reached a certain high level of mutual trust."[107]

Most Western observers maintain China and Russia are not entering a new stage in security cooperation. Jeffrey Mankoff, a fellow and deputy director of the Russia and Eurasia Program at the Center for Strategic and International Studies, said, "Sporadic cooperation between the Russian and Chinese militaries [does not] alter the fact that China's assertiveness worries Russia at least as much as it worries the United States. Russian military commanders acknowledge that they see China as a potential foe, even as official statements continue to focus on the alleged threat from the United States and [the North Atlantic Treaty Organization]."[108] Furthermore, two of Russia's largest military exercises since the Soviet era, held in July 2010 and July 2013, focused on its Far East region and were indicative of training for a conflict scenario involving China.[109]

Nevertheless, most U.S. observers agree the United States should carefully monitor the status of the China-Russia relationship. Dean Cheng and Ariel Cohen, both senior research fellows at the Heritage Foundation, warned, "If a close Sino–Russian strategic relationship develops, it could limit the capacity of the U.S. to act abroad and undermine economic freedom, democracy, and human rights in Greater Eurasia." [110]

China-India Border Tensions Flare

Border tensions between China and India flared after New Delhi claimed a contingent of 30 to 50 PLA soldiers crossed about 12 miles beyond the Line of Actual Control * between the two countries on April 15 and stayed there for three weeks. According to New Delhi, PLA soldiers frequently conduct border incursions (more than 600 times over the last three years) but do not usually cross more than a few miles over the Line of Actual Control nor stay there longer than several hours.[111]

Beijing denied Chinese troops had crossed into Indian territory. A Chinese Ministry of Foreign Affairs spokesperson said, "China has always acted in strict compliance with relevant agreements and protocols between the two countries on maintaining peace and tranquility in the Line of Actual Control area along the border . . . Chinese patrol troops have never crossed the line." [112] Chinese Premier Li Keqiang attempted to downplay the incident and the risk of conflict. During a state visit to India, he insisted that "a few clouds in the sky cannot shut out the brilliant rays of our friendship." Premier Li did not directly address the alleged Chinese incursion, though he said "both sides believe we need to improve various border-related mechanisms that we have put into place and make them more efficient, and we need to appropriately manage and resolve our differences." [113]

Beijing and New Delhi resolved the April border impasse in May after a series of talks and agreed to pursue a formal agreement to build trust and confidence between the border troops. The two sides signed the agreement during the Indian prime minister's trip to China in October 2013.[114]

Nevertheless, the potential for periodic low-level confrontations between border patrols to escalate likely will persist. Indian media have reported several additional albeit briefer incursions by Chinese troops since the April standoff. Furthermore, both China and India continue to boost their militaries' capabilities on the border, adding to mutual suspicion. This has left both sides sensitive to each other's border activities and disposed toward worst-case perceptions of the other sides' intentions and activities. Ely Ratner and Alexander Sullivan of the Center for a New American Security, warn: "more intense strategic competition between India and China would reverberate throughout the continent, exacerbating tensions

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* The Line of Actual Control is the effective border between China and India. The 2,400 mile-long Line of Actual Control traverses the Aksai Chin, the northern part of the Sikkim State, and crosses the McMahon Line in Arunachal Pradesh State.

in Central Asia, the Indian Ocean, and Southeast Asia. Disruptions to the Asian engine of economic growth caused by these tensions could debilitate the global economy." [115]

"Subtle Shift" in China's North Korea Policy?

As has been discussed in previous Commission reports, China for decades has provided North Korea with economic and political support and shielded Pyongyang from harsh punishment by the international community for its destabilizing rhetoric and activities.[116] However, North Korea's recent provocations—including its December 2012 long-range rocket launch and February 2013 nuclear test—have led to a "subtle shift" in China's policy toward North Korea, according to former U.S. Assistant Secretary of State for East Asian and Pacific Affairs Kurt Campbell.[117] Observable manifestations of this "subtle shift" are Beijing's stronger and higher-level public signals of its frustration with Pyongyang. Most notably, President Xi indirectly criticized North Korea in an April speech when he said, "No one should be allowed to throw a region and even the whole world into chaos for selfish gains." [118] This appears to be the first time a Chinese president has publicly reproached North Korea.

Nevertheless, most U.S. analysts agree China has not fundamentally altered its North Korea strategy. Beijing's recent diplomatic moves have been temporary, limited, easily reversible, and more symbolic than substantive.

- In September 2013, several Chinese government ministries jointly issued a new 236-page list of technologies and materials to be banned from export to North Korea.[119] The proscription list focuses on dual-use items that could be used to produce weapons of mass destruction or ballistic missiles. However, according to the Nautilus Institute, "nothing indicates that by issuing tighter controls, China is fundamentally changing its policy toward North Korea, let alone abandoning it . . . The degree to which China enforces the prohibition of trade in items on this list will mostly determine the success of the program." [120]
- Although China in March 2013 voted to approve new and strengthened UN Security Council sanctions on North Korea,[121] Stephanie Kleine-Ahlbrandt, then North East Asia project director and China adviser for the International Crisis Group, in July noted that China's implementation of the sanctions had been "underwhelming." [122]
- In May 2013, state-owned Bank of China Ltd. closed its account with North Korea's Foreign Trade Bank. However, Ms. Kleine-Ahlbrant explains, "It is unclear whether there was any money in the Foreign Trade Bank's accounts when they were closed. For months already, North Koreans had been limiting their use of major Chinese banks to avoid scrutiny. Third countries are often used for such transactions, as well as provincial Chinese banks, which operate with considerably more autonomy than the larger state-owned banks. Furthermore, most of North Korean trade with China skirts the banking sys-

tem altogether by engaging in cash transactions via trading companies in China, processing payments in the form of gold or gemstones, or even bartering." [123]

Joel Wuthnow, analyst at the CNA Center for Naval Analyses, warns: "this refrain is familiar. For instance, China's harsh rhetoric and vote in favor of UN sanctions after North Korea's 2006 nuclear test was followed in 2007 by a push for dialogue; a similar pattern developed after China's approval of sanctions in response to [North Korean] provocations in 2009, with a more conciliatory approach in 2010." [124]

United States-China Security Relationship

China Seeking "New Type of Major-Country Relationship" with the United States

Throughout 2013, Beijing called for a "new type of major-country relationship" * with the United States. Official Chinese statements claim the "new type" relationship is intended to promote more stable relations between the two countries and avoid or, if necessary, manage tensions that history suggests could occur as China rises. The concept, which was formulated by Beijing in 2011, has been referenced increasingly in official Chinese statements and press since February 2012, when then presumptive Chinese President Xi evoked it during a visit to the United States.[125] The "new type" relationship was a central theme of the June 2013 summit between President Obama and President Xi in Sunnylands, California.[126]

The "new type" concept, like many Chinese policy slogans, is vaguely defined in order to provide Chinese officials with the flexibility to frame it in different ways for different circumstances and audiences. Chinese officials likely will attempt to use the concept to serve a number of Beijing's strategic objectives, including the following:

- Develop deeper and more frequent military communication to improve the two countries' abilities to manage crises if and when they arise.
- Pressure the United States to respect China's "core interests," which are to preserve China's political system and national security, protect Chinese sovereignty and territorial integrity, and sustain economic and social development.
- Promote an image of China as a constructive actor seeking common solutions to regional and global issues.
- Convince the United States that China is proactively seeking to build a peaceful and cooperative bilateral relationship.
- Pressure the United States to cease its military reconnaissance and survey operations in China's claimed EEZ, reduce U.S. arms sales to Taiwan, and relax restrictions on the military-to-military relationship, particularly those imposed in the 2000 National Defense Authorization Act.† [127]

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* Chinese statements also use the term "new type of great power relationship." Both phrases refer to the same concept.

† Section 1201 of the 2000 National Defense Authorization Act prohibits DoD from authorizing any military-to-military exchange or contact with representatives of the PLA if that exchange

Continued

Select Military-to-Military Engagements

DoD is seeking to expand and deepen its engagement with the Chinese military in nonsensitive areas of mutual interest. DoD contends a strong military-to-military relationship develops familiarity at the operational level, which reduces the risk of conflict through accidents and miscalculations; builds lines of communication at the strategic level that could be important during a crisis; contributes to better overall bilateral relations; and creates opportunities to obtain greater contributions from China to international security.

From 2012 to 2013, the number of U.S.-China military-to-military contacts—including high-level visits, recurrent exchanges, academic exchanges, functional exchanges, and joint exercises—more than doubled from approximately 20 to 40.[128] In particular, contact between the U.S. Navy and PLA Navy increased significantly during this timeframe. In July 2013, U.S. Pacific Commander Admiral Locklear said, "I think that the progress that we're making between our two militaries is quite commendable . . . because we are able to have very good dialogue on areas where we converge, and there are a lot of places where we converge as two nations, and we're also able to directly address in a matter-of-fact way where we diverge." [129] Key military-to-military contacts in 2013 include the following:

- In April, U.S. Chairman of the Joint Chiefs of Staff General Martin Dempsey traveled to Beijing to meet with senior Chinese leaders, including President Xi, CMC Vice Chairman General Fan Changlong, and Defense Minister General Chang Wanquan. General Dempsey raised U.S. concerns about Chinese cyber espionage, reiterated U.S. treaty obligations to Japan encompass the Senkaku Islands, and explained the U.S. rebalance to Asia. After the trip, General Dempsey announced both militaries had agreed to a set of joint recommendations for their respective governments, including more frequent and regular military engagements at every level and the development of a code of conduct for interactions in the air, sea, and cyber domains.[130]

- In May, the *USS Shiloh,* a guided-missile cruiser based in Japan, called at Zhanjiang, China, to visit the PLA Navy's South Sea Fleet headquarters.[131] This marked the first port visit by a U.S. Navy ship to China since 2009.[132]

- In May, then U.S. Pacific Fleet Commander Admiral Cecil Haney visited Beijing for talks with PLA Deputy Chief of General Staff General Qi Jianguo and PLA Navy Commander Admiral Wu Shengli.[133] Admiral Haney then traveled to Zhanjiang to participate in the *USS Shiloh*'s port visit.[134]

- In August, a group of two PLA Navy surface ships and a replenishment ship called at Pearl Harbor, Hawaii. This marked the first port visit by a Chinese ship to the United States since 2006.[135] The PLA Navy ships then participated in a search and

or contact would create a national security risk for the United States. United States Congress, "National Defense Authorization Act for Fiscal Year 2000," Public Law 106–65, October 5, 1999. *http://www.gpo.gov/fdsys/pkg/PLAW-106publ65/pdf/PLAW-106publ65.pdf*.

rescue exercise with ships from the U.S. Pacific Fleet. According to U.S. Navy Region Hawaii and Naval Surface Group Middle Pacific Commander Rear Admiral Rick Williams, the exercise included "helicopters working together [for] airspace deconfliction . . . small boat operations back and forth . . . [and] communication drills."[136]

- In August, the U.S. Fifth Fleet and the PLA Navy conducted the second ever U.S.-China counterpiracy exercise.[137] A U.S. guided-missile destroyer, a Chinese destroyer, and a Chinese replenishment ship participated in the two-day exercise in the Gulf of Aden. According to DoD press, the drill included "simulated medical emergencies and hostage scenarios . . . a live-fire proficiency exercise . . . [and the] landing of a helicopter from each country aboard the deck of each other's ships." Paraphrasing a U.S. Fifth Fleet official, the DoD press report said the exercise marked a "big step forward" from the first U.S.-China counterpiracy exercise in 2012, which "lasted only about six hours and was limited to a basic visit, board, search, and seizure and secure exercise, follow-on discussion, and crew lunch."[138]
- In August 2013, China's Defense Minister General Chang Wanquan traveled to the United States, where he visited the U.S. Pacific Command, the U.S. Northern Command, the North American Aerospace Defense Command, and the Pentagon. Defense Minister Chang met with U.S. Secretary of Defense Chuck Hagel at the Pentagon to discuss Asian security, U.S.-China cyber issues, and opportunities to enhance U.S-China military cooperation. During a joint press conference, Secretary Hagel and Defense Minster Chang gave an overview of recent and planned bilateral exercises; announced plans to establish a dialogue between the U.S. Strategic Plans and Policy directorate of the Joint Chiefs of Staff and the PLA's new Strategic Planning Department; and said the two sides continue to develop a notification mechanism for major military activities and rules of behavior for military air and naval activities.[139]
- In September, PLA Navy Commander Admiral Wu Shengli and Senior Captain Zhang Shen, the commanding officer of China's first aircraft carrier, traveled to San Diego, California, and Washington, DC. In San Diego, the PLA Navy delegation met with U.S. Chief of Naval Operations Admiral Jonathan Greenert; toured a NIMITZ-class aircraft carrier and a LOS ANGELES-class attack submarine; embarked on a Littoral Combat Ship at sea; and visited U.S. Marine Corps Base Camp Pendleton. In Washington, DC, the delegation had a series of talks with U.S. Navy leadership at the Pentagon and visited Walter Reed National Military Medical Center.[140]

Additionally, China in March accepted the U.S. invitation, first extended by then U.S. Secretary of Defense Leon Panetta in September 2012, to participate in the U.S.-led multilateral Rim of the Pacific (RIMPAC) Exercise near Hawaii in 2014.[141] According to U.S. Pacific Command Commander Admiral Samuel Locklear, this is "a big step for the Chinese military ... [the] Chinese navy [will] be entering a multinational three-week-long exercise that's basically run by the U.S. from the 3rd Fleet headquarters." [142]

Implications for the United States

China's military modernization presents significant challenges to U.S. security interests in Asia. First and foremost, major elements of this program—such as the DF–21D antiship ballistic missile and increasing numbers of advanced submarines armed with antiship cruise missiles—are designed to restrict U.S. freedom of action throughout the Western Pacific. As the PLA's anti-access/area denial * capabilities mature, the costs and risks to the United States for intervention in a potential regional conflict involving China will increase.

Furthermore, the PLA's rapidly advancing regional power projection capabilities enhance Beijing's ability to use force against Taiwan, Japan, and rival claimants in the South China Sea. This could embolden China to respond militarily to a perceived provocation or to consider preemptive attacks in a crisis involving Taiwan or China's maritime sovereignty claims. Many of these scenarios could require the U.S. military to protect U.S. regional allies and partners as well as to maintain open and secure access to the air and maritime commons in the Western Pacific.

At the same time, rising unease over both China's expanding capabilities and increasing assertiveness is driving U.S. allies and partners in Asia to improve their own military forces and strengthen their security relationships with each other. These trends could support U.S. interests by lightening Washington's operational responsibilities in the region.

Most Asian countries welcomed the U.S. rebalance to Asia when it was announced by the Obama Administration in 2011. The Philippines, for example, is considering granting the United States access to Subic Bay—a former U.S. naval base.† The Philippines Department of Foreign Affairs Visiting Forces Agreement Director said, "As the [United States] begins to implement [the rebalance to Asia], Subic will play an important role because it is one of the important facilities that can service its presence in the Pacific." [143] However, there is growing concern among U.S. allies and partners that the United States will be unable to follow through on its commitment to the rebalance due to declining defense budgets and continuing security challenges elsewhere. Furthermore, some regional countries almost certainly began to question the willingness of the United States to restrain China's increasing assertiveness after China in 2012 gained de facto control of Scarborough Reef, territory also claimed by the Philippines, a U.S. treaty ally. This perception could lead some regional countries to increasingly accom-

* "Anti-access" (A2) actions are those intended to slow deployment of an adversary's forces into a theater or cause the forces to operate from distances farther from the conflict than they would otherwise prefer. A2 affects movement into theater. "Area denial" (AD) actions are those intended to impede an adversary's operations within areas where friendly forces cannot or will not prevent access. AD affects movement within theater. U.S. Air-Sea Battle Office, *Air Sea Battle: Service Collaboration to Address Anti-Access & Area Denial Challenges* (Arlington, VA: May 2013), pp. 2–4.

† Subic Bay—a natural harbor that is about 50 miles north of Manila—served as a major U.S. naval base until the early 1990s.

modate China or pursue military capabilities that could be used offensively or preemptively. Either scenario could undermine U.S. interests in the region.

Conclusions

- PLA modernization is altering the security balance in the Asia Pacific, challenging decades of U.S. military preeminence in the region.
- The PLA Navy is in the midst of an impressive modernization program. China's acquisition of naval platforms, weapons, and systems has emphasized qualitative improvements, not quantitative growth, and is centered on improving its ability to strike opposing ships at sea and operate at greater distances from the Chinese mainland. Today, the PLA Navy is able to conduct high-intensity operations in China's immediate periphery as well as low-intensity operations beyond the region. Trends in China's defense spending, research and development, and shipbuilding suggest the PLA Navy will continue to modernize. By 2020, China could have approximately 60 submarines that are able to employ submarine-launched intercontinental ballistic missiles or anti-ship cruise missiles and approximately 75 surface combatants that are able to conduct multiple missions or that have been extensively upgraded since 1992.
- The PLA is rapidly expanding and diversifying its ability to strike U.S. bases, ships, and aircraft throughout the Asia Pacific region, including those that it previously could not reach, such as U.S. military facilities on Guam.
- The PLA's expanding involvement in real world missions allows it to field-test equipment and obtain hands-on experience in areas such as addressing unconventional threats in harsh and potentially hostile environments, satisfying expeditionary logistics requirements, and integrating into multilateral operations.
- The PLA is improving its day-to-day readiness levels and conducting longer-range and more frequent, robust, and realistic training. As these reforms continue, the PLA will become more proficient and confident operating its advanced platforms and weapon systems and better able to rapidly respond to regional contingencies.
- The PLA Navy's growing presence in foreign EEZs contradicts its longstanding policy on military activities in its own EEZ. Rather than resolve this inconsistency between its actions and policy, Beijing likely will continue to assert its authority to regulate U.S. military activities in its EEZ.

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SECTION 2: CHINA'S CYBER ACTIVITIES

Introduction

Since the Commission's *2012 Annual Report to Congress*, strong evidence has emerged that the Chinese government is directing and executing a large-scale cyber espionage campaign against the United States. This section—based on discussions with cybersecurity experts and U.S. Department of Defense (DoD) officials and independent research *—provides an overview of this evidence, examines developments in Chinese cyber policy, and explores potential U.S. actions and policies to deter and mitigate future Chinese cyber theft and improve U.S. cyber policy development and implementation.†

Mounting Evidence of the Chinese Government's Active Role in Cyber Espionage

Detailed Technical Information Released on Chinese Cyber Activities

In February 2013, Mandiant, a private U.S. cybersecurity firm, published a report providing detailed technical information regarding the activities of a cyber threat group, which Mandiant refers to as Advanced Persistent Threat 1. According to the report, the group likely is the 2nd Bureau of the People's Liberation Army (PLA) General Staff Department's Third Department, also known as Unit 61398. Mandiant assesses Unit 61398 since 2006 has penetrated the networks of at least 141 organizations, including companies, international organizations, and foreign governments. These organizations are either located or have headquarters in 15 countries and represent 20 sectors, from information technology to financial services. Four of these sectors are among the seven strategic emerging industries the Chinese government prioritized for development in its 12th Five-Year Plan (2011 to 2015). 81 percent of the targeted organizations were either located in the United States or had U.S.-based headquarters. Through these intrusions, the group gained access to "broad categories of intellectual prop-

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* In 2013 the Commission held a roundtable on U.S.-China cybersecurity issues on July 11 and sponsored a report on the economic and security implications of cloud computing development in China, which the Commission published on September 5. Leigh Ann Ragland et al., *Red Cloud Rising: Cloud Computing in China* (Vienna, VA: Defense Group Inc. for the U.S.-China Economic and Security Review Commission, September 2013). *http://origin.www.uscc.gov/sites/default/files/Research/Red%20Cloud%20Rising_Cloud%20Computing%20in%20China.pdf*.

† For discussion of China's cyber strategy and actors, see U.S.-China Economic and Security Review Commission, *2012 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2012), pp. 147–151; Bryan Krekel et al., *Occupying the Information High Ground: Chinese Capabilities for Computer Network Operations and Cyber Espionage* (Falls Church, VA: Northrop Grumman Corporation for the U.S.-China Economic and Security Review Commission, March 2012). *http://origin.www.uscc.gov/sites/default/files/Research/USCC_Report_Chinese_Capabilities_for_Computer_Network_Operations_and_Cyber_%20Espionage.pdf*.

erty, including technology blueprints, proprietary manufacturing processes, test results, business plans, pricing documents, partnership agreements, and e-mails and contact lists from victim organizations' leadership." [1]

In its report, Mandiant states Unit 61398 is responsible for conducting computer network operations,* specifically the gathering of strategic and economic intelligence on targets in the United States and Canada, as well as targeting organizations whose primary language is English in other countries.[2] Aside from Unit 61398, the Third Department has another 11 operational bureaus, three research institutes, four operations centers, and 16 technical reconnaissance bureaus.† [3] Not all of these organizations are directing their actions against the United States, and there are no public reports available about their role in China's cyber espionage campaign.[4]

According to the *Wall Street Journal*, on the same day Mandiant published its report, the U.S. Department of Homeland Security and the U.S. Federal Bureau of Investigation shared hundreds of Internet Protocol (IP) addresses used by Unit 61398 with U.S. Internet service providers to help them defend their customers against cyber intrusions. Mandiant gave the U.S. government advance notice of the release of its report on Unit 61398; this may have been a factor in the timing of the government's sharing of the IP addresses.[5]

In April 2013, the Verizon RISK Team, a cybersecurity unit within private U.S. telecommunications company Verizon, published its annual *Data Breach Investigations Report*.[6] The report presents analysis of 621 cases of "confirmed data disclosure," which Verizon defines as "any event resulting in confirmed compromise (unauthorized viewing or accessing) of any non-public information," that occurred in 2012. Eighteen governmental and private organizations from the United States, Europe, Malaysia, and Australia provided the information about these cases. Verizon categorized 19 percent of the intrusions as espionage carried out by "state-affiliated actors." It identified 96 percent of the intrusions conducted by state-affiliated actors as originating in China.[7]

Chinese Cyber Espionage against U.S. Critical Infrastructure

In July 2013, a threat researcher at Trend Micro, a private Japanese cybersecurity firm, claimed he had detected a Chinese cyber intrusion, commencing in December 2012, of a honeypot.‡

* Computer network operations are "comprised of computer network attack, computer network defense, and related computer network exploitation enabling operations." Bryan Krekel et al., *Occupying the Information High Ground: Chinese Capabilities for Computer Network Operations and Cyber Espionage* (Falls Church, VA: Northrop Grumman Corporation for the U.S.-China Economic and Security Review Commission, March 2012), p. 115. *http://origin.www.uscc.gov/sites/default/files/Research/USCC_Report_Chinese_Capabilities_for_Computer_Network_Operations_and_Cyber_%20Espionage.pdf*.

† Technical reconnaissance bureaus are administratively subordinate to the PLA General Staff Department's Third Department but are attached to the PLA's service arms and provide direct support to operational units through signals intelligence and computer network operations.

‡ A honeypot is part of a honeynet, which is a fake or diversionary computer network designed to draw in an adversary in order to identify the adversary or give the adversary false information. Honeynets can provide intelligence regarding adversaries' "tools, tactics, and motives." The

Chinese Cyber Espionage against U.S. Critical Infrastructure—*Continued*

He created the honeypot to resemble the industrial control system of a water plant in the United States. The researcher attributed the intrusion to Unit 61398, based on forensic analysis.[8] If true, this suggests Unit 61398 is collecting intelligence on critical infrastructure in addition to other targets. Such activities are consistent with PLA doctrine, which explains that one function of wartime computer network operations is to "disrupt and damage the networks of [an adversary's] infrastructure facilities, such as power systems, telecommunications systems, and educational systems."[9] Some PLA strategists also have suggested China should develop the capability to paralyze ports and airports by cyber or precision weapon attacks on critical infrastructure.[10]

U.S. Department of Defense for the First Time Attributes Cyber Espionage to China

In May 2013, DoD for the first time directly accused the Chinese government and military of cyber espionage against U.S. networks. DoD's 2013 *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China* states: "In 2012, numerous computer systems around the world, including those owned by the U.S. government, continued to be targeted for intrusions, some of which appear to be attributable directly to the Chinese government and military." The report then states, "China is using its computer network exploitation capability to support intelligence collection against the U.S. diplomatic, economic, and defense industrial base sectors that support U.S. national defense programs."[11]

U.S. Secretary of Defense Chuck Hagel said addressing Chinese cyber espionage primarily requires dialogue between the U.S. and Chinese governments behind closed doors, but he added, "It has to be public as well."[12] Publicly attributing cyber intrusions to the Chinese government and military in the DoD report is a significant step for the U.S. government. Previous DoD documents and statements had acknowledged cyber espionage "emanated" or "originated" from China but stopped short of attributing those operations to the Chinese government and military. For example, DoD's 2012 report to Congress stated: "Computer networks and systems around the world continued to be targets of intrusions and data theft, many of which originated within China."[13] In a press briefing following the release of the 2012 report, then acting Deputy Assistant Secretary of Defense for East Asia David Helvey said, "We have concerns about a number of computer network operations and activities that appear to originate from China that affect DoD networks." When asked whether he was referring to the Chinese government, he said, "I didn't specify the attribution."[14]

Honeynet Project, "Short Video Explaining Honeypots." *http://old.honeynet.org/misc/files/HoneynetWeb.mov*.

Beijing Issues Routine Denials of the Allegations by Mandiant and DoD

When confronted with public accusations from the United States about its cyber espionage, Beijing attempted to refute the evidence, in part, by pointing to the anonymity of cyberspace and the lack of verifiable technical forensic data. The Chinese government's statements were similar to its responses to previous foreign allegations of cyber espionage.[15]

In a press conference on the day after Mandiant released its report, a spokesperson for China's Ministry of Foreign Affairs said, "Groundless speculation and accusations regarding hacker attacks, for various purposes, is both unprofessional and irresponsible and it is not helpful for solving the problem." He also emphasized cyber attacks are a serious problem for China.[16] In a press conference the next day, a spokesperson for China's Ministry of National Defense denied that the PLA supports hacking. He argued Mandiant's allegations are without merit, because, among other reasons, hackers frequently use third-party IP addresses to conduct cyber attacks.[17]

In response to the allegations regarding China's cyber espionage activities in DoD's 2013 report to Congress, a Ministry of Foreign Affairs spokesperson said China is "strongly against any form of hacking activities" and called the charges "baseless."[18]

Evidence of a Cyber Campaign against U.S. Press

There is growing evidence the Chinese government is conducting a cyber espionage campaign against U.S. media organizations. China likely seeks to use information acquired through these intrusions to (1) shape U.S. press coverage of China by intimidating U.S. journalists' sources in China, and (2) gain warning about negative media coverage of China before it is published.[19]

- In January 2013, the *New York Times* reported Chinese cyber actors had gained access to its computer network in September 2012 and had conducted activities inside the network for the next four months. The intrusions appeared to focus on the e-mail account of a reporter investigating the assets of family members of outgoing Chinese Premier Wen Jiabao. The *New York Times* hired Mandiant to investigate the intrusion, which Mandiant attributed to a China-based cyber threat group it refers to as Advanced Persistent Threat 12. The *New York Times* reported, "The attacks started from the same university computers used by the PLA to attack United States military contractors in the past."[20]
- The *New York Times* also reported Chinese cyber actors conducted an intrusion into computers at Bloomberg News in 2012 following Bloomberg's investigation of the assets of then Chinese Vice President Xi Jinping's relatives.[21]
- Following the *New York Times*' revelations, the *Wall Street Journal* and the *Washington Post* reported their networks also had been penetrated by hackers, with evidence in both cases implicating cyber actors based in China.[22] In the *Wall Street*

Journal intrusion, the hackers targeted personnel reporting on China.[23]

New Information Emerges about 2009 Intrusion into Google's Network

In May 2013, the *Washington Post* reported Chinese cyber actors in 2009 infiltrated a Google database containing information regarding Foreign Intelligence Surveillance Court orders Google had received.* The hackers seemed to be searching for names of Chinese intelligence operatives whom the U.S. government might be monitoring. Regarding this intrusion, a former U.S. government official said that were the Chinese government to become aware that its operatives were being monitored, it could "take steps to destroy information, get people out of the country," and perhaps intentionally transmit incorrect information to the U.S. government.[24] A former U.S. Department of Justice (DoJ) official said data breaches such as this one show "the overall security and effectiveness of lawful interception and undercover operations is dependent in large part on security standards in the private sector," which "clearly need strengthening."[25]

Defense Science Board Points to Widespread Hacking of U.S. Defense Designs

The Defense Science Board† warns in *Resilient Military Systems and the Advanced Cyber Threat*, an unclassified report published in October 2012, "The cyber threat is serious, with potential consequences similar in some ways to the nuclear threat of the Cold War." The Defense Science Board then assesses DoD "is not prepared to defend against this threat."[26] In May 2013, the *Washington Post* published an article describing a classified version of the report, which lists more than 24 U.S. weapon system designs the board determined were accessed by cyber intruders. The *Washington Post* reported, "Senior military and industry officials with knowledge of the breaches said the vast majority were part of a widening Chinese campaign of espionage against U.S. defense contractors and government agencies." The list includes the Patriot Advanced Capability 3 air defense system, the Terminal High Altitude Area Defense system, the Aegis ballistic missile defense system, the F/A–18 fighter aircraft, the V–22 Osprey multirole combat aircraft, the Black Hawk helicopter, the Littoral Combat Ship, and the F–35 Joint Strike Fighter.[27]

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* The intruders also reportedly accessed Google's source code. Source code is the set of instructions that compose computer software programs. In addition, they attempted to access the e-mail accounts of Chinese human rights activists. This intrusion was part of a broader campaign targeting over 30 companies that U.S. cybersecurity company McAfee called "Operation Aurora." Ellen Nakashima, "Chinese Hackers Who Breached Google Gained Access to Sensitive Data, U.S. Officials Say," *Washington Post*, May 20, 2013. *http://articles.washingtonpost.com/2013-05-20/world/39385755_1_chinese-hackers-court-orders-fbi*; Andrew Jacobs and Miguel Helft, "Google, Citing Attack, Threatens to Exit China," *New York Times*, January 13, 2010. *http://www.nytimes.com/2010/01/13/world/asia/13beijing.html?pagewanted=all&_r=0*; and Kim Zetter, "Google Hack Attack Was Ultra Sophisticated, New Details Show," *Wired*, January 14, 2010. *http://www.wired.com/threatlevel/2010/01/operation-aurora/*.

† According to its charter, the Defense Science Board submits "independent advice and recommendations on science, technology, manufacturing, acquisition process, and other matters of special interest to the DoD" to the Secretary of Defense and other senior defense officials. Defense Science Board, "Charter." *http://www.acq.osd.mil/dsb/charter.htm*.

Update on U.S. Department of Justice Indictment of Chinese Company

In another high-profile example of a Chinese company allegedly targeting a U.S. company's intellectual property through cyber espionage, the DoJ in June 2013 filed charges against Sinovel Wind Group, a Chinese energy firm, alleging Sinovel stole intellectual property from Massachusetts-based company American Superconductor (AMSC). DoJ charged Sinovel, the deputy director of Sinovel's research and development department, a technology manager at Sinovel, and a former employee of a subsidiary of AMSC with theft of trade secrets and related charges.[28]

AMSC and Sinovel entered into a business relationship in 2005, with AMSC selling software, components, and electrical systems to Sinovel for use in its wind turbines. In the following years, Sinovel became AMSC's largest client. However, the Chinese firm in 2011 stopped paying for products that had arrived in China and cancelled existing orders after allegedly stealing source code from AMSC to reproduce AMSC's software.[29] Media reporting alleges Dejan Karabasevic, who was working as an engineer for AMSC Wintec GmbH in Austria at the time, remotely extracted the source code from a computer in Wisconsin and delivered it to Sinovel by e-mail.[30] According to the company's chief executive officer, without sales to Sinovel, AMSC's revenue declined dramatically, and 50 percent of its 900 employees lost their jobs.[31] In early 2012, the U.S. Federal Bureau of Investigation found software alleged to have been illegally copied from AMSC's software in a wind turbine the Massachusetts Water Resources Authority had purchased from Sinovel. This was a critical factor leading to Sinovel's indictment.[32] AMSC has sought compensation from Sinovel through lawsuits in China, an effort that is ongoing and has resulted in legal fees for AMSC exceeding $6 million.[33]

Chinese Cyber Policy Developments

United States and China Establish Cyber Working Group

In April 2013, U.S. Secretary of State John Kerry announced the U.S. and Chinese governments would establish a working group to discuss cybersecurity.[34] The Cyber Working Group convened for the first time in July immediately preceding the latest meeting of the U.S.-China Strategic and Economic Dialogue (S&ED). Christopher Painter, the U.S. Department of State's Coordinator for Cyber Issues, and Dai Bing, an official from China's Ministry of Foreign Affairs, were the senior representatives for their respective countries at the meeting.[35] At the conclusion of the S&ED, the two sides announced they had "decided to take practical measures to enhance dialogue on international norms and principles in order to guide action in cyber space and to strengthen CERT to CERT (Computer Emergency Response Team)* coordination and cooperation."[36] James Lewis, director of the Technology and Public Policy Program at the Center for Strategic and International Studies

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*A CERT is an organization that is devoted to preventing and resolving cybersecurity problems and provides information regarding cyber threats and vulnerabilities to government agencies, companies, and other organizations. For an example of a CERT, see US–CERT, "About Us" (Washington, DC: U.S. Department of Homeland Security). *http://www.us-cert.gov/about-us*.

(CSIS), testified to the House Foreign Affairs Committee's Subcommittee on Asia and the Pacific that the July S&ED and Cyber Working Group meetings "are an important step that, if it succeeds, will make the situation in Asia more stable." He added, "We are looking at a long effort and the S&ED process will need to be sustained and reinforced."[37]

China Shifts on International Law and Cyberspace

In what appears to be a break with the past, China in June 2013 agreed in a United Nations (UN) report that international law, which includes the law of armed conflict,* extends to cyberspace. The report states, "International law, and in particular the Charter of the United Nations, is applicable and is essential to maintaining peace and stability and promoting an open, secure, peaceful and accessible [information and communication technology] environment."[38] In addition, China agreed that "states must meet their international obligations regarding internationally wrongful acts attributable to them. States must not use proxies to commit internationally wrongful acts. States should seek to ensure that their territories are not used by non-state actors for unlawful use of [information and communication technologies]."[39] This statement is based on the contents of the UN's *Articles on Responsibility of States for Internationally Wrongful Acts*, also known as the law of state responsibility.[40] The UN Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security, which includes China, the United States, Russia, and 12 other countries, agreed on the report's contents when the group convened in New York.[41]

James Mulvenon, vice president of Defense Group Inc.'s Intelligence Division, at the roundtable on U.S.-China cybersecurity issues held by the Commission on July 11, said, "The Chinese made a dramatic reversal on their view about how the laws of armed conflict did not apply to the cyber dimension, which was a showstopper for DoD about [the department] being involved in any confidence building measures [with China]."[42] While the Chinese government does not appear to have publicly asserted its stance on the applicability of the law of armed conflict and the law of state responsibility to cyberspace prior to the UN report, U.S. experts and media reports indicate that in the past Beijing has not agreed that these laws apply to activities in cyberspace.[43]

Impact of Snowden Leaks on U.S. Efforts to Stop Chinese Cyber Espionage

In June 2013, Edward Snowden, a former contractor for the U.S. National Security Agency (NSA) alleged NSA has conducted cyber operations against hundreds of Hong Kong and mainland Chinese targets.[44] Addressing Mr. Snowden's allegations, a

* The law of armed conflict, which is also known as international humanitarian law, includes principles such as distinction between military and civilian targets, proportionality, military necessity, and limitation. International Committee of the Red Cross, "The Law of Armed Conflict: Basic Knowledge," June 2002, pp. 12–14. *http://www.icrc.org/eng/assets/files/other/law1_final.pdf*.

Impact of Snowden Leaks on U.S. Efforts to Stop Chinese Cyber Espionage—*Continued*

spokesperson for China's Ministry of National Defense said, "To, on the one hand, abuse one's advantages in information technology for selfish ends, while on the other hand, making baseless accusations against other countries, shows double standards that will be of no help for peace and security in cyberspace." [45] Despite the Obama Administration's efforts to distinguish what it calls "cyber-enabled economic espionage" or "cyber-enabled theft of trade secrets" from government-to-government espionage,[46] some observers expect Mr. Snowden's allegations to set back U.S. efforts on U.S.-China cybersecurity issues by at least six months. Dr. Mulvenon said, "I don't really think we're going to make a lot of progress for a while. . . . I would say it's probably going to delay progress six to twelve months." [47] However, an official at the U.S. embassy in Beijing told the Commission Mr. Snowden's allegations had not affected private discussions with the Chinese government on cyber theft of intellectual property.

Developments Related to Chinese Information Technology Companies

An October 2012 report by the U.S. House Permanent Select Committee on Intelligence (HPSCI) characterized China's two largest telecommunication equipment companies, Huawei and ZTE, as a risk to U.S. national security because they could facilitate intelligence collection by the Chinese government. The report advised U.S. companies against using products or services provided by Huawei and ZTE.* [48] During an interview with the *Australian Financial Review* in July 2013, former director of the Central Intelligence Agency and NSA, General Michael Hayden (Retd.), confirmed and augmented the HPSCI's findings regarding Huawei. When asked to verify whether he believed "it is reasonable to assume that hard evidence exists that Huawei has engaged in espionage on behalf of the Chinese state," General Hayden said, "Yes, that's right." He then added, "At a minimum, Huawei would have shared with the Chinese state intimate and extensive knowledge of the foreign telecommunications systems it is involved with. I think that goes without saying." [49]

Huawei and ZTE continue to issue public assurances that they do not pose a security threat.[50] For example, Huawei's president Ren Zhengfei said during his first interview with a media organization in May 2013 that his company would not assist the Chinese government with collecting foreign intelligence if asked.[51]

Despite widespread concerns about the national security risks posed by Huawei and ZTE, Bloomberg reported in August 2013 that the U.S. General Services Administration (GSA) authorized U.S. government agencies to procure a videoconferencing system produced by ZTE and Prescient, a division within U.S. company CyberPoint International LLC, in November 2012. According to an

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*For more details on the HPSCI report, see U.S.-China Economic and Security Review Commission, *2012 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2012), p. 164.

executive at CyberPoint, Prescient produced hardware and software to enhance the security of the system, which was originally made by ZTE. He said, due to these alterations, it now was a "Made-in-America product."[52] However, in September 2013, U.S. Customs and Border Protection concluded the system should still be considered a Chinese product, because "the Chinese-origin Video Board and the Filter Board impart the essential character to the video teleconferencing server."[53] GSA subsequently took the system off the list of products agencies can buy. Even before the decision, no U.S. agencies had purchased this product.[54]

In a meeting in May 2013, Commissioners and DoD officials discussed DoD's interpretation of U.S. law regarding procurement sources. DoD officials indicated a stricter procurement evaluation standard that includes sourcing concerns could be applied only to items on the United States Munitions List. Items outside this list are judged by a different standard, which some officials believe might preclude concerns about the origin of products. For example, items procured for C4ISR* maintenance facilities are not subject to stricter scrutiny. Commissioners raised concerns that this interpretation of the law was limiting the department's ability to address potential risks arising from certain procurement sources. Commissioners urged DoD to expand the purview of the stricter standard to items beyond the munitions list.

DoD is currently moving in this direction. Section 806 of the National Defense Authorization Act (NDAA) for Fiscal Year 2011 is intended to address the problem, but it has yet to be fully implemented. Section 806 authorizes the Secretary of Defense and the secretaries of the Army, Navy, and Air Force to reject procurement sources for information technology on grounds of protecting supply chain security if they receive a recommendation to do so from DoD.[55] According to a DoD Congressional liaison, as of May, "DoD has proceeded to implement NDAA Section 806, beginning with a number of table-top exercises involving department procurement, legal, acquisition, engineering, and intelligence experts to expose any underlying issues with 806 implementation."[56] In addition, DoD wrote the Defense Federal Acquisition Regulation Supplement Rule implementing Section 806 and, as of May, the rule was in the process of interagency coordination.[57] These changes to DoD procurement ultimately may provide officials with the flexibility they need to protect all DoD systems. However, progress has been slow and the problem the Commissioners highlighted will remain until the new policy is implemented, potentially posing a threat to national security.

Security Implications of Cloud Computing in China

"Cloud computing, often referred to as simply 'the cloud,' is the delivery of on-demand computing resources—everything from applications to data centers—over the Internet and on a pay-for-use basis," according to IBM.[58] In *Red Cloud Rising: Cloud Computing in China*, a report for the Commission published in 2013, Defense

*C4ISR refers to command, control, communications, computers, intelligence, surveillance, and reconnaissance.

Group Inc. (DGI) describes several potential cybersecurity concerns related to China and cloud computing, including the following:

- Microsoft licensed 21Vianet, a Chinese data center services company, to provide Office 365 and Windows Azure, two cloud computing products, to customers in China. Microsoft currently plans to link 21Vianet's data centers in China to Microsoft's data centers in other parts of Asia, Europe, and North America. As a part of this plan, Windows Azure users outside China could choose to store their data in data centers in China, and Azure users in China could store their data in other countries. Domestic Chinese law authorizes the government to "inspect the electronic communication instruments and appliances and other similar equipment and installations" of organizations operating in China. If the Chinese government accesses 21Vianet's data centers, it might then potentially connect to foreign data centers through the network Microsoft is planning. DGI states, "This risk can be mitigated by designing the network with appropriate data segregation and limits on network administrator privileges." [59]
- China's Ministry of State Security (MSS), the country's main foreign intelligence collection agency, is closely connected with the Chongqing Special Cloud Computing Zone. In addition to being one of the central government agencies to authorize the establishment of the zone, the MSS has stated it is giving the zone "leading guidance and corresponding requirements." [60] The agency's connection to this cloud computing zone represents a potential espionage threat to foreign companies that might use cloud computing services provided from the zone or base operations there.[61]
- Since Chinese domain registrars and Internet service providers typically are not vigilant about users employing their services to carry out nefarious activities against computers outside China, DGI writes, "One can speculate that malicious use of Chinese cloud services may eventually take place at a higher rate than the cloud computing industry's global norm." [62]
- Given the widely acknowledged security weaknesses in networking hardware developed by Chinese companies and the shift toward use of this equipment in Chinese cloud infrastructure, "it logically follows that use of this equipment may constitute an additional vulnerability in some Chinese cloud infrastructure, beyond the standard 'baseline' level of vulnerability." [63]

In addition, cloud computing could improve the PLA's C4ISR capabilities. DGI writes that cloud computing "could enable more effective and flexible development and deployment of military equipment, while at the same time improving the survivability of the PLA's information systems by endowing them with greater redundancy (allowing a system's capabilities to survive the disabling or destruction of any individual node)." [64]

Deterring Chinese Cyber Theft against U.S. Companies

There are no indications the public exposure of Chinese cyber espionage in technical detail throughout 2013 has led China to change its attitude toward the use of cyber espionage to steal intellectual property and proprietary information. Mandiant's revelations merely led Unit 61398 to make changes to its cyber "tools and infrastructure," causing future intrusions to be harder to detect and attribute.[65] Richard Bejtlich, chief security officer at Mandiant, said Unit 61398 decreased its activity for about one month following the publishing of Mandiant's report in February.[66] Former and current U.S. officials said the U.S. government's sharing of IP addresses with Internet service providers contributed to this reduction in activity.[67] However, Mr. Bejtlich said Unit 61398 remains active but at lower levels compared to the period before Mandiant's report was released.[68]

It is clear naming and attempting to shame will not be sufficient to deter entities in China from engaging in cyber espionage against U.S companies. Mitigating the problem will require a long-term and multifaceted approach that centers on changing China's cost-benefit calculus.[69] Congress, the Obama Administration, and outside experts are discussing a number of potential U.S. actions and policies, including the following:

Link Chinese economic cyber espionage to trade restrictions. An example of such a measure is the *Deter Cyber Theft Act* (S. 884), a bipartisan bill introduced in the Senate in May 2013. The bill requires the U.S. intelligence community to identify goods it assesses to have been "manufactured or otherwise produced using technologies or proprietary information" that was "developed by United States persons" and acquired through cyber espionage. It calls on the President to block the import of these goods if the President deems it necessary for safeguarding intellectual property rights or the DoD supply chain.[70]

Prohibit Chinese firms using stolen U.S. intellectual property from accessing U.S. banks. In May 2013, the Commission on the Theft of American Intellectual Property (hereafter "the IP Commission"),* released a report that examines the pilfering of U.S. intellectual property and presents policy recommendations to address the problem. The IP Commission recommends the U.S. government "deny the use of the American banking system to foreign companies that repeatedly benefit from the misappropriation of American intellectual property."[71] Roy Kamphausen, senior advisor for political and security affairs at the National Bureau of Asian Research and the deputy executive director for the IP Commission, explained at the Commission's roundtable the U.S. government could determine whether or not a foreign company should be sanctioned based on a combination of information from commercial or government sources, and well-defined bench-

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*The IP Commission was co-chaired by Dennis Blair, former U.S. director of national intelligence, and Jon Huntsman, former U.S. ambassador to China.

Deterring Chinese Cyber Theft against U.S. Companies—*Continued*

marks, such as the results of legal cases in the past involving the company.[72]

Ban U.S. travel for Chinese organizations that are involved with cyber espionage. Dr. Mulvenon suggested to the Commission the United States needs "to create a constituency of people in China who want to succeed but are being harmed by government cyber espionage efforts that they had nothing to do with." He believes placing Chinese companies and universities involved with cyber espionage on a list of entities that are barred from entry into the United States would help to build this constituency. However, Dr. Mulvenon warned this policy would have to be implemented carefully and deliberately, because sanctioning Chinese companies that are connected to foreign multinational companies "would be self-defeating in some cases." [73] For example, if a U.S. company has a partnership with a Chinese company, such measures might hinder the U.S. company's ability to do business with its Chinese partner.

Use counterintelligence techniques, such as deliberately providing incorrect information to cyber spies to "poison the well." [74] Dr. Mulvenon explained to the Commission this could lead the Chinese government "to spend more and more resources actually figuring out whether things are true or not." He argued, "The more problems they have in that system will lead them to begin to accelerate the trends toward centralization of authority and decision-making, and . . . I think the goal of our policy should be to make it as difficult to get a computer network exploit operation approved in the Chinese system as it is currently in our system." * [75] However, David Merkel, Mandiant's chief technology officer, doubts the effectiveness of this tactic. He said, "Those kinds of techniques can be effective in highly-targeted ways, used by specialists to get some particular result like learning more information about an adversary . . . but as some kind of broad-based defense or mechanism to change the economics of stealing digital information, I just don't see it." [76] Mr. Merkel explained, "When I go take a look at a large organization and the challenges it has managing its own legitimate information, and then you talk about managing legitimate disinformation and being able to tell one from the other and being able to make decisions based on what happens with it seems pretty far fetched." [77]

Encourage the U.S. government, military, and cleared defense contractors to implement measures to reduce the effectiveness of Chinese cyber operations and increase the risk of conducting such operations for Chinese organizations. For example, the IP Commission recommends measures such as "meta-tagging, water-

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* Dr. Mulvenon said that in China there is a "bottom up, grassroots, entrepreneurial sort of cyber espionage framework." He described U.S. cyber espionage as "top down . . . and controlled," and involving a great deal of oversight. U.S.-China Economic and Security Review Commission, *Roundtable: U.S.-China Cybersecurity Issues* (Washington, DC: July 11, 2013).

Deterring Chinese Cyber Theft against U.S. Companies—*Continued*

marking, and beaconing,"[78] because they can help identify sensitive information and code a digital signature within a file to better detect intrusion and removal.[79] These tags also might be used as evidence in criminal, civil, or trade proceedings to prove data was stolen.

Clarify the legal rights of companies, and the types of action that are prohibited, regarding finding and recovering intellectual property that is stolen through cyber intrusions. Mr. Kamphausen said U.S. companies "need the right tools that afford them the protections, legal and otherwise, so that they can do what's in their own interest."[80]

Pass legislation permitting U.S. companies to conduct offensive cyber operations in retaliation against intrusions into their networks. Such operations could range from "actively retrieving stolen information" to "physically disabling or destroying the hacker's own computer or network." The IP Commission explores this option in its report but ultimately does not endorse it at the current time, because the possibility that retaliatory actions could significantly impair neutral computers or networks makes this option undesirable.[81]

Improve opportunities for U.S. companies to pursue legal action in the United States against Chinese commercial espionage. The IP Commission recommends the Economic Espionage Act (18 U.S.C. § 1831–1839) be amended to "provide a federal private right of action for trade secret theft."[82] Mr. Kamphausen explained, "This essentially means you can bring your own [law] suit. You don't have to wait for the government to take one up on your behalf."[83]

Shift jurisdiction for all appeals in Economic Espionage Act cases to the Court of Appeals for the Federal Circuit. The IP Commission recommends Congress "make the Court of Appeals for the Federal Circuit (CAFC) the appellate court for all actions under the [Economic Espionage Act]."[84] At present, appeals in Economic Espionage Act cases are handled by a court of appeals in one of the United States' 12 regional circuits.[85] The IP Commission writes, "The CAFC serves as the appellate court for nearly all IP-related cases, and thus has a high degree of competency on IP issues. Making the CAFC the appellate court for all [Economic Espionage Act] issues ensures a degree of continuity in judicial opinion. Moreover, it helps support the federal circuit in expanding extraterritorial enforcement."[86]

Encourage U.S. companies and individuals to bring cases of cyber theft of intellectual property to intellectual property courts in China. According to Mr. Kamphausen, "Enormous strides have been made within the Chinese legal system with regard to protection of intellectual property and then enforcement actions

Deterring Chinese Cyber Theft against U.S. Companies—*Continued*

once cases are brought."[87] In his comments, he indicated to the Commission these courts may become a viable option for U.S. companies seeking recourse when their intellectual property has been stolen.

Furthermore, a variety of potential multilateral measures to deter Chinese cyber theft are under discussion, including the following:

Expand information sharing among countries regarding cyber threats. For example, countries could create an international list of "bad players" to which private companies could contribute information.[88]

Include standards for safeguarding intellectual property in negotiations of the Trans-Pacific Partnership (TPP) and the Transatlantic Trade and Investment Partnership (T–TIP) agreements.[89] Intellectual property rights is one of the issues partner countries are discussing in these negotiations.[90] However, the TPP negotiating parties have yet to reach consensus on this issue. They met in Tokyo in October 2013 to discuss the intellectual property chapter of the TPP.[91] The United States and the European Union only recently started negotiating the T–TIP, thus discussions of intellectual property rights in this forum are in the beginning stage.[92]

Finally, some discussions focus on improving the U.S. government's ability to develop and implement cyber policy as necessary steps to address Chinese cyber theft. Suggestions include the following:

Appoint a Cabinet-level official to oversee an interagency process regarding the protection of intellectual property. According to the IP Commission, this step is necessary, because executive branch "efforts to protect American intellectual property will involve literally thousands of detailed actions—data gathering and research, interagency coordination, work with the private sector, coordination with Congress, and interactions with foreign government agencies."[93] The IP Commission adds this undertaking will involve "expert officials across many departments and agencies."[94]

Enhance cooperation between the U.S. government and private companies. During the Commission's roundtable, Bruce Quinn, vice president for government relations with Rockwell Automation, stressed the importance of improving cooperation between the U.S. government and the private sector to protect U.S. intellectual property from cyber intrusions. Most importantly, he said the government could provide companies with information about threats to their intellectual property as well as suggestions for protecting it. Mr. Quinn would like to see a model whereby if a company shares information about a threat with the govern-

Deterring Chinese Cyber Theft against U.S. Companies—*Continued*

ment, the government would later provide the company with a report detailing its understanding of that threat. He said the government should provide companies with a point-of-contact for information regarding cyber threats to intellectual property.* According to Mr. Quinn, this is particularly important for small- and medium-sized companies. He explained Rockwell has "contacts with the government. . . . But these small- and medium-sized companies that funnel into us, that are critical to us being successful, they don't have that access." He suggested the U.S. Department of Commerce's Foreign Commercial Service could be this point-of-contact. Under such an arrangement, the Foreign Commercial Service would have access to threat information from other U.S. government agencies. He explained, "It doesn't have to be detailed information, but it has to be enough that they can sensitize these small- and medium-sized manufacturers to the threat and make recommendations to them if they're looking at entering certain markets, how to best protect themselves, what to look for, what are the red flags." He also suggested, given the government's knowledge about cyber threats, the U.S. Defense Advanced Research Projects Agency could partner with U.S. companies to develop defensive technologies to combat cyber intrusions and then release those technologies for purchase by the public.[95]

Implications for the United States

China's cyber espionage against U.S. commercial firms poses a serious threat to U.S. business interests and competiveness in key industries. While it is clear the economic cost of cyber espionage to the United States is significant, precise numbers are impossible to calculate. A July 2013 interim report based on an ongoing study by McAfee and CSIS estimates the annual cost of both cyber crime † and cyber espionage targeting U.S. persons and entities is between $24 billion and $120 billion. The report does not separate out the cost of cyber espionage, in particular, from the total amount or estimate the cost of cyber espionage originating from specific countries, such as China.[96] *The IP Commission Report* assesses the damage to the U.S. economy due to the theft of intellectual property by all means to be around $300 billion a year. Using a range of estimates from prominent studies of this issue, the IP Commission states 50 to 80 percent of international intellectual property theft originates in China. *The IP Commission Report* lists what it appraises to be the numerous difficulties with calculating the cost of intellectual

* This proposal differs from President Obama's February 2013 executive order regarding cybersecurity, in that the executive order is focused on information sharing between the government and critical infrastructure providers. The White House, "Executive Order—Improving Critical Infrastructure Cybersecurity" (Washington, DC: February 12, 2013). *http://www.whitehouse.gov/the-press-office/2013/02/12/executive-order-improving-critical-infrastructure-cybersecurity*.

† The McAfee and CSIS report defines cyber crime as the theft of financial assets, whereas the report's examination of cyber espionage is focused on the theft of intellectual property and confidential information from companies. James Lewis and Stewart Baker, *The Economic Impact of Cybercrime and Cyber Espionage* (Washington, DC: CSIS, July 22, 2013), pp. 8–11.

property theft, including using surveys of a sample of companies to draw conclusions about an entire sector or a variety of sectors.* [97] General Keith Alexander, director of the NSA and commander of U.S. Cyber Command, assessed the cost to U.S. companies of intellectual property theft to be about $250 billion a year, although not all the losses are due to Chinese activity.[98]

The theft of trade secrets is a major concern for U.S. businesses with operations in China. The U.S.-China Business Council's 2013 survey of its members found they "cited trade secrets as the intellectual property (IP) issue of most concern in China." [99] If effective action to curb commercial espionage is not taken, this problem might worsen for U.S. companies. Dr. Lewis testified to the House Committee on Energy and Commerce's Subcommittee on Oversight and Investigations that although, "for China, there has been a lag of several years, perhaps as many as ten, between successful acquisition through espionage and the ability to produce competing products (be they military or civil) . . . [the] lag time between acquisition and the appearance of a competing product based on stolen technology is decreasing, as China's ability to absorb and utilize technology has increased." [100] This suggests the demand for U.S. intellectual property from within China could increase and with it the amount and value of intellectual property stolen.

If Chinese companies are able to duplicate technology and products using intellectual property acquired by cyber theft from U.S. companies, they may be able to compete even more effectively with U.S. companies in markets worldwide. Stealing intellectual property could allow Chinese companies to forgo some of the time and expenditure necessary for research and development.[101] Beyond theft of proprietary information regarding technology or products, the theft of corporate e-mail correspondence or internal documents can aid Chinese companies in competitive bidding for commercial contracts.[102] In each of these cases, U.S. companies might lose revenue and lay off workers or even go out of business. The theft of intellectual property, if publicized, also might lead to a drop in a company's stock value.[103] Moreover, the authors of the McAfee and CSIS report write, "Cyber espionage and crime may slow the pace of innovation, distort trade, and create social costs from job loss. This larger effect may be more important than . . . [the] actual number [of dollars lost]." [104]

China's cyber espionage also has security implications. Information gained from intrusions into the networks of U.S. military contractors likely improves China's insight into U.S. weapon systems, enables China's development of countermeasures, and shortens China's research and development timelines for military technologies.[105] In addition, the same intrusions Chinese cyber actors use for espionage also could be used to prepare for offensive cyber operations. Chinese cyber actors could place latent capabilities in U.S. software code or hardware components that might be employed in a potential conflict between the United States and China.

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*For the IP Commission's full assessment of the difficulties in calculating the cost of intellectual property theft, see The Commission on the Theft of American Intellectual Property, *The IP Commission Report* (Seattle, WA: The National Bureau of Asian Research, May 2013), pp. 23–30. *http://www.ipcommission.org/report/IP_Commission_Report_052213.pdf*.

Conclusions

- The Chinese government is directing and executing a large-scale cyber espionage campaign against the United States and to date has successfully targeted the networks of U.S. government and private organizations, including those of DoD and private firms. These activities are designed to achieve a number of broad economic and strategic objectives, such as gathering intelligence, providing Chinese firms with an advantage over their competitors worldwide, advancing long-term research and development objectives, and gaining information that could enable future military operations.
- China has not reduced its cyber intrusions against the United States despite recent public exposure of Chinese cyber espionage in technical detail. This suggests Beijing has decided to continue its cyber campaign against the United States.
- Developments in cloud computing in China may present cybersecurity risks for U.S. users and providers of cloud computing services. The relationship between China's Ministry of State Security and the Chongqing Special Cloud Computing Zone represents a potential espionage threat to foreign companies that might use cloud computing services provided from the zone or base operations there. In addition, the plan to link 21Vianet's data centers in China and Microsoft's data centers in other countries suggests the Chinese government one day may be able to access data centers outside China through Chinese data centers.
- There is an urgent need for Washington to take action to prompt Beijing to change its approach to cyberspace and deter future Chinese cyber theft. Actions and policies under discussion include the following: passing new legislation or modifying existing legislation; changing the cost-benefit calculus of Chinese cyber actors and China's leaders through sanctions and counterintelligence tactics; undertaking multilateral measures; appointing a Cabinet-level official to oversee an interagency process regarding the protection of intellectual property; and enhancing cooperation between the U.S. government and the private sector. These would be more effective if used in combination, as they probably would lead Beijing to make only temporary or minor changes to its cyber espionage activities if used in isolation.

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SECTION 3: CHINA'S MARITIME DISPUTES

Introduction

This section provides an overview of China's East China Sea and South China Sea disputes, covering the drivers of Beijing's approach to the disputed waters, the means by which China is asserting sovereignty in those areas, the risks of escalation or miscalculation at sea, and the consequential dangers of political or military escalation. It is based on witness testimonies from Commission hearings; information from the Commission's fact-finding trips to China, Japan, and Taiwan; and additional research. This section primarily focuses on the East China Sea; the South China Sea was covered in detail in chapter 3, section 1, of the Commission's 2012 Annual Report.

Maritime Dispute Overview

Peter Dutton, professor and director of the China Maritime Studies Institute at the U.S. Naval War College, testified to the Commission that China's overall interests and objectives in the East and South China Seas include:

> *. . . enhancing China's sense of national security, acquiring control over the region's living and non-living maritime resources, and restoring China's place of pre-eminence in the East Asian regional order . . . Additionally, consolidating Chinese state power over the offshore islands and regional seas serves the Communist Party's interest in maintaining internal political credibility by delivering to the Chinese people what they believe is rightfully their own.*[1]

Although sovereignty disputes in the East and South China Seas are not new, China's growing diplomatic, economic, and military clout is improving China's ability to assert its interests. It is increasingly clear that China does not intend to resolve the disputes through multilateral negotiations or the application of international laws and adjudicative processes but instead will use its growing power in support of coercive tactics that pressure its neighbors to concede China's claims.

East China Sea Dispute Background

The East China Sea dispute involves China, Japan, and Taiwan (see figure 1).* The dispute can be divided into two distinct issues: territorial sovereignty over the Senkaku Islands (known as Diaoyu Dao in China, and Diaoyutai in Taiwan), and demarcation of maritime zones, which has implications for natural resource rights.

* For a discussion of Taiwan's role in China's maritime disputes, see chapter 3, section 2, of this Report, "Taiwan."

China's most intense dispute in this area relates to territorial sovereignty over the Senkaku Islands, eight uninhabited islets that lie approximately 120 nautical miles (nm) northeast of Taiwan, and 240 nm southwest of Japan's Okinawa Island. China and Taiwan rely on a historical foundation as far back as the Ming Dynasty (1368–1644) to justify their claims to the islands. According to China's official narrative, Japan "secretly 'included' Diaoyu Dao in its territory at the end of the Sino-Japanese War of 1894–1895. Japan then forced China to sign the unequal Treaty of Shimonoseki," ceding the Senkaku Islands and Taiwan to Japan.[2]

Japan administers the Senkaku Islands and asserts there is no territorial dispute over the islands. When Japan made an official declaration incorporating the Senkaku Islands into Japanese territory in 1895, it considered them uninhabited land without an owner. The United States administered the islands following the 1951 Treaty of San Francisco officially concluding World War II until the 1971 Okinawa Reversion Treaty came into force. This treaty transferred administrative rights over the Senkaku Islands to Japan while maintaining U.S. neutrality on the ultimate sovereignty of the islands.[3] Japan argues China did not express an interest in the islands until a 1968 United Nations (UN) study suggested the possibility of petroleum resources in the East China Sea.[4]

The Japanese government's September 2012 purchase of three of the Senkaku Islands from a private Japanese owner angered China, sparking an escalation in tensions between China and Japan.* [5] Beijing immediately responded by issuing a Government Statement, its highest-level diplomatic document, which for the first time includes map coordinates to its claims in the East China Sea.† Later that month, China's State Council released a white paper on the Senkakus, its first ever on a territorial dispute, which stated the "Diaoyu Dao is China's inherent territory in all historical, geographical, and legal terms, and China enjoys indisputable sovereignty over Diaoyu Dao." [6]

A separate but equally important dispute among China, Japan, and Taiwan is over rights and interests (including natural resource extraction) involving maritime demarcation of overlapping exclusive economic zones (EEZ) within the East China Sea. The dispute—which primarily concerns the Chunxiao (Shirakaba in Japanese) Gas Field—is mainly a result of differing interpretations of the United Nations Convention on the Law of the Sea (UNCLOS). Among many other provisions, UNCLOS allots nations an EEZ out to 200 nm from their coastal baselines.‡ Although a coastal nation

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*For more information on the background and domestic aftermath of the Senkaku Islands purchase in China, reference the East China Sea subsection in chapter 2, section 1, of the Commission's 2012 Annual Report, "China's Impact on U.S. Security Interests, " pp. 133–135.

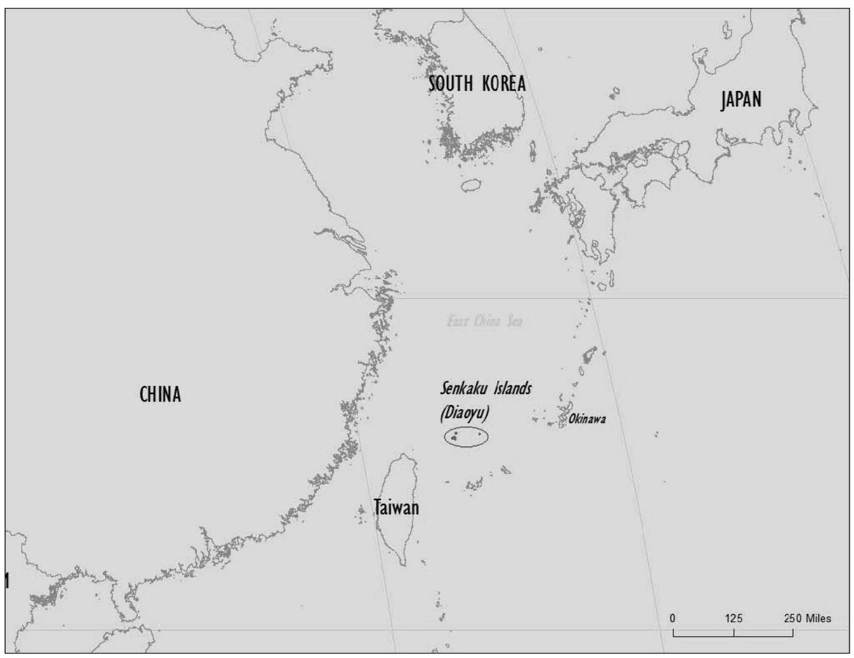
†Government Statements represent China's highest-level, most authoritative message. Prior to this incident, China had only twice issued a Government Statement—once regarding the Sino-Vietnamese War and once regarding the 1999 destruction of China's embassy in Belgrade during U.S. bombing operations. Open Source Center, "China Shows No Sign of Easing Tough Public Posture on Senkakus," September 14, 2012. OSC ID: CPF20120914534001. *http://www.opensource.gov*; J. Ashley Roach, "China's Straight Baseline Claim: Senkaku (Diaoyu) Islands," *American Society of International Law Insights*, February 13, 2013. *http://www.asil.org/pdfs/insights/insight130213.pdf*.

‡One nautical mile is approximately equal to 1.15 statute miles. Therefore, 200 nautical miles is roughly 230.16 statute miles.

cannot claim full sovereignty in an EEZ, it does have sovereign rights to explore, exploit, and protect natural resources, including fisheries, in this zone.[7] UNCLOS also provides similar rights over natural resources, with the exception of fishing, in an extended continental shelf zone up to 150 nm beyond a country's EEZ, subject to certain restrictions based on seafloor geography.[8]

Because the maritime distance between China and Japan in the East China Sea is less than 400 nm, neither China nor Japan can claim a full EEZ in this region. Japan proposes a median line between the two countries as an attempt to divide EEZ rights evenly. China claims an extension of its continental shelf eastward past the median line to the Okinawa Trough and in December 2012 formalized its position in a claim submission to the United Nations.[9]

Figure 1: The East China Sea



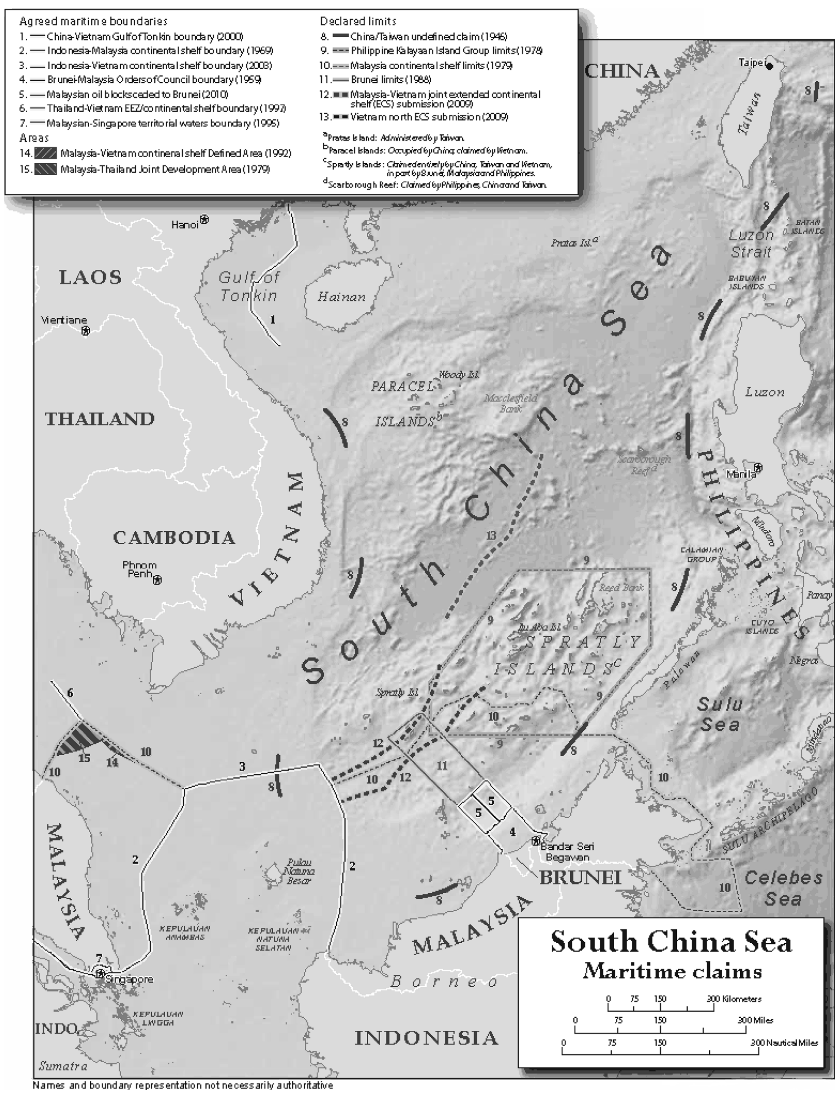
Source: Mark Manyin, *Senkaku (Diaoyu/Diaoyutai) Islands Dispute: U.S. Treaty Obligations* (Washington, DC: Congressional Research Service, January 2013).

South China Sea Dispute Background

Six parties claim the South China Sea in part or in full: China, Taiwan, Vietnam, the Philippines, Malaysia, and Brunei. Beijing denotes its claim on its South China Sea maps using a nine-dash line, with an additional dash off the coast of Taiwan to demonstrate its claim over Taiwan (see figure 2). Also in dispute are two sets of island groups: the Paracel Islands, located in the northern part of the sea, and the Spratly Islands, a widespread collection of approximately 200 islands, islets, rocks, and reefs located in the southern part of the South China Sea. China occupies the Paracel

Islands, though Taiwan and Vietnam also lay claim to them. While all claimants except Brunei have established military outposts in the Spratly Islands, China and Vietnam occupy the greatest number of outposts.* For a comprehensive discussion of the South China Sea dispute, see chapter 3, section 1, of the Commission's 2012 Annual Report, "China and the South China Sea."

Figure 2: The South China Sea



Source: U.S. State Department. From U.S. Energy Information Administration, *South China Sea* (Washington, DC: February 2013). *http://www.eia.gov/countries/regions-topics.cfm?fips=SCS*.

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*For more information on Taiwan's claims and outposts and for another map depiction of the South China Sea, see chapter 3, section 2, of this Report, "Taiwan."

China's Overall Approach to Maritime Disputes

At the Commission's hearing on China's maritime disputes, two longtime China watchers concluded that China is seeking to change the status quo in its favor in both the East and South China Seas. Rear Admiral Michael McDevitt, USN (Retd.), senior fellow at CNA Center for Naval Analysis, said in testimony to the Commission that China has taken a "proactive approach toward creating a new, [more] favorable status quo" with regard to its maritime disputes. He assessed Beijing has been more assertive since 2012, offering rival claimants the choice of either facing the brunt of Chinese power as a result of challenging Chinese claims or benefitting from economic and political rewards for moderating their positions or even acquiescing to China's claims.[10]

Michael Swaine, senior associate at the Carnegie Endowment for International Peace, emphasized in his testimony that Beijing has in some instances "responded in a deliberately escalatory manner" to perceived attempts by China's rival claimants to secure territorial gains in the disputed waters, "seeking to create a new status quo in its favor or to undertake a more muscular or aggressive action in order to convey resolve and deter further escalation by others."[11] For example, Beijing appears to have calculated that Japan's purchase of the Senkaku Islands provided a justification to deploy a regular maritime presence supporting a new status quo in China's favor.[12]

Chinese official statements and use of maritime law enforcement rather than military forces suggest Beijing prefers to avoid direct military conflict over its maritime disputes and rely on the shift in the balance of regional power in its favor to resolve its maritime disputes in the long term.[13] China probably judges that as a result of its growing power and influence vis-à-vis other claimants to the East and South China Seas, time is on its side with regard to consolidating control over its maritime claims.

Drivers of China's Approach to Maritime Disputes

Nationalism

The new Chinese Communist Party (CCP) leadership has affirmed that it intends to continue governing China without resort to elections or other democratic processes, and the CCP has long been aware that the absence of democratic legitimacy tends to undermine the stability of its rule. As a result, the CCP places a high priority on legitimizing itself by convincing the Chinese people that it is delivering economic growth, a better quality of life, and an assertion of China's ascendance regionally and globally.

In fact, Beijing has long used the education system and media to cultivate an awareness of China's victimization during what China calls its century of humiliation from the mid-19th to the mid-20th centuries.[14] By promoting a sense of grievance among the Chinese people, and then aggressively asserting China's claims against its neighbors, the CCP shifts attention away from the authoritarian nature of its rule and toward its role as the champion of China's interests in the region.

China not only takes an aggressive stance in the region to satisfy the nationalistic impulse it has promoted; it also uses nationalism domestically to support its regional claims. Jessica Chen Weiss, assistant professor of political science at Yale University, testified to the Commission: "The Chinese government has allowed nationalist street demonstrations when it wants to demonstrate resolve to signal that China will not budge on [an] issue. Just as the [U.S.] president can point to Congress and say his hands are tied, so can the Chinese leadership point to nationalist fervor and say that they can't compromise or else protestors will turn against them." [15]

For example, Beijing permitted large-scale, anti-Japanese demonstrations in the fall of 2012 following the Japanese government's purchase of several of the Senkaku Islands. Demonstrations in China's second- and third- tier cities even became destructive, damaging storefronts of Japanese companies, such as Toyota and Panasonic.[16]

On the other hand, the Chinese government suppresses popular nationalism if it believes doing so will help it achieve its diplomatic objectives.[17] For example, in a move attributed to Beijing, the Hong Kong government in August 2013 prevented a group of anti-Japan activists from sailing to the Senkaku Islands as they did in 2012 to mark the anniversary of Japan's World War II surrender.[18] Beijing likely judged popular Chinese animosity toward Japan threatened a potentially volatile public backlash that it might not be able to manage or exploit to its advantage. However, as Dr. Weiss testified, suppressing nationalist sentiment is "costly for the Chinese government, which has often been accused [by its people] of being both unpatriotic and undemocratic in suppressing nationalist sentiment." [19]

Sovereignty and "Core Interests"

China's view of "indisputable sovereignty" over its maritime claims underlies its overall policy approach to the East and South China Seas.[20] As tensions involving China's maritime disputes in the East China Sea and South China Sea have grown since 2009, official and unofficial Chinese sources indicate China views the East and South China Seas as central to its "core interests," which authoritative Chinese speeches and documents define as (1) national security; (2) sovereignty and territorial integrity; and (3) economic and social sustained development.[21] Beijing makes core interest declarations to signal to other countries that China is unwilling to compromise on particular policy issues and to imply that China would use force to defend its core interests. These declarations usually relate to matters regarding China's territorial sovereignty, such as Taiwan, Tibet, and Xinjiang.[22]

China appears to have overtly linked the South China Sea and East China Sea to China's core interests in recent years.* [23] Japanese commentators expressed concern that the designation of the Senkaku Islands as a core interest in April signaled a shift in Bei-

* According to Japanese press reports, a Chinese Ministry of Foreign Affairs spokesperson stated in a regular press briefing that "[t]he Diaoyu [Senkaku] Islands are about sovereignty and territorial integrity. Of course, it's China's core interest." An official Ministry of Foreign Affairs transcript quotes the spokesperson as saying the issue of the contested islands "touches on" China's core interests. Kyodo, "China Says Senkaku Islands are its 'Core Interest,'" April 26, 2013. OSC ID: JPP20130426969071. *http://www.opensource.gov*; Open Source Center, "China-Japan—Video of PRC Remarks on Senkakus as 'Core Interest' Differs from Official Transcript," May 7, 2013. OSC ID: CPP20130507358001. *http://www.opensource.gov*.

jing's approach to the maritime dispute and indicated China "will make no concessions on the islets."[24] Subsequent official Chinese statements have not clarified the status of the islands, allowing Beijing to maintain flexibility in its approach to the dispute, prevent any domestic accusations that China is adopting a weaker stance, and deny that it is taking unilateral actions or escalating tensions.[25]

Economic Development

China also views the East and South China Seas as central to its economic development, due to their resource potential and significant roles as maritime transit routes. Though nationalism has a stronger pull on China's foreign policy-making levers with regard to its maritime disputes, natural resources are significant because they galvanize popular nationalist sentiment.[26]

Oil and Gas Resources: China's surging economy has made the country increasingly dependent on oil and gas to supply its growing industrial and manufacturing base. However, hydrocarbon reserves in the East and South China Seas would provide only modest relief to the heavy energy demands of many of the surrounding Asian economies, according to Lloyd Thrall, project associate at the RAND Corporation.[27] Additionally, the financial feasibility of exploiting oil and gas reserves in these areas is limited at best. In the South China Sea, the risk and cost of recovering deepwater oil and gas in contested waters prone to unusually strong currents and tropical storms heavily outweighs the minimal benefit of yet-to-be-proven hydrocarbons.[28] Nevertheless, the speculation and perceived economic value of natural resources in both seas fuels the narrative of competition and sovereignty by the respective claimants.[29]

Maritime Trade Routes: The East and South China Seas play central roles in the transport of oil and gas to China's coastal regions, which serve as the engines of China's economic growth.[30] According to the U.S. Energy Information Administration, almost a third of the world's crude oil passes through the South China Sea, with about 15 percent of this volume moving on to Northeast Asia and the East China Sea.[31] Additionally, over half of the world's traded liquefied natural gas (LNG) passes through the South China Sea. China's reliance on this trade route is projected to grow significantly in the coming two decades due to increasing LNG consumption. As Steven Lewis, fellow and professor at Rice University, testified to the Commission: "The future economic growth of China's most prosperous cities and provinces is one heavily tied to massive fleets of LNG carriers (with four or five times the number of vessels used today)" transiting the East and South China Seas.[32]

Fisheries: According to Mr. Thrall, "Fishermen in East and Southeast Asia are potent national symbols . . . to have fishermen denied their livelihood in areas perceived as historical fishing grounds, or, worse yet, detained or facing violence can strike deeply discordant notes" within China.[33] This dynamic helps explain the nationalist sentiment in China that followed the detention of the captain of a Chinese fishing trawler upon his collision with a Japanese Coast Guard (JCG) vessel in September 2010. Similar sentiments are prevalent across the region; the death of a Taiwan fisherman in May 2013, a result of the Philippine Coast Guard firing shots at a Taiwan fishing boat in disputed fishing grounds, set off nationalist outpourings across Taiwan. The incident led to three months of strained relations between Taiwan and the Philippines that ended only after Manila offered an official apology, agreed to pay compensation to the victim's family, and recommended homicide charges for the Philippine Coast Guard personnel who opened fire on the Taiwan fishing boat.[34] See chapter 3, section 2, of this Report, "Taiwan," for full coverage of the Taiwan-Philippine row.

Advancing Maritime Claims in Regional and Multilateral Organizations

The multilateral nature of the South China Sea dispute, as opposed to the generally bilateral nature of the East China Sea dispute, diffuses negotiating power among multiple claimants, giving China relatively less influence in the multilateral dispute resolution process. China as a result seeks to "divide and conquer" by negotiating the issue on a bilateral basis rather than under the auspices of the Association of Southeast Asian Nations (ASEAN). At the ASEAN Regional Forum Foreign Ministers' Meeting in July 2013, Chinese Foreign Minister Wang Yi underscored this approach: "The South China Sea issue is not an issue between China and ASEAN. It is only an issue between China and a small number of Southeast Asian countries."[35] In 2013, there have been two significant efforts in multilateral venues seeking to resolve South China Sea disputes; China has stalled progress in one and refused to participate in the other.

South China Sea Code of Conduct negotiations: Chinese obstructionism and efforts to exploit disunity among Southeast Asian nations was a factor in stalled progress toward a binding Code of Conduct in the South China Sea. China and ASEAN in 2002 signed a Declaration on the Conduct of Parties in the South China Sea that laid the groundwork for an eventual Code of Conduct. However, despite agreeing to "work, on the basis of consensus, towards the eventual attainment" of a "code of conduct in the South China Sea [that] would further promote peace and stability in the region," Beijing remains circumspect on ASEAN calls for formal, substantive Code of Conduct talks.[*] [36] During an August 2013 multicountry visit to Southeast Asia, Foreign Minister Wang emphasized patience in what he described would be a long-term process toward concluding a Code of Conduct.[37]

Philippines-initiated arbitration over South China Sea claims: Manila surprised many observers in January 2013 when it initiated UNCLOS-based arbitration challenging China's nine-dash line and maritime claims in the South China Sea. Beijing has rejected the arbitral process as "manifestly unfounded" under UNCLOS and declined to participate.[38] In an official Foreign Ministry statement responding to the arbitration, Beijing denounced the Philippines'

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*For an additional discussion of the Declaration on Conduct and the Code of Conduct, reference chapter 3, section 1, of the Commission's 2012 Annual Report, "China and the South China Sea," p. 237.

"illegal occupation" of China's claimed islands and reefs and argued the arbitral process counteracts ongoing bilateral negotiations that would peacefully resolve the South China Sea issue.[39] However, China's refusal to participate in the arbitration has not prevented the formation of an arbitral tribunal or delayed the proceedings. A five-judge tribunal in the Hague is expected to consider Manila's arguments following their submission in March 2014 and is likely to conclude proceedings by mid-2015.*[40]

Political tension is particularly pronounced between China and the Philippines due to China's view that the Philippines has internationalized the South China Sea disputes.[41] In August 2013, official Chinese press signaled displeasure with the Philippines, seemingly for instituting arbitration to draw international attention to the lack of progress on a Code of Conduct: ". . . certain countries are deliberately creating an issue of the 'Code of Conduct' and are not genuinely concerned about the 'Code' but instead want to use this kind of hyping to multilateralize and internationalize South China Sea issues."[42]

Legal and Administrative Assertions of Maritime Sovereignty

Since late 2012, China has stepped up its use of a number of legal and administrative methods to assert sovereignty over its claims in the East and South China Seas, including the following:

- After the Japanese Senkaku purchase in September 2012, Beijing published its claim to the disputed islands in an official Government Statement "on the Baselines of the Territorial Sea of Diaoyu Dao and Its Affiliated Islands" and submitted these claims to the UN.[43] Japan, which does not officially recognize a dispute over the islands, countered with its position that China's submission was "totally unacceptable and legally invalid."[44] The United States also has protested China's claims, calling them "improperly drawn."[45]
- In 2012, China introduced a new passport design that has a watermark of a national map that includes popular tourist sites in Taiwan, its nine-dash line around the South China Sea, and border areas disputed with India as part of its territory. Countries disputing the depiction of China's territory denounced China's new passports, and some are not stamping the new passports and instead are issuing separate visa sheets.[46]
- Hainan Province, China's southernmost province, issued new maritime regulations in late 2012. The regulations, which are

*The selected arbitrators include Judge Thomas Mensah (Ghana), Judge Jean-Pierre Cot (France), Judge Stanislaw Pawlak (Poland), Professor Alfred Soons (the Netherlands) and Judge Rüdiger Wolfrum (Germany). Judge Thomas Mensah is serving as the arbitral panel's president. According to Annex VII of UNCLOS, each of the parties in arbitration may select one judge. The remaining three judges are in normal circumstances to be selected by agreement between the parties. Because of China's refusal to participate, the Philippines selected Judge Wolfrum, and the president of the International Tribunal on the Law of the Sea appointed the four remaining arbitrators. Luke Eric Peterson, "Philippines-China UNCLOS arbitration moving forward without Chinese participation," Kluwer Arbitration Blog, August 28, 2013. *http://kluwerarbitrationblog.com/blog/2013/08/28/an-update-on-the-philippines-china-unclos-arbitration/*.

applicable to the 12 nm territorial waters within Hainan Province's announced baselines, include a provision allowing China to board, inspect, and expel foreign vessels "illegally" entering Chinese waters.[47] According to Wu Shicun, director of the Hainan Foreign Affairs Office and president of China's National Institute for South China Sea Studies, the provision is designed to curb Vietnamese fishing activity near the Paracel Islands.[48]

- China's official Sinomaps Press issued a new national map in January 2013 that includes China's South China Sea claims. The new map depicts the entire South China Sea on the same scale as mainland China, rather than using insets to illustrate China's claimed island groups. The map also includes a dash southeast of Taiwan delineating China's claim over Taiwan, bringing China's well-known nine-dash line claim in the South China Sea to ten dashes. Although official Chinese maps have included the tenth dash for at least the past two years, its larger-scale incorporation into the newest version of an official Chinese map raised concerns among China's neighbors in both the East and South China Seas.[49] One Sinomaps editor said the changes in presentation served to "elevate the [Chinese] peoples' consciousness of national territory and safeguard China's maritime rights and interests."[50]

Maritime Law Enforcement Assertions of Maritime Sovereignty

China's maritime law enforcement agencies since 2009 have played an increasing role as the frontline actors in staking and enforcing China's maritime claims.[51] Beijing likely sees this approach as less provocative than the use of the PLA Navy and a means to demonstrate de facto governance over its territorial claims. Nevertheless, robust and near-constant deployments of increasingly capable maritime law enforcement vessels, with the PLA Navy often deployed nearby, effectively serve as coercive policy instruments in the East and South China Seas.[52]

Since 2012, China has begun to "[respond] to challenges to its claims with an enhanced physical presence to bolster China's position and deter any further challenges," according to M. Taylor Fravel, associate professor of political science at the Massachusetts Institute of Technology. "These responses suggest an even greater willingness to pursue unilateral actions to advance its claims." Dr. Fravel further notes that this activity is a recent departure from what had for several decades been a pattern of Chinese restraint with regard to the presence of ships and aircraft in disputed waters.[53] Several other analysts have observed this change in China's approach to island disputes since the 2012 Scarborough Reef standoff, which began with a confrontation between China and the Philippines over the fishing activities of several Chinese fishing vessels at the reef, located in the South China Sea.* [54] Both countries had previously fished in Scarborough Reef despite disputing its

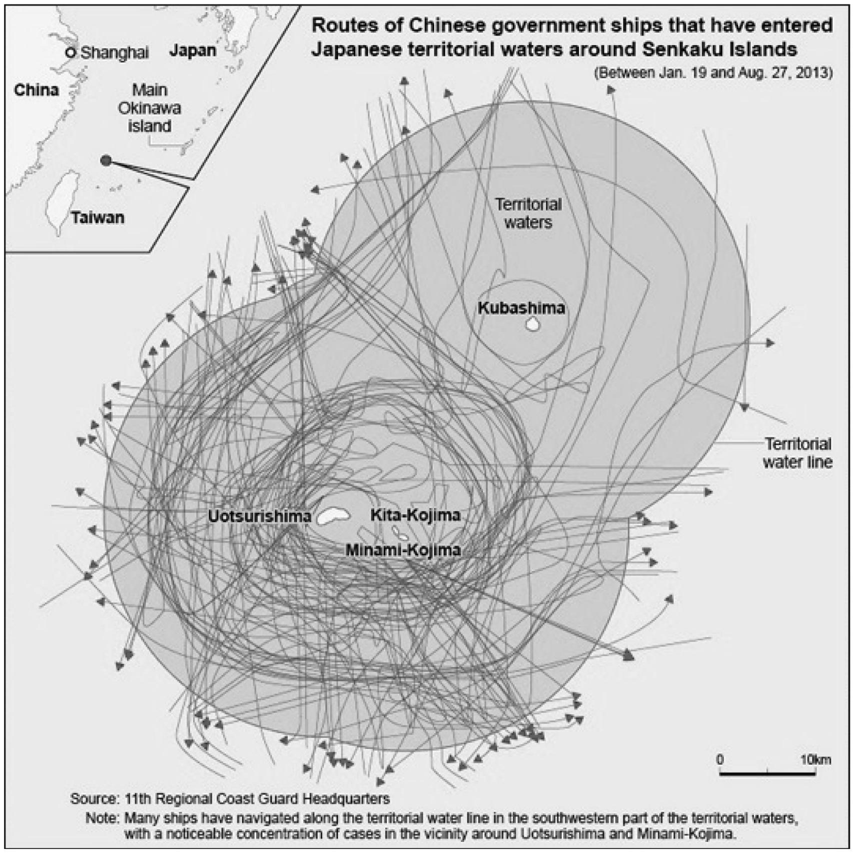
*For more information about the Scarborough Reef standoff, see chapter 3, section 1, of the Commission's 2012 Annual Report, "China and the South China Sea," p. 231–233.

territoriality. Over the course of the months-long standoff, China established physical control over the reef by patrolling the vicinity with maritime law enforcement vessels and roping off the reef's entrance to prevent Philippine vessels from operating there.[55] At the time of this Report's publication, China continues to maintain de facto control over the reef.[56]

China has applied similar tactics in Second Thomas Shoal, a coral reef in the South China Sea approximately 105 nm west of Palawan Island, Philippines. The Philippines in early May 2013 reported a PLA Navy vessel escorting two Chinese maritime law enforcement ships and approximately 30 fishing boats in the shoal. The Philippines maintains a regular presence on Second Thomas Shoal of approximately 12 marines aboard the *BRP Sierra Madre*, a World War II-era U.S. tank landing ship that the Philippine Navy deliberately ran aground on the shoal in 1999 to stake its territorial claim.[57] China frames this "illegal occupation" of Chinese territory as justification for its enhanced patrols in the waters surrounding Second Thomas Shoal.[58]

The Commission learned in meetings with the JCG that PLA Navy and Chinese maritime law enforcement activity near the Senkaku Islands, previously irregular and sporadic, increased sharply following Japan's Senkaku Islands purchase. Official Chinese press appears to confirm the purchase marked a turning point for China's maritime operations, after which Chinese government ships maintained a near-persistent presence near the disputed isles. (See figure 3 for a depiction of this operational state based on JCG data.)[59]

Figure 3: Routes of Chinese Government Ships Near Senkaku Islands from January 19, 2013 to August 27, 2013



Source: Asahi Shimbun (Tokyo), "INSIGHT: Japan, China still far apart in mending ties 1 year after purchase of Senkakus," September 11, 2013. *http://ajw.asahi.com/article/behind_news/AJ201309110069*.

Japan Reconsiders Self-Defense in the East China Sea

The ongoing domestic debate over whether Tokyo should revise its constitution to expand the circumstances for self-defense was a prominent theme of the Commission's fact-finding trip to Japan this year. Japan remains divided on the issue of revising a constitutional provision renouncing war and preventing the maintenance of a military force.[60] In meetings with a group of retired Japan Self-Defense Force and JCG senior officers, the Commission learned that such a revision could, for example, allow the Japan Self-Defense Force to employ arms in the event of intrusion into Japan's territorial waters by foreign government vessels. The retired senior officers further explained that under the current constitution, a lengthy legal process would precede

Japan Reconsiders Self-Defense in the East China Sea—*Continued*

any decision by Tokyo to exercise self-defense. This would complicate Tokyo's ability to authorize a military response to a perceived Chinese escalation in the East China Sea, especially if such activity involves only Chinese maritime law enforcement—not naval—vessels.

Beijing has undertaken a number of steps since mid-2012 to address several shortcomings in its coordination of maritime policy to better align China's maritime activity with national policy. China's lack of a unified maritime strategy and multiple—sometimes overlapping—bureaucracies has previously been characterized as a model of inefficiency and an impediment to effective policymaking.[61]

In mid-2012, China created a new, high-level advisory group for maritime security issues. In China's foreign policy-making apparatus, key Chinese security policy issues, such as Taiwan, foreign affairs, and national security traditionally have merited their own high-level advisory groups within the Politburo Standing Committee.[62] However, this is the first time maritime security has been elevated to this level, signaling the rising importance of this issue to Chinese leadership. The designation of Xi Jinping, who at the time was the top contender to be China's next senior leader, as the group's head, also indicates high-level attention to the matter. Furthermore, upon Japan's 2012 purchase of the Senkaku Islands, Beijing reportedly formed an "Office to Respond to the Diaoyu Crisis" and again placed Mr. Xi at the helm.[63]

China previously had six chief maritime law enforcement agencies, all with separate and sometimes overlapping missions. In June 2013, China officially consolidated four of these six agencies—China Marine Surveillance, China Coast Guard, Fisheries Law Enforcement Command, and Maritime Customs Service—into the new China Coast Guard. The Maritime Safety Administration and China Rescue and Salvage remain independent.[64] The inaugural China Coast Guard patrol occurred near the Senkaku Islands, and was intended to "sternly declare the Chinese government's stance on its sovereignty over the Diaoyu Islands to Japanese vessels," according to an official Chinese statement.[65]

While most of these ships previously had been unarmed, those subordinated to the China Coast Guard under the new structure could now be armed with mounted guns.[66] Furthermore, the China Coast Guard's capabilities will continue to modernize and improve in the next three to five years as it receives at least 30 new ocean-going ships and more than 100 smaller patrol boats. Most of these vessels will be larger and more capable than previous ones, and some will have the ability to embark helicopters. China's maritime law enforcement agencies also will continue to incorporate decommissioned ships from the PLA Navy into their own fleets—a practice that has increased in recent years.[67]

Military Assertions of Maritime Sovereignty

The PLA Navy plays a powerful but indirect role in the East and South China Seas, backing up maritime law enforcement patrols from a distance; training, transiting, and conducting highly visible displays of presence in disputed waters; and resupplying Chinese-controlled islands in the South China Sea.* [68]

- In March 2013, the PLA Navy sent a task force comprised of one large amphibious ship and three modern surface combatants to James Shoal, which is the southernmost point of China's maritime claim in the South China Sea and lies approximately 43 nm off the coast of Malaysia. According to official Chinese media, the crews of these vessels held a ceremony pledging to safeguard China's maritime interests upon reaching James Shoal. The task force then conducted training in the West Pacific before returning home.[69]
- In May 2013, the PLA Navy conducted a rare, multifleet exercise involving elements of all three PLA Navy fleets in the South China Sea. While China's Ministry of National Defense described the exercise as "routine" and "not aimed at any specific country or target," [70] some commentators suggested the exercise was used for political signaling during the China-Philippines standoff at Second Thomas Shoal and the transit of the U.S. Navy's *USS Nimitz* aircraft carrier through the region.[71]
- In mid-July 2013, following a joint exercise with the Russian Navy, a PLA Navy task force for the first time passed through the La Perouse Strait (also known as the Soya Strait), dividing northern Japan and Russia. The group of five vessels then transited east of Japan through the Pacific Ocean and back around southern Japan through the Miyako Strait dividing Japan's Miyako and Okinawa Islands, before reaching its homeport in Qingdao.[72] Japanese press portrayed the route as "intended to demonstrate Chinese naval might to Japan and the United States and show Russia it means business in the region." [73] Official Chinese press heralded the event as a demonstration of the PLA Navy's ability to gain access to the Pacific Ocean through narrow chokepoints and to "cut the first island chain into several pieces," according to a PLA Navy official.[74] Chinese strategists and academics assert that the United States and Japan use the first island chain to strategically encircle or contain China and to prevent China from operating freely in the Pacific.† [75]

The PLA Navy's regional power projection capability has advanced rapidly since the 1990s, boosting Beijing's ability to assert its maritime claims in the East and South China Seas and to respond forcefully to perceived challenges by rival claimants. See chapter 2, section 1, of this Report, "Military and Security Year in Review," for full coverage of China's naval modernization.[76]

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*U.S. Navy Seventh Fleet senior officers told the Commission PLA Navy vessels generally supported maritime law enforcement patrols at a distance of about 50 to 75 nm.

†The first island chain refers to the first chain of major archipelagoes east of the East Asian continent—from the Kuril Islands in the north, through the Japanese archipelago, Ryukyu Islands, Taiwan, the Philippines, and Borneo.

Risk of Unintended Escalation in the East and South China Seas

While Beijing's efforts to streamline its decision making on maritime disputes may reduce the risk of unintended escalation or accidents stemming from poor policy coordination, this risk is unlikely to be completely eliminated for the following reasons.

First, China's crisis management approach emphasizes demonstrating resolve to assert its sovereignty claims to rival claimants and domestic audiences. This characteristic, combined with China's tendency to view sovereignty in moralistic and absolutist terms, results in China's greater capacity to engage in escalatory actions in a foreign policy crisis.[77]

Second, despite Beijing's efforts to consolidate its maritime bureaucracy, the fragmented nature of China's foreign policy structure could undermine Beijing's cohesiveness on maritime issues, particularly in the East China Sea. A major contributing factor is the limited authority of the Chinese Foreign Ministry. The Chinese Foreign Minister ranks several steps below the Politburo, whereas his Japanese counterpart occupies a much more influential position within the Japanese government. In some cases, this difference in protocol ranking between the two foreign ministries has prevented meaningful dialogue from taking place at the working level and could limit the capacity for crisis mitigation. For example, despite its limited authority, the Chinese Foreign Ministry was reportedly the only official channel open to Tokyo during the 2012 Senkaku Island crisis. Frequent turnover in Japanese leadership from 2006 to 2012 has further hindered the establishment of consistent official and unofficial diplomatic channels between the two countries.[78]

The Ministry of Foreign Affairs in PRC Foreign Policymaking

Although China's Ministry of Foreign Affairs technically is responsible for the formulation and implementation of China's foreign policy, its influence has waned over the past decade. Due to China's increased political, economic, and military interaction with the world in recent decades, a wide array of actors has entered the Chinese foreign policymaking process through their direct dealings with foreign entities, including several national ministries, most provincial governments, the PLA, and state-owned firms.[79] As a result, the Ministry of Foreign Affairs is but one of several Chinese foreign policy actors that often have competing interests and goals. The exclusion of the foreign minister from China's 25-member Politburo since 1998 has further weakened the Ministry of Foreign Affairs' position in the foreign policymaking process. Though the opacity of the Chinese political system makes it difficult to render a definitive assessment, most analysts judge the Politburo and its seven-member Standing Committee make most of China's important foreign policy decisions.[80]

For more information on the proliferation of official and nonofficial Chinese foreign policy actors, see chapter 3, section 2, of the Commission's 2011 Annual Report, "Actors in China's Foreign Policy."

Finally, deficiencies in civil-military coordination could continue to hamper policy coordination in the East and South China Seas. Officials at Japan's National Institute for Defense Studies, a policy think tank under the Japanese Ministry of Defense, told the Commission that coordination between the PLA and the Foreign Ministry, an important nexus in the management of China's maritime disputes, remains weak.[81] The position of the PLA in the party bureaucracy outweighs and outranks the Foreign Ministry, which is one of many ministries under the State Council. Therefore, "for the Foreign Ministry to liaise with the PLA, it must report up to the State Council, which may have to report up further up to the Politburo in order to secure PLA cooperation," according to the Congressional Research Service.[82] Such a structure does not lend itself to rapid or coordinated decision-making between the PLA and Foreign Ministry, which would be critical in a crisis in either the East or South China Seas.

The apparent maturation since the mid-2000s of China's National Committee on Border and Coastal Defense, an entity under the "dual leadership" of the State Council and the Central Military Commission that "coordinates China's border and coastal defense," suggests an effort to strengthen civil-military coordination with regard to border defense. However, outsiders know little about the influence of this organization on Beijing's overall management of the East and South China Sea disputes.[83]

China's civil-military relationship also poses risks for crisis in the East and South China Seas at the operational level. Because the PLA routinely enjoys autonomy for military affairs, operational military activities that could significantly impact foreign affairs may not be approved at the highest levels before their execution.[84]

For instance, on two occasions in late January 2013, a Chinese PLA Navy frigate reportedly locked weapons-targeting radar onto a Japan Maritime Self-Defense Force platform—first a helicopter, and later a destroyer. Public information on both Japanese and Chinese rules of engagement for ships and aircraft in the area is limited; however, illuminating another military asset with radar suggests hostile intent under international norms and increases the risk of miscalculation in an operational environment.[85]

When queried about the incidents at a press conference, China's foreign ministry spokesperson stated the foreign ministry was "not aware of the matter" and knew of the incidents only through press reports.[86] Later in March, Japan's Kyodo News, citing unnamed high-level PLA officers, reported that the PLA admitted its frigates had locked its weapons-targeting radar onto the Japanese platforms. According to Kyodo, these PLA officers claimed the event, at least in the case of the destroyer, was reportedly due to an isolated "emergency decision" of the frigate's commander based on the Chinese military's rules of engagement.[87] China's Ministry of Defense dismissed the Kyodo report.[88] Nevertheless, the disconnect among Chinese entities in these cases suggests, as Rear Admiral McDevitt testified to the Commission, "that perhaps [the] ability [of Chinese leadership] to control the situation was not absolute."[89]

Such close encounters are not limited to naval surface vessels. Japan also has reported an increasing number of Chinese aircraft within Japan's Air Defense Identification Zone. Between March

2012 and March 2013, the Japan Air Self-Defense Force scrambled fighter jets against Chinese aircraft in 306 instances—the largest number on record, and the first time this number surpassed the number of similar Japanese responses against Russia.[90] Furthermore, the Japanese Ministry of Defense in May 2013 reported three separate instances of PLA Navy submarine operations within Japan's contiguous zone in the East China Sea, an UNCLOS-defined band of water that stretches from 12 to 24 nm from Japan's coastal baselines.[91] "Innocent passage" of submarines is lawful in contiguous zones and even in territorial waters, but the frequency and persistence of such operations at a time of ongoing tension was enough for Tokyo to raise the issue publically as a means to urge restraint.[92]

These incidents, particularly the radar lock incident, "raise questions about . . . whether there's an appreciation [in China] for the degree to which [these were] escalatory act[s]," as Roy Kamphausen, senior advisor for political and security affairs at the National Bureau for Asian Research, testified to the Commission.[93] As interactions between Chinese forces and U.S. and Japanese forces become more regular, the adherence of international protocols at sea will become increasingly important for the safety of all air and maritime operations in the region as well as the stability of the security situation in the East and South China Seas.

Implications for the United States

Beijing discourages and seeks to prevent the diplomatic involvement of the United States in the disputes, which Beijing considers a series of bilateral issues between China and each claimant. In response to interview questions on the role of the United States in the East China Sea, China's Ambassador to the United States Cui Tiankai stated, "The most helpful thing the U.S. could do is to remain truly neutral, to take no side . . . When the United States talks to us, they say they'll take no side, but sometimes, when they talk to the Japanese or when they make public statements, we hear something different." [94]

Although the United States does not take a position on the sovereignty of the disputed features and waters in the East and South China Seas, its treaty commitments bind it to the region in ways that link its security interests to the peaceful resolution of China's maritime disputes.

In the East China Sea, the 1960 Treaty of Mutual Cooperation and Security between Japan and the United States of America provides for a U.S. commitment "in accordance with its constitutional provisions and processes" to defend Japan in the event of an armed attack "against either Party in the territories under the administration of Japan." [95] The official U.S. position includes the Senkaku Islands, which are under Japanese administration, in its treaty obligations.[96] In the South China Sea, the United States maintains a treaty alliance with the Philippines based on the 1951 Mutual Defense Treaty between the United States and the Republic of the Philippines. Though the United States has affirmed its commitment to the Mutual Defense Treaty,[97] it has not officially articulated the specific geographic areas that would trigger a mutual defense response to the Philippines. Some observers suggest this ambiguity regarding the Philippines' disputed land features has led Manila to misinterpret U.S. defense obligations, perhaps even emboldening Manila to challenge China.[98]

Forward-deployed U.S. forces in East Asia are another element of U.S. security policy in the East and South China Seas. As Lt. Gen. Wallace "Chip" Gregson, USMC (Retd.), currently senior director for China and the Pacific at the Center for the National Interest, testified to the Commission, "Broad, active, widely distributed presence throughout the theater dampens sources of instability, deters conflict, gives substance to U.S. security commitments, and ensures continuing American access to the region."[99] As defense budgets tighten, the United States will face difficult choices in implementing its policy "rebalance" to Asia. A major challenge ahead for Washington, therefore, will be to stand firm on its security commitments while resourcing its overall foreign policy and security goals in the Asia Pacific region.[100] An integral part of this effort is evident in the deepening U.S. diplomatic and military engagement in the region, with an apparent emphasis on treaty alliances with the Philippines and Japan.[101]

Finally, the U.S.-China relationship is central to Washington's interest in the East and South China Sea disputes. Despite a generally improving military-to-military relationship, mutual mistrust about one another's long-term intentions continues to pervade the overall security relationship.[102] This strategic backdrop poses challenges for the operational environment at sea, especially as the maritime operating areas of the two countries increasingly overlap. China's growing naval and maritime law enforcement advantage over its neighbors will add to already high levels of confidence that China can and should take bolder actions to protect its maritime interests. As U.S.-China air and naval interactions become more frequent, China's adherence to and participation in multilateral regimes regulating mariner interactions, such as the Convention on the International Regulations for Preventing Collisions at Sea and the Western Pacific Naval Symposium's Code of Unalerted Encounters at Sea, will become increasingly critical.[103]

Through its diplomatic actions and the rebalance to Asia, the United States has signaled its intent to strengthen its relationship with partners and allies in East Asia. However, China's military modernization, coupled with the potential decline in U.S. power caused by sequestration, is altering the balance of power in the region and reducing the deterrent effect of the rebalance policy. The risk is therefore increasing that China's coercive approach to its sovereignty claims will lead to greater conflict in the region.

Conclusions

- China relies on a coercive and persistent maritime law enforcement and naval presence to gain control of disputed territory in the East and South China Seas. A consolidated maritime policymaking bureaucracy and streamlined maritime law enforcement fleets could increase Beijing's confidence in its capability for coercion in the ongoing maritime disputes.

- Two key drivers shape China's approach to its maritime disputes: First, China encourages ardent popular nationalism, which it exploits to support its foreign policy aims in the East and South China Seas. Second, China views sovereignty over claims in the East and South China Seas as central to its national security, territorial integrity, and economic development.
- China uses legal and administrative measures to assert de jure governance over its disputed maritime regions; it deploys maritime law enforcement and naval vessels to its claimed waters to demonstrate and lay the groundwork for de facto governance.
- Beijing's tendency to demonstrate resolve in its maritime disputes; its large and complicated political, foreign affairs, and military bureaucracy; and its inconsistent adherence to internationally accepted norms of air and maritime operations may contribute to operational miscalculations in the East and South China Seas. Unyielding positions on sovereignty and nationalist sentiment surrounding these maritime disputes increase the risk of escalation from a miscalculation at sea to a political crisis.

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102. Kenneth Lieberthal and Wang Jisi, *Addressing U.S.-China Distrust* (Washington, DC: The Brookings Institution, April 2012). *http://www.brookings.edu/~/media/research/files/papers/2012/3/30%20us%20china%20lieberthal/0330_china_lieberthal.pdf*.

103. For more information on these regimes, see Kimberly Hsu and Craig Murray, *China's Expanding Operations in Foreign Exclusive Economic Zones* (Washington, DC: U.S.-China Economic and Security Review Commission, June 2013). *http://www.uscc.gov/Research/china%E2%80%99s-expanding-military-operations-foreign-exclusive-economic-zones*.

RECOMMENDATIONS

China's Cyber Activities

The Commission recommends:

- Congress adopt legislation clarifying the actions companies are permitted to take regarding tracking intellectual property stolen through cyber intrusions.
- Congress amend the Economic Espionage Act (18 U.S.C. § 1831–1839) to permit a private right of action when trade secrets are stolen.
- Congress support the Administration's efforts to achieve a high standard of protection of intellectual property rights in the Trans-Pacific Partnership and the Transatlantic Trade and Investment Partnership.
- Congress encourage the Administration to partner with other countries to establish an international list of individuals, groups, and organizations engaged in commercial cyber espionage. The Administration and partner governments should develop a process for the list's validation, adjudication, and shared access.
- Congress urge the Administration to continue to enhance its sharing of information about cyber threats with the private sector, particularly small- and medium-sized companies.
- Congress direct the Administration to prepare an inventory of existing federal use of cloud computing platforms and services and determine where the data storage and computing services are geographically located. Such inventory should be prepared annually and reported to the appropriate committees of jurisdiction.
- Congress urge the Administration to expedite progress in its implementation of Section 806 of the National Defense Authorization Act for Fiscal Year 2011 (Public Law 111–383), which was intended to enhance the Department of Defense's ability to address supply chain risks.

China's Maritime Disputes

The Commission recommends:

- Congress fund the U.S. Navy's shipbuilding and operational efforts to increase its presence in the Asia Pacific to at least 60 ships and rebalance homeports to 60 percent in the region by 2020 so that the United States will have the capacity to maintain readiness and presence in the Western Pacific, offset China's growing military capabilities, and surge naval assets in the event of a contingency.

- Congress fund Departments of Defense and State efforts to improve the air and maritime capabilities of U.S. partners and allies in Asia, particularly with regard to intelligence, surveillance, and reconnaissance, to improve maritime domain awareness in the East and South China Seas.
- Congress urge the Department of Defense to continue to develop the U.S.-China maritime security relationship in order to strengthen strategic trust. The relationship should be within the bounds of the National Defense Authorization Act for Fiscal Year 2000 (Public Law 106–65) and based on the principles of reciprocity and transparency.
- Congress fund U.S. Coast Guard engagement efforts with coast guard and maritime law enforcement agencies in the Western Pacific to increase understanding among civilian maritime bodies in the Asia Pacific.

CHAPTER 3

CHINA AND THE WORLD

SECTION 1: CHINA AND THE MIDDLE EAST AND NORTH AFRICA

Introduction

This section, based on a Commission hearing and research conducted throughout the year, discusses China's relations with the Middle East and North Africa (MENA).* The section explores China's primary interests in MENA; Chinese engagement in the region; and the political, diplomatic, and security challenges China faces there. Finally, it examines how China's MENA policies impact U.S. interests.

China's Primary Interests in MENA

Beijing's approach and policies related to MENA are driven by its broader national interests, which are to sustain China's economic growth, preserve China's political system, protect China's sovereignty claims, and expand China's global influence. These interests are reflected in China's primary objectives in the region: enhancing economic ties; supporting China's efforts to achieve energy security; fostering friendly relations with all MENA countries (as well as the Palestinian territories); ensuring domestic stability and control, particularly in Xinjiang Uighur Autonomous Region; and promoting regional stability in an effort to augment China's domestic economic and security priorities. These interests are discussed below.

Enhancing Economic Ties

Since the 1990s, Beijing's main priority in MENA has been to safeguard China's domestic economic growth by expanding opportunities for Chinese exports and acquiring resources to enhance China's energy security.[1] Dawn Murphy, then postdoctoral research fellow at the Princeton-Harvard China and the World Program, testified to the Commission that China likely will be the dominant economic actor in MENA by the 2020s.[2]

Trade: Between 2003 and 2012, China-MENA annual trade increased more than twelvefold, from $20.8 billion to $262.1 billion.[3] China in 2009 overtook the United States to become the world's

*For the purposes of this Report and unless otherwise noted, MENA refers to Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, the Palestinian territories, Qatar, Saudi Arabia, Syria, Tunisia, the United Arab Emirates, and Yemen.

largest exporter to MENA.[4] Still, China's trade with the region constituted only 6.7 percent of its global trade in the first half of 2013.[5]

Although China runs a trade deficit with MENA (due largely to its heavy reliance on energy imports from the Persian Gulf), the region increasingly is an important export market for China. Chinese exports to MENA grew from $6.47 billion to $121 billion between 1999 and 2012.[6] The majority of these exports are light manufactured goods, including home and office appliances, communications and acoustic equipment, lamps, furniture, toys, building materials, machinery, textiles, footwear, and stationery, among other items.[7] MENA also is a large export market for Chinese services, particularly in the construction, telecommunications, and finance sectors.[8] Chinese state-owned enterprises (SOEs) Sinohydro and China Railway Construction Corporation, the two largest Chinese construction companies in the region, have built dams, highways, mines, airports, housing, water distribution networks, stadiums, irrigation projects, power stations, and other facilities in Algeria, Iran, Libya, Oman, Qatar, and Yemen. Telecommunications companies Huawei and ZTE provide services in at least six countries in the region, including Algeria, Bahrain, Egypt, Iran, Tunisia, and the United Arab Emirates.[9] Both companies in recent years reportedly sold or were associated with the sale of embargoed telecommunications equipment to Iran in violation of U.S. sanctions.[*] [10]

China's trade with MENA is facilitated by the following:

- *"Strategic partnerships:"* China shares what it refers to as "strategic partnerships" with Algeria, Egypt, Saudi Arabia, and the United Arab Emirates. These partnerships vary in depth and nature of cooperation. While some have a security component, most emphasize economic cooperation, as with the Sino-Saudi "strategic oil partnership," discussed below.[11]

- *Cooperation fora:* The China-Arab States Cooperation Forum (CASCF) and the Forum on China-Africa Cooperation (FOCAC) are China's primary multilateral venues for promoting its economic interests in the region, including but not limited to identifying and developing export markets.[12] For example, the China-Arab States Economic and Trade Forum, established under CASCF in China's Ningxia Hui Autonomous Region in 2010, serves as a "bridgehead" for China to develop "an open inland economy, emphasizing . . . Arab League countries and Muslim regions." [13]

- *Special economic zones and trade fairs:* Energy exports aside, much China-MENA trade is facilitated by trade zones and wholesale trade fairs. China and Egypt launched the Egypt Suez Cooperation Zone in 2009. The zone facilitates exports to the Middle East, Africa, and Europe.[†] [14] Dubai's DragonMart

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* Huawei's contract with Iran's state-controlled mobile phone industry appears to have been marketed in part on the premise that the company could enable Tehran to censor and conduct surveillance on Iranian mobile phone users. Steve Stecklow, Farnaz Fassihi, and Loretta Chao, "Chinese Tech Giant Aids Iran," *Wall Street Journal*, October 27, 2011. *http://online.wsj.com/article/SB10001424052970204644504576651503577823210.html*.

† China in 2006 also began plans for a special economic zone in Algeria, focused on automobile manufacturing. These plans have since been suspended. U.S.-China Economic and Security Review Commission, *Hearing on China and the Middle East*, written testimony of Dawn Murphy,

is the largest trading center for Chinese goods outside China and houses more than 3,900 Chinese wholesale and retail vendors.[15] The Yiwu International Trade Mart in Yiwu, Zhejiang Province, claims to be the world's largest small commodities market and attracts around 200,000 Arab traders each year.[16]

China's trade ties with the region could expand with a planned free trade agreement with the Cooperation Council for the Arab States and the Gulf, which includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. The proposed agreement would cover trade in goods and services.[17]

Investment: China's investment in MENA is growing.[18] According to statistics from the Chinese Ministry of Commerce, Chinese foreign direct investment (FDI) flows to the region reached $1.5 billion in 2011. China's FDI stock in the region reached $6.14 billion in 2011, about 1.4 percent of China's global FDI stock that year. Iran, the United Arab Emirates, and Saudi Arabia, respectively, were the top three recipients of Chinese FDI (in terms of flows and stock) in the region in 2011.[19]

Much of China's investment in MENA is in the infrastructure and transportation sectors. Chinese companies are building, funding, or have agreed to build railways in Egypt, Iran, Israel, Libya, and Saudi Arabia. State-owned China Harbour Engineering Company is investing in port projects in Kuwait, Saudi Arabia, and Qatar.[20] Investment in infrastructure helps China build goodwill in the region and increase its access to Middle Eastern, European, and African markets.

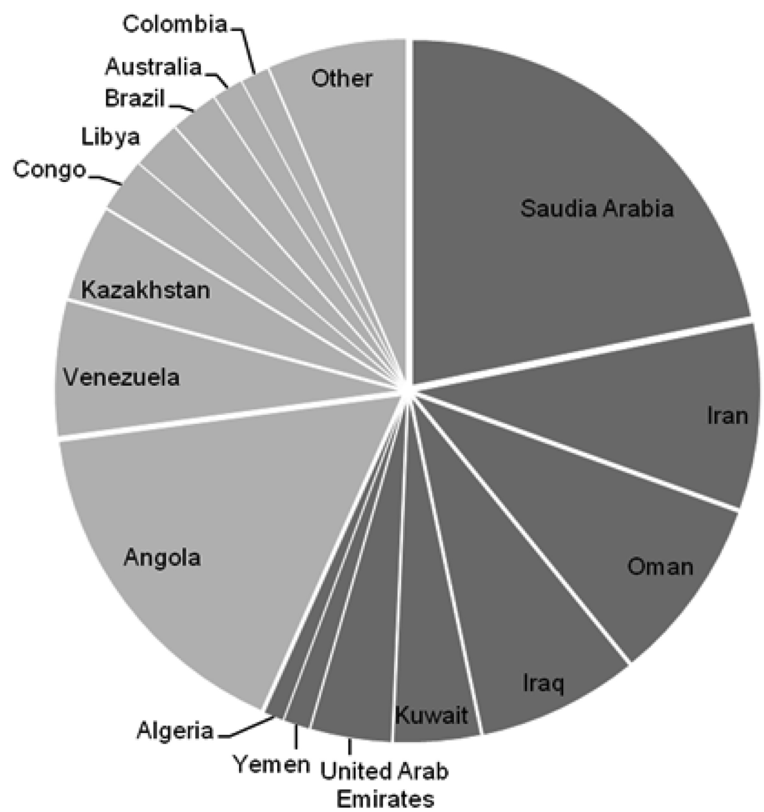
Financial Services: China is active in financial services sectors throughout the region. Five regional banks have signed cross-border renminbi (RMB) trade settlement agreements, enabling MENA-based companies to settle payments with Chinese suppliers.[21] China's four largest state-owned banks operate in Dubai, United Arab Emirates, which likely will become the first market for RMB conversion and clearing outside East Asia.[22] Several non-Chinese banks in the United Arab Emirates offer RMB accounts to accommodate growing numbers of Chinese traders and investors.[23]

Promoting Energy Security

China's engagement with MENA is driven primarily by its efforts to achieve energy security.[24] In 2012 and the first eight months of 2013, the region accounted for about 54 percent of China's imported crude oil.[25] Saudi Arabia is China's largest source of oil, both in the region and globally. Among Middle Eastern producers, Saudi Arabia, Iran, Oman, and Iraq, respectively, exported the most crude oil by volume to China in the period from January 2012 to August 2013.[26] Qatar and Yemen are China's third- and fifth-largest sources of liquefied natural gas (LNG), providing 18 percent and 7 percent of China's LNG imports in 2011, respectively.[27]

June 6, 2013; Chris Alden and Faten Aggad-Clerx, *Chinese Investments and Employment Creation in Algeria and Egypt* (Tunis, Tunisia: African Development Bank, 2012), p. 20. *http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Brochure%20China%20Anglais.pdf*.

Figure 1: China's Crude Oil Imports by Volume, January 2012 to August 2013
(Imports from MENA are noted in a darker gradient)



Source: China National Bureau of Statistics, via CEIC database. *http://www.ceicdata.com/en*.

China's reliance on oil imports from MENA likely will grow.[28] Erica Downs, fellow at the Brookings Institution, testified to the Commission that China's oil imports from the region are estimated to grow from 2.9 million barrels per day in 2011 to 6.7 million barrels per day in 2035.[29] In addition to imports, China's national oil companies (the state-owned "national champions" of China's energy sector) have invested heavily in energy companies and projects in MENA, particularly in Iran and Iraq.*

Over the last decade, China's leaders increasingly have begun to view the country's growing reliance on energy imports, the majority of which originate in MENA, as a strategic vulnerability.[30] Then Chinese President Hu Jintao in a 2003 speech described China's dependence on seaborne energy imports as China's "Malacca Dilemma," referencing the strait through which most of China's

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* For additional information on China's energy ties with the region, see the Commission's 2012 Annual Report to Congress. U.S.-China Economic and Security Review Commission, *2012 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2012), pp. 333–334. *http://origin.www.uscc.gov/sites/default/files/annual_reports/2012-Report-to-Congress.pdf*.

MENA crude oil imports flow.[31] This sense of vulnerability appears to drive Beijing's efforts to strengthen its relations with the region's major producers. Beijing likely will enhance its overall engagement in MENA if China's reliance on the region's energy exports continues to grow as projected. According to a 2013 market outlook report by Norwegian multinational energy company Statoil, "Given the rebalancing of global oil trade flows, most of [China's] imports must be covered by the Middle East, which suggest[s] that China probably will be forced to take a more interventionist approach in foreign policy, particularly towards the Middle East."[32]

Beijing's energy insecurity and consequent drive for greater influence in the region are compounded by China's apprehension about U.S. primacy in the region and the U.S. Navy's near-total control over the sea lanes through which Chinese energy imports pass.[33] According to a 2012 report by Scott Harold and Alireza Nader for the RAND Corporation, Beijing seeks to augment its energy trade ties with political ties to the Iranian government to ensure that in a potential scenario in which the United States may seek to disrupt China's oil supply, China could rely on a friendly oil-producing country to mitigate the disruption.[34]

Saudi Arabia, Iran, Iraq, and Oman: China's Major Energy Partners in MENA

Saudi Arabia: China and Saudi Arabia established a "strategic oil partnership" in 1998, which has enabled close cooperation in the energy sector.[35] China's oil trade with Saudi Arabia has grown drastically in the past decade, and in 2009 China overtook the United States as Saudi Arabia's largest crude oil customer.[36] Chinese national oil companies have several investments in Saudi oil and natural gas projects, and Saudi Aramco, the largest Saudi energy company, has several investments in Chinese refineries.[37]

Saudi Arabia's position as a dominant supplier and its ability to calibrate production and drive oil prices make it an indispensable partner for China. Beijing seeks assurances from Riyadh that Saudi Arabia will maintain price stability in the event of severe supply disruptions.[38] China (and other importers of Iranian crude oil) relied heavily on Saudi Arabia to compensate for sharp decreases * in Iranian imports in 2012.† Riyadh, recognizing China's growing importance as an export market for Saudi oil, in turn has indicated its willingness to help China achieve energy security. A 2006 joint memorandum on energy cooperation states Saudi Arabia will assist China in developing its strategic petroleum reserves.[39] During then President Hu's 2009 state visit to

* Between 2011 and 2012, the volume of Chinese imports of Iranian crude oil decreased by about 20 percent, from about 27 million tons to about 22 million tons. China National Bureau of Statistics, via CEIC database. *http://www.ceicdata.com/en*.

† The United States also reportedly urged Saudi Arabia to increase oil exports to China to encourage Beijing to decrease its Iranian imports. Mohammed Turki Al-Sudairi, *Sino-Saudi Relations: An Economic History* (Geneva, Switzerland: Gulf Research Center, August 2012), p. 26. *http://grc.net/index.php?frm_module=contents&frm_action=detail_book&pub_type=16&sec=Contents&frm_title=&book_id=79283&op_lang=en*.

Saudi Arabia, Iran, Iraq, and Oman: China's Major Energy Partners in MENA—*Continued*

Saudi Arabia, the two countries announced a "gentleman's agreement" between Saudi Aramco and Chinese national oil company Sinopec for the continued export of Saudi crude oil to China. Later that year, Saudi Minister of Petroleum and Mineral Resources Ali Al-Naimi stated in a speech, "China can rely on Saudi Arabia to provide it with the oil it will need to continue its projected growth for the coming decades." [40]

Iran: Energy interests are a primary driver of China's challenging and problematic relationship with Iran.[41] China is Iran's top crude oil customer, and about 8 percent of China's oil imports (by volume) were from Iran in the period from January 2012 to August 2013.[42] Iran was China's third-largest supplier of crude oil globally for much of the 2000s, but in 2012 and in the first eight months of 2013 Iranian exports to China dropped significantly, likely due to U.S. sanctions on Iran's energy sector and a pricing dispute between Chinese oil trader Unipec and the National Iranian Oil Company in 2012.[43]

Beijing seeks to balance its interest in securing energy from and maintaining relations with Iran with its interests in promoting its image as a responsible international power and maintaining stable relations with the United States and other MENA countries. Since January 2012, the U.S. Department of State has consistently exempted China on a biannual basis from sanctions on foreign countries importing crude oil from Iran because, although China had continued to import crude oil from Iran, the State Department judged China had "significantly reduced" those imports.* [44] Chinese national oil companies reportedly have negotiated discounts on Iranian crude oil purchases, leveraging Tehran's growing international isolation and consequently limited export markets.[45]

China in 2013 apparently began to exploit a loophole in U.S. sanctions by continuing to reduce its crude oil imports from Iran while dramatically increasing its fuel oil imports, which are not technically covered by U.S. sanctions. According to the *Wall Street Journal*, China in the first seven months of 2013 imported $495 million worth of Iranian fuel oil, compared to $1 million in 2012. While fuel oil is less valuable and more difficult to refine than crude oil, Chinese oil companies appear to have imported large amounts at discounted rates from Iran, enabling China to partially compensate for its reduction in crude oil imports.† [46] China's energy relations with Iran thus adhere to the letter, but not the spirit, of U.S. sanctions.

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*The State Department is scheduled to announce the next round of exemptions in December 2013.

†In July 2013, the U.S. House of Representatives passed H.R. 850 ("Nuclear Iran Prevention Act of 2013"), a bill that would, among other things, require countries to reduce their fuel oil as well as crude oil imports in order to qualify for the State Department's exemption from sanctions. Wayne Ma and Tennille Tracy, "Sanctions Gap Allows China to Import Iranian Oil," *Wall Street Journal,* August 21, 2013. *http://online. wsj.com/article/SB10001424127887324619504579026333611696094.html*.

Saudi Arabia, Iran, Iraq, and Oman: China's Major Energy Partners in MENA—*Continued*

Chinese companies have pursued several large investment contracts to develop Iranian oil and gas.* However, these projects have moved slowly, and some have stalled or been suspended in recent years.[47] According to Dr. Downs, "Reasons for the shrinking presence of China's oil companies in Iran include sanctions that have made it difficult for China's oil companies to secure equipment and technologies needed to operate in Iran, unhappiness with contract terms, uncertainty about whether Iran's nuclear program will spark a military conflict, and reported guidance from China's leadership to move slowly in Iran."[48]

Iraq: China is benefitting greatly from Iraq's postwar oil production. Between 2008 and 2012, the value of Iraqi crude oil exports to China increased by almost 870 percent.[49] China also is the largest foreign investor in Iraq's oilfields.[50] China National Petroleum Corporation (CNPC), a Chinese national oil company, and British Petroleum are jointly developing Iraq's Rumaila field, which accounted for one-third of Iraqi oil production in 2012.[51] Dr. Downs testified to the Commission that Rumaila in 2012 was CNPC's most productive overseas project and accounted for nearly half of the company's net overseas oil and gas production. CNPC also is invested in Iraq's al-Adhab and Halfaya oilfields.[52] At the time of this Report's publication, CNPC's listed subsidiary PetroChina is in talks to become an investor in a $50 billion Exxon Mobil-operated project to develop one of Iraq's largest oilfields, West Qurna-1.[53]

Oman: Oman increasingly is an important source of energy for China and was the fourth-largest source of Chinese crude oil imports in the first half of 2013.[54] In addition to Saudi Arabia, Iraq, and other producers, China has relied on Oman in 2012 and 2013 to compensate for decreases in imports from Iran. China-Oman investment ties in the energy sector are more limited than the previously discussed countries. CNPC has a production-sharing contract for a 50 percent stake in Oman's Block 5, which has both oil and natural gas assets.[55]

Fostering Friendly Relations in MENA

China seeks to develop and maintain friendly ties with all MENA countries (and the Palestinian territories) without being drawn into the region's conflicts or power struggles.[56] Beijing hopes to leverage these relationships to extend China's regional and global influence; portray China as a responsible global power; and promote regional stability with a view toward advancing its own economic, political,

*China's potentially lucrative investments in Iranian projects have been facilitated in part by the fact that these projects have been abandoned or passed over by major Western companies due to political risk and sanctions on Iran's energy and banking sectors. U.S.-China Economic and Security Review Commission, *Hearing on China and the Middle East*, written testimony of Erica Downs, June 6, 2013; Scott Harold and Alireza Nader, *China and Iran: Economic, Political, and Military Relations* (Santa Monica, CA: RAND Corporation, 2012), p. 5. *http://www.rand.org/content/dam/rand/pubs/occasional_papers/2012/RAND_OP351.pdf*.

and security interests. China's efforts appear to be working. A 2013 Pew Global Research study found that MENA countries tend to view China more as a partner than an enemy.* Dr. Murphy testified that government officials throughout the region have favorable views toward China, although they "do not want relations with China to endanger their existing close relationships with the United States." [57]

At the same time, Beijing considers MENA a "graveyard of great powers" and generally seeks to avoid becoming involved in the region's rivalries and conflicts or being perceived as aligning with particular countries or stakeholders.[58] With a large degree of success, China to date has simultaneously fostered advantageous relationships with regional rivals such as Israel and the Palestinians, Israel and Iran, Saudi Arabia and Iran, and even Iraq and Iran when they were at war in the 1980s.† Beijing's reluctance to overtly align with or against countries in MENA reflects pragmatic decision making aimed at maximizing China's economic and political advantage in the region.

China's Non-Interference Policy and MENA

China claims respect for other countries' sovereignty and opposes interference in the internal affairs of other countries.[59] This principle is rooted in Beijing's opposition to establishing an international precedent that legitimizes regime change, which it likely judges could have implications for Chinese Communist Party rule in the event of upheaval in China. The non-interference principle guides Beijing's approach and policies toward MENA and is reflected in Beijing's aversion to challenging sitting regimes or the political status quo in other countries and its reluctance to overtly align with any one side in a conflict or rivalry.[60]

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*The 2013 Pew Global Research study included Egypt, Israel, Jordon, Lebanon, the Palestinian territories, and Tunisia. Pew Research Center, *America's Global Image Remains More Positive than China's: But Many See China Becoming the World's Leading Power* (Washington, DC: Pew Global Research, June 18, 2013), pp. 25–26. *http://www.pewglobal.org/files/2013/07/Pew-Research-Global-Attitudes-Project-Balance-of-Power-Report-FINAL-July-18-2013.pdf*. Other studies from the late 2000s indicating positive views of China by Middle East countries include: Shibley Telhami, *2006 Annual Arab Public Opinion Survey* (College Park, MD: University of Maryland, February 2007), slide 9; Pew Research Center, *Rising Environmental Concern in 47-Nation Survey: Global Unease with Major World Powers* (Washington, DC: Pew Research Center, June 27, 2007), p. 29. *http://www.pewglobal.org/files/pdf/256.pdf*; and Julie Ray, "China's Leadership Better Regarded Outside the West," *Gallup World*, April 29, 2008. *http://www.gallup.com/poll/106858/chinas-leadership-better-regarded-outside-west.aspx*.

†China sold weapons to both Iraq and Iran during the war, using the conflict to advantage its ailing arms manufacturing industry. China's sales to each side did not attract serious criticism from either Iran or Iraq. If anything, it strengthened Sino-Iranian ties and mutual trust. John W. Garver, *China & Iran: Ancient Partners in a Post-Imperial World* (Seattle, WA: University of Washington Press, 2006), pp. 59, 82; U.S. Defense Intelligence Agency, "China's Defense Industrial Modernization and Arms Sales" (Washington, DC). *http://www.dia.mil/public-affairs/foia/pdf/CHINA/CHINA%27S%20DEFENSE%20INDUSTRIAL%20MODERNIZATION%20AND%20ARMS%20SALES.pdf*; and Scott Harold and Alireza Nader, *China and Iran: Economic, Political, and Military Relations* (Santa Monica, CA: RAND Corporation, 2012), p. 3. *http://www.rand.org/content/dam/rand/pubs/occasional_papers/2012/RAND_OP351.pdf*.

China's Non-Interference Policy and MENA—*Continued*

Yitzhak Shichor, professor emeritus at the Hebrew University of Jerusalem and the University of Haifa, asserts that China does in fact involve itself in the affairs of other countries when Beijing judges it is in China's national interest to do so. Dr. Shichor testified to the Commission that China applies the principle of non-interference in a "flexible, pragmatic, and creative" way.[61] This appears to be the case in China's relations with MENA in recent years. For example, China in the name of non-interference and respect for sovereignty does not support United Nations (UN) Security Council action or sanctions to punish regimes in Iran and Syria for destabilizing activity, violence, and human rights abuses.[62] Beijing quietly has supported regimes in both countries while Chinese diplomats stress China's impartiality to international audiences.*

Ensuring Domestic Stability and Control

One of China's objectives in its foreign relations with MENA countries (and to an even greater extent with Central Asia †) is promoting domestic security, particularly in Xinjiang Uighur Autonomous Region, home to many of China's ethnic Turkic Muslims. Episodic ethnic and political unrest in Xinjiang has in the past attracted support from overseas Muslim groups, particularly in MENA and Central Asia.‡ Beijing fears these overseas groups could encourage what it refers to as "separatist insurgencies." [63] In its diplomatic engagement with MENA countries, especially with CASCF, China solicits support for its policies to suppress "separatist" activities in Xinjiang. For example, the 2010 CASCF Communiqué states that the organization's Arab countries are "against religious extremist forces or ethnic separatist forces engaged [in] terrorism or anti-China separatist activities." [64]

According to Dr. Murphy, "After the beginning of the Arab Spring, China's concern regarding domestic stability in relation to the Middle East has shifted from issues related to Xinjiang to a concern over preventing the spread of Arab Spring-style upheaval from the Middle East to China." [65] Starting in 2011, Chinese officials sought to ensure that unrest did not manifest in China by

* For example, Chinese Ministry of Foreign Affairs spokesperson Hong Lei in May 2013 asserted China's impartiality in the Syrian conflict, saying, "China has no selfish interests on the Syrian issue and has no intention to protect any party. China is positive and open to any resolution plan that is widely acceptable to all relevant parties in Syria." Ministry of Foreign Affairs (China), "Foreign Ministry Spokesperson Hong Lei's Remarks on the UN General Assembly's Adoption of the Resolution on the Syrian Issue," May 16, 2013. *http://www.fmprc.gov.cn/eng/xwfw/s2510/2535/t1040948.shtml*.

† Beijing's imperative for stability and control in Xinjiang is a key driver of China's foreign policy in Central Asia. For additional discussion, see International Crisis Group, *China's Central Asia Problem* (Bishkek, Kyrgyzstan; Beijing, China; Brussels, Belgium: February 27, 2013), pp. 6–8. *http://www.crisisgroup.org/~/media/Files/asia/north-east-asia/244-chinas-central-asia-problem.pdf*.

‡ Dr. Shichor testified to the Commission that "the Chinese [government has] been very careful so far not to allow external financial or any other kind of support to Muslims in China." Dr. Murphy elaborated, saying Beijing is "concerned about informal financing [for Xinjiang's Muslim groups] . . . especially from Turkey, [and] possibly from the Gulf states." U.S.-China Economic and Security Review Commission, *Hearing on China and the Middle East*, testimony of Yitzhak Shichor, June 6, 2013; U.S.-China Economic and Security Review Commission, *Hearing on China and the Middle East*, testimony of Dawn Murphy, June 6, 2013.

suppressing Arab Spring-inspired "Jasmine Revolution" protests, censoring related information on the Internet, and emphasizing through official and semi-official media outlets that popular calls for democracy across MENA were misguided.[66]

Promoting Regional Stability

Beijing increasingly views stability in MENA as essential to protecting and advancing China's expanding interests and ensuring China's future security.[67] Some of China's efforts, including offering support for the Israeli-Palestinian peace process, counterpiracy operations, and peacekeeping operations, promote stability in MENA.[68] At the same time, Chinese ties with rogue regimes and terrorist organizations and arms sales to the region have in the past undermined peace and security.

Support for the Israeli-Palestinian Peace Process: China maintains relatively positive ties with both Israel and the Palestinians. Though Beijing remains wary of becoming entangled in the conflict, it has since the late 1990s indicated a desire to play a greater role in the peace process.

Historically, China has strongly supported the Palestinians. Beijing first expressed support for Palestinian statehood in 1955 and provided arms, military training, and other aid to the Palestinian Liberation Organization and the Popular Front for the Liberation of Palestine through the 1980s.* [69] China did not formally recognize Palestine until 1988, however. Four years later, China formally recognized Israel, although Beijing had quietly cultivated economic and political ties with Israel since the late 1970s.[70] Following the establishment of diplomatic ties, Sino-Israeli economic, technological, and military ties grew substantially.

China made occasional statements supporting Israeli-Palestinian reconciliation in the 1980s and 1990s but became more actively invested in the peace process in the early 2000s. This appears to be largely due to requests from several Arab countries for Beijing to become more involved. These countries likely judged China could balance U.S. influence over the peace process given Beijing's longstanding support for the Palestinians.[71] In response, Beijing in 2002 established its first ever "special envoy" diplomat. The special envoy is responsible for the entire region but focuses on the Israeli-Palestinian conflict in particular. Observers note that this position entails gathering and sharing information more so than playing an active role in the mediation process.[72]

In the spring of 2013, Beijing signaled a new willingness to engage in the peace process. Chinese President Xi Jinping in May issued a "Four Point Proposal" emphasizing a two-state solution, peaceful negotiation, the "land-for-peace" principle,† and "a greater

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* The nature of China's provision of arms to Palestinian organizations is not well documented. AK–47 assault rifles and other small arms appear to constitute the bulk of Chinese weapons transfers. China also provided training opportunities for Palestinian soldiers in China and in the Middle East. John K. Cooley, "China and the Palestinians," *Journal of Palestinian Studies* 1:2 (Winter 1972): 26. *http://palestine-studies.org/files/Special%20Focus/Through%20the%20Eyes%20of%20Others/China%20and%20the%20Palestinians.pdf*; Dawn Murphy, *Rising Revisionist? China's Relations with the Middle East and Sub-Saharan Africa in the post-Cold War Era* (Washington, DC: George Washington University, 2012), pp. 81–86.

† The "land for peace" principle originates in UN Security Council Resolution 242, which states, "The establishment of a just and lasting peace in the Middle East . . . should include the

sense of responsibility and urgency" among the international community to resolve the conflict.[73] This proposal reiterates China's earlier statements on the conflict and is largely consistent with the official U.S. position.* President Xi publicized the proposal himself, indicating the importance China's top leaders ascribe to the issue. The announcement of the proposal coincided with visits to Beijing by President Mahmoud Abbas of the Palestinian territories and Israeli Prime Minister Benjamin Netanyahu. China's Ministry of Foreign Affairs at the time stated China "is willing to offer necessary assistance if the leaders of Palestine and Israel have the will to meet in China."[74] Nevertheless, Beijing appears to have designed the leaders' itineraries such that neither leader would be in the same Chinese city at the same time.[75] It remains to be seen if Beijing's recent overtures will translate to concrete actions to facilitate the peace process.

Counterpiracy Operations: Since January 2009, China has sustained a naval task group in the Gulf of Aden to conduct counterpiracy operations.† This represents China's largest overseas military presence. As of October 2013, China's People's Liberation Army (PLA) Navy had deployed around 10,000 personnel in 15 successive two- or three-ship task forces over four years. Chinese official media sources state the PLA Navy has protected more than 5,000 commercial ships from China and more than 50 other countries over the course of 500 escorts.[76] Chinese counterpiracy patrollers have made port calls for resupply or military-to-military engagements to 12 MENA ports: Algiers, Algeria (1 visit); Al Manamah, Bahrain (1); Alexandria, Egypt (1); Haifa, Israel (1); Shuwaikh, Kuwait (1); Casablanca, Morocco (1); Muscat, Oman (1); Salalah, Oman (15); Doha, Qatar (1); Jiddah, Saudi Arabia (4); Abu Dhabi, United Arab Emirates (1); and Aden, Yemen (8).[77]

Beijing maintains it will not pursue a permanent military presence abroad. However, some Chinese commentators since the late 2000s have called for China to develop a permanent or semipermanent overseas naval presence in the Indian Ocean to address logistical challenges associated with sustaining the PLA Navy's counterpiracy presence in the Gulf of Aden and help secure China's maritime trade routes in the Indian Ocean. China could seek to establish repair, refuel, and replenishment stations in MENA or the

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application of both the following principles: Withdrawal of Israeli armed forces from territories occupied in the recent conflict; [and] [t]ermination of all claims or states of belligerency and respect for and acknowledgement of the sovereignty, territorial integrity and political independence of every State in the area and their right to live in peace within secure and recognized boundaries free from threats or acts of force." United Nations, "United Nations Security Council Resolution 242," (New York, NY: November 22, 1967). *http://unispal.un.org/unispal.nsf/0/7D35E1F729DF491C85256EE700686136*.

* Beijing's position on the conflict was formally established in 1997. It was slightly revised in 2003 to reflect the "road map to peace" proposed by the United States, the European Union, Russia, and the UN in 2003. Dawn Murphy, *Rising Revisionist? China's Relations with the Middle East and Sub-Saharan Africa in the post-Cold War Era* (Washington, DC: George Washington University, 2012), p. 217.

† For past Commission reporting on China's counterpiracy operations, see chapter 2, section 1, "Military and Security Year in Review," of this Report; U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2009), pp. 118, 123, 125, 127; U.S.-China Economic and Security Review Commission, *2011 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2011), p. 162; and U.S.-China Economic and Security Review Commission, *2012 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2012), pp. 135, 138.

Indian Ocean to address logistical challenges associated with sustaining the PLA Navy's counterpiracy presence in the Gulf of Aden and help secure China's maritime trade routes in the Indian Ocean. Such a logistics hub also could facilitate potential future missions in the region, such as noncombatant evacuations, disaster relief, defense of maritime trade routes, and limited force projection.[78] Countries in the Gulf of Aden, particularly Oman and Yemen, have allowed frequent PLA Navy port visits over the past four years and likely would be top candidates for China's first logistics hub.[79] China probably will not pursue traditional overseas bases in the near term due to longstanding political restraints, Beijing's concern about international backlash against a larger overseas military presence, and the current absence of a strategic requirement to persistently project power globally.[80]

Peacekeeping Operations: China has participated in four UN peacekeeping operations in MENA since 2001: UN Truce Supervision Organization,* UN Iraq-Kuwait Observer Mission, UN Interim Force in Lebanon, and UN Supervision Mission in Syria. More than 3,200 troops have participated in these missions.[81] As of September 2013, China had four peacekeepers in the UN Truce Supervision Organization and 343 peacekeepers in the UN Interim Force in Lebanon.[82]

Chinese Activities that Undermine MENA Security

While China generally seeks stability in MENA, some Chinese activities in the region undermine security and stability.

- *Commercial ties to rogue regimes:* Chinese companies frequently invest in and trade with authoritarian regimes in MENA and elsewhere in the world. This is typified by Chinese national oil companies, which have profited from Iran's international isolation.[83] For example, China's national oil companies seek to exploit Tehran's sanctions-crippled economy † to negotiate advantageous contracts and barter agreements and secure lucrative investments. Chinese state-owned Zhuhai Zhenrong Corp. in 2012 reportedly ordered an $80 million shipment of Syrian crude oil in defiance of Western sanctions.[84] In a June 2013 interview for the *Financial Times,* Syrian Deputy Prime Minister for the Economy Kadri Jamil said China, Russia, and Iran are "supporting us [the Syrian regime] politically, militarily—and also economically." [85]

* The UN Truce Supervision Organization, established in 1948, "monitor[s] ceasefires, supervise[s] armistice agreements, prevent[s] isolated incidents from escalating and assist[s] other UN peacekeeping operations in the region to fulfill their respective mandates" in MENA. United Nations, "United Nations Truce Supervision Organization." *http://www.un.org/en/peacekeeping/missions/untso/.*

† An Iranian manufacturing company owner interviewed by the *New York Times* in September 2013 characterized Iran's oil trading relationship with China as an "oil-for-junk program." Thomas Erdbrink, "Iran Staggers as Sanctions Hit Economy," *New York Times*, September 30, 2013. *http://www.nytimes.com/2013/10/01/world/middleeast/iran-staggers-as-sanctions-hit-economy.html?pagewanted=all&_r=0.*

Chinese Activities that Undermine MENA Security—*Continued*

- *Arms sales:* In recent years, China has sold arms in limited quantities to MENA countries.* According to the Stockholm International Peace Research Institute, China delivered arms to Algeria, Egypt, Iran, Saudi Arabia, and Syria from 2008 to 2012 in fulfillment of orders made between 1992 and 2009.† For the past decade, Iran has been the primary beneficiary of Chinese arms (mostly antiship cruise missiles) and dual-use technology transfers to the region.[86] Moreover, U.S. officials have indicated Chinese entities may not be in full compliance with international nuclear nonproliferation efforts aimed at Iran, though the Chinese government claimed it ceased assisting Tehran's nuclear program in 1997.[87]

  In some cases, Chinese arms used in MENA appear to have been acquired via third countries or from Chinese weapons manufacturers without necessarily being sanctioned by the Chinese government.[88] Chinese weapons manufacturers have sold or attempted to sell arms or dual-use technologies to Iran and Libya in violation of international and U.S. sanctions.[89] Chinese officials usually deny the sales or offers were made with the knowledge and consent of the Chinese government. Regardless of Beijing's level of involvement, its lax enforcement of export controls allows this proliferation to occur.[90]

- *Ties with regional terrorist groups:* Beijing maintains official ties with both Hamas and Hezbollah, although the United States, the European Union, and other powers designate both Hamas and the military wing of Hezbollah terrorist organizations. Both groups reportedly have used Chinese-made arms in attacks on Israel, though it is unclear if the Chinese government sanctioned or was aware of the transfer of these arms. According to news reports, Hamas in 2006 launched around 50 Chinese rockets in attacks on Israel, and Hezbollah in 2008 attacked an Israeli naval vessel with a Chinese-made C–802 antiship missile transferred from Iran.[91] In 2012, families of Israeli students killed in a 2008 terror attack by Hamas filed a lawsuit against a New York City branch of the state-owned Bank of China for providing support for Hamas terrorist activities.[92] Bank of China rejected the allegations as groundless.[93]

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* This was not always the case. From the 1950s to the late 1970s, China donated large quantities of small arms and provided military training to revolutionary groups in the region. In subsequent decades, China's arms transfers have been more limited. Dawn Murphy, *Rising Revisionist? China's Relations with the Middle East and Sub-Saharan Africa in the post-Cold War Era* (Washington, DC: George Washington University, 2012), p. 84; Stockholm International Peace Research Institute, "SIPRI Arms Transfers Programme." *http://portal.sipri.org/publications/pages/transfer/splash*.

† These transfers included towed guns (Algeria); trainer/combat aircraft and unmanned aerial vehicles (Egypt); armored personnel carriers and possibly portable surface-to-air missiles and antiship missiles (Iran); self-propelled guns (Saudi Arabia); and air search radar (Syria). Stockholm International Peace Research Institute, "SIPRI Arms Transfers Programme." *http://portal.sipri.org/publications/pages/transfer/splash*.

China's Geopolitical Challenges in MENA

China faces several geopolitical challenges in MENA. Instability, regime changes, and power shifts in recent years likely have demonstrated to Beijing that its preferred low-key method of managing its relationships in the region is unsustainable. In addition, Beijing's positions on Syria and Iran implicate China in violence, human rights abuses, and weapons proliferation and put China at odds with the United States in the region.

Regime Change and Unrest: Tunisia, Egypt, Libya, and Syria

China was unprepared to respond to the abrupt political upheaval and regime changes of the Arab Spring.[94] This likely is due to Beijing's inclination to cultivate relationships with ruling parties and its overall lack of experience in the region. Both Chinese and Western observers note the relative inexperience of China's diplomatic corps in MENA as a reason for its difficulty in responding to sweeping changes in the region. Director and professor of the Middle East Studies Institute at the Shanghai International Studies University Liu Zhongmin assessed "China's response to the political unrest [in MENA] was somewhat lagging behind." He continued, "China's contacts and communication with the political opposition in the Middle Eastern countries were not active enough."[95] According to Jon B. Alterman, director of the Middle East Program at the Center for Strategic and International Studies, "China's [MENA] diplomacy has been more cautious than it has been deft."[96] In his testimony to the Commission, he elaborated that China's policy toward unrest in the region is uninformed, "in part because [China] does not know [about the region's opposition groups], but also because it has not paid close attention to the societies from which they have sprung."[97]

Tunisia: Beijing moved quickly to censor domestic news about the Tunisian uprising and took steps to form ties with the transitional government in January 2011.[98] A Chinese Foreign Ministry spokesperson stated China's hope for a peaceful resolution to the unrest and the resumption of friendly ties with the Tunisian government regardless of the uprising's outcome. However, after that initial statement, Beijing was silent on the unrest and transition, at least in public.[99] Chinese diplomats were and to an extent remain unfamiliar with Tunisia's Islamist political groups, including the ruling Ennahdha party, which was voted into power in late 2011.[100]

Egypt: Prior to the overthrow of former Egyptian President Hosni Mubarak, Beijing had been cultivating relations with the Mubarak regime in order to expand its economic profile, secure ties to one of the most powerful countries in the region, and promote access to critical infrastructure in Egypt, including the Suez Canal.[101] In the months following the uprising and overthrow, Chinese diplomats reportedly struggled to forge relations with the transitional Egyptian government, apparently due to suspicions on the part of Egypt's new leaders, who considered Beijing to have been a strong supporter of the Mubarak government.[102] Nevertheless, Egypt's newly elected president Mohamed Morsi in August 2012 chose

China for his first state visit outside the Middle East. Relations between Beijing and Cairo remained stable and positive throughout the Morsi Administration. Bilateral trade increased by 27 percent between 2010 and 2012, and the two sides signed several agreements on investment and science and technology cooperation.[103]

After the Egyptian military removed President Morsi from power in July 2013 and during subsequent months of unrest and violence, Chinese officials were circumspect in their official statements on the situation. Public reticence notwithstanding, Beijing appears to be observing developments in Egypt closely: Chinese Minister of Foreign Affairs Wang Yi spoke over the phone with his Egyptian counterpart in the new government 16 times between President Morsi's removal and August 16.[104] Minister Wang expressed that "China attaches high attention to the situation in Egypt, and has called on all parties concerned to give up violence to avoid bloodshed and to prevent more casualties. China supports [*sic*] to resolve differences through dialogues and consultations, to restore law and order, and to advance steadily the process of inclusive political transition."[105] Minister Wang further asked the Egyptian government to ensure the safety of Chinese citizens, enterprises, and institutions in the country.[106]

While Sino-Egyptian economic ties remained largely unaffected by the transition from the Mubarak to the Morsi governments, bilateral trade appears to have faltered somewhat in 2013 amid renewed unrest surrounding removal of the Morsi government and installment of the military government.[107] It is unclear whether the decrease in bilateral trade in 2013 can be attributed to the ongoing political unrest. Chinese investment in Egypt continued in 2013, with Sinopec purchasing a stake in U.S. energy company Apache's Egyptian oilfield operations in August. According to Apache, the company's "exploration and production operations, which are located in remote, unpopulated areas, remain unaffected by political events in the region."[108]

Libya: More so than during the relatively quick power transitions in Tunisia and Egypt in 2011, China faced challenges on several fronts during the months-long Libyan conflict. Instability and violence threatened the safety of Chinese citizens and the security of Chinese investments and trade ties.[109] China in early 2011 evacuated 35,000 citizens from Libya in its first major noncombatant evacuation operation.[110] As violence by then Libyan President Muammar el-Qaddafi's regime escalated, China in February 2011 voted to approve UN Security Council Resolution 1970, which imposed sanctions on President Qaddafi and his close associates, imposed an arms embargo on Libya, and provided humanitarian assistance, among other things.[111] Less than three weeks later, China abstained from the vote on UN Security Council Resolution 1973, which authorized the Security Council to establish a no-fly zone and pursue an immediate ceasefire in Libya.[112] China almost certainly understood that its abstention would enable military intervention in Libya, but it also allowed Beijing flexibility to publicly hew to its policy of non-interference and express surprise and regret when North Atlantic Treaty Organization (NATO) forces predictably intervened in Libya.[113]

Nevertheless, through the spring and summer of 2011 China appeared reluctant to sever ties with the Qaddafi regime. Journalists from Toronto's *Globe and Mail* found evidence suggesting state-owned weapons manufacturer Chinese North Industries Corporation had offered at least $200 million in arms to the Qaddafi regime while the arms embargo (which China had voted for) was in place.[114] China also was the only UN Security Council member not to call for Qaddafi to step down and the last UN Security Council member to recognize Libya's new transitional government in the fall of 2011.[115] Despite a decline in 2011, bilateral trade (particularly Chinese exports to Libya) rebounded in 2012 and the first half of 2013.[116]

Syria: Despite its emphasis on neutrality and peaceful resolution in public statements,* China takes a hardline stance on the Syrian conflict. Beijing's position seems to be based on an ideological opposition to foreign intervention (China has limited economic or strategic interests in Syria). Beijing likely fears actions designed to overthrow a sovereign regime could legitimize regime change and external intervention and thus threaten China's own core interests of sovereignty and territorial integrity. This position seems to be reinforced by China's apparent regret over its abstention from, and thus tacit support for, foreign intervention in Libya authorized by UN Security Council Resolution 1973.[117]

China repeatedly has used its veto power to prevent the UN Security Council (and other UN bodies) from singling out, blaming, or imposing sanctions on the Syrian government.[118] China has vetoed three UN Security Council resolutions to take action against President Assad and exercised three "no" votes to punish President Assad in the UN General Assembly and UN Human Rights Council.[119] China also has opposed any military action, even in support of humanitarian efforts, in Syria.[120] In response to the Obama Administration's August 2013 statements suggesting possible unilateral air strikes against Syria, a Chinese Ministry of Foreign Affairs spokesperson stated, "China is highly concerned about the relevant country's [United States] plan on taking unilateral military action." The spokesperson then said the international community should "avoid complicating the Syrian issue and dragging the Middle East down into further disaster."[121]

China's position on the Syria conflict aligns with the Russian position, though the two countries may have different motivations for their respective stances.[122] China and Russia have voted the same on issues related to Syria in the UN Security Council, and China supported a Russian proposal that the Syrian government hand over the country's chemical weapons under UN supervision. Foreign Minister Wang in mid-September 2013 said, "China welcomes the framework agreement reached between Russia and the U.S. in Geneva on the issue of chemical weapons in Syria. We believe it

* China's stated position on the Syrian conflict emphasizes an end to violence, political transition under the guidance of the UN and the Arab League, and humanitarian assistance. Beijing endorsed the UN's "six-point plan" for peace in Syria developed by former UN-Arab League envoy to Syria Kofi Annan, although it has rejected efforts within the UN to pressure President Assad to acquiesce to UN resolutions or step down. Priyanka Boghani, "Syria peace plans: China vs. United Nations," *Global Post*, November 1, 2012. *http://www.globalpost.com/dispatch/news/regions/middle-east/syria/121101/syria-peace-plans-china-vs-united-nations*.

will ease the tense situation in Syria, and open a path for the chemical weapons issue to be resolved."[123] Beijing and Moscow in September 2013 released a joint statement on the Syrian conflict, conveying shared concerns about the security and humanitarian situation and supporting an "accurate and objective international investigation" into the reported use of chemical weapons in Syria, among other things.[124]

According to the Stockholm International Peace Research Institute's Arms Transfers Database, China has not delivered or approved the sale of weapons to Syria since 2010.[*] [125] The most recent Chinese arms transfers to Syria were four Type-120 air search radar systems, which were ordered in 2009 and delivered in 2010.[126] Unconfirmed reporting also suggests that Chinese-made shoulder-launched FN–6 antiaircraft missiles were transferred by third parties to Syrian rebels.[127]

Beijing has expended considerable diplomatic energy and incurred widespread criticism for its position on the Syrian conflict. In her testimony before the Commission, Dr. Murphy asserted Beijing's position on Syria marks a departure from China's historical approach to the Middle East insofar as it alienates other countries in the region and represents a firm and sustained opposition to U.S. interests.[128] Many in the international community, including the United States, assert China's position protects the Assad regime and prevents necessary international measures to promote the peaceful resolution of the conflict. Then U.S. Ambassador to the UN Susan Rice in February 2012 said the United States was "disgusted" by China's (and Russia's) vetoes of otherwise unanimous UN Security Council resolutions on Syria and remarked that the UN's mission was being "held hostage" by China and Russia.[129] Moreover, whereas MENA countries (and public opinion) generally favor China's presence and policies in the region, this has not been true regarding the Syrian conflict. Several Arab League countries, particularly Saudi Arabia and Qatar, criticized China for its position on Syria.[130] At the time of this Report's publication, China appears to judge the benefits of continuing to shield and enable the Assad regime outweigh the potential costs of supporting international efforts to hold the regime accountable.

Iran

The Commission has in recent years reported at length on Sino-Iranian economic, political, and military relations.† This section

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* China provided arms to Syria before 2010, however. According to the Congressional Research Service, China since 2004 signed arms transfer agreements with Syria worth $800 million (representing about 9 percent of global arms transfers to Syria from 2004 to 2011). Richard F. Grimmett and Paul K. Kerr, *Conventional Arms Transfers to Developing Countries, 2004–2011* (Washington, DC: Congressional Research Service, August 24, 2012), pp. 44–45. *http://www.fas.org/sgp/crs/weapons/R42678.pdf*.

† Commission publications on China and Iran from 2011 to 2013 include Marybeth Davis et al., *China-Iran: A Limited Partnership* (Washington, DC: CENTRA Technology, Inc. for the U.S.-China Economic and Security Review Commission, April 2013). *http://origin.www.uscc.gov/sites/default/files/Research/China-Iran_A%20Limited%20Partnership.pdf*; U.S.-China Economic and Security Review Commission, *2012 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, 2012), pp. 334–336; and U.S.-China Economic and Security Review Commission, *2011 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, 2011), pp. 252–260.

discusses China-Iran ties in the context of China-MENA relations specifically.

Beijing's relationship with Tehran is simultaneously China's closest and most problematic bilateral relationship in the region.[131] The multiple facets of this relationship—including energy ties, arms and dual-use technology sales, and diplomatic support—have enabled Tehran's destabilizing policies and damaged U.S.-China relations and China's international reputation. However, Beijing appears to judge these consequences are worth the energy security benefits gained from continued cooperation with Iran. China also likely prefers that the United States not enjoy unchecked power and influence in the Middle East.[132] According to a report by CENTRA Technology, Inc. sponsored by the Commission, "China has used its relations with Iran to balance against U.S. interests and what it sees as hegemonic policies in the Middle East."[133] However, should China seek a more robust political and security presence in MENA, countries of the region could seek to pressure China to reconsider its support for Iran.

China's reduction in Iranian crude oil imports in 2012 and 2013 was made possible by Saudi Arabia, Iraq, Oman, and other countries' willingness and ability to compensate for the lost barrels of oil. Significant increases in Iraqi oil production expected in the coming years and decades could provide a reliable alternative source of oil for Beijing should it seek to further decrease Iranian imports.[134] Moreover, Saudi Arabia, a powerful regional player and energy powerhouse with its own concerns about Iran, has demonstrated a commitment to Chinese energy security. As China increasingly relies on these countries for its energy, Beijing may determine it can moderate its support for and ties with Tehran without sacrificing the energy security benefits it currently gains from the relationship. However, Beijing at present does not seem to assess that sacrificing its relationship with any of its major oil suppliers is in its interests. As long as this remains the case, Beijing is unlikely to seriously revise its relationship with Tehran on this basis.[135]

Beijing does not appear to judge Iran's nuclear program as a serious threat to Chinese economic or security interests or to security in MENA.[136] Joel Wuthnow, researcher at CNA China Studies, testified to the Commission, "Although some Chinese analysts accept the premise that an Iranian nuclear weapon might spark a regional arms race, few have publicly discussed whether and how such an outcome may damage Chinese interests."[137] However, as China's presence and influence in the region grows, Dr. Wuthnow suggested Middle Eastern countries and the United States may find opportunities to persuade China that Iran's behavior poses a risk to "regional security, and thus to China's own interests in Iran and the region."[138]

Implications for the United States

The United States has deep and longstanding interests in MENA, which it seeks to protect and advance through economic engagement, strategic partnerships and security arrangements, and a large military presence. As China's interests and presence in the region grow, they inevitably will impact U.S. objectives and influence there.

Beijing recognizes the United States is the most influential external power in MENA and formulates its regional policies with this in mind. A Saudi Arabian ambassador to China remarked, "In order to understand China's relations with the Gulf states, one must understand Sino-American relations." [139] Historically, China has sometimes opposed or resented U.S. influence and policies in MENA, but has sought to avoid directly challenging the United States in the region.[140] According to Dr. Alterman, "Chinese officials are keenly aware of the advantages of supplementing the United States in regional affairs, but they show little interest in supplanting the United States . . . [China] studiously avoids forcing countries to choose between the United States and China." [141] Rather, in preferring a minimally involved role in the region, China benefits from the U.S. security presence there.

- *"Free riding" on U.S. security efforts:* China is in many ways a "free rider" on U.S. power and influence in MENA, while contributing relatively little to regional security itself.[142] Associate Professor and Deputy Director of the Department of Arabic Language and Culture at Peking University Wu Bingbing asserts, "The United States provides the ultimate strategic security guarantee to Saudi Arabia . . . China lacks the ability to provide such a security guarantee, and is not sure how far the Sino-Saudi friendship can go." [143] China's successful investments and growing energy trade with Iraq, which has experienced a postwar oil boom, is another example of China reaping benefits from U.S. security efforts in the region.[144]
- *Learning from U.S. military activities:* China's military since the 1990s has gained insight into modern warfare and, more specifically, U.S. military strategy and capabilities from studying U.S. military campaigns in the Middle East.[145] Dr. Shichor testified to the Commission that MENA is "the key region in the world that serves as a laboratory for testing [and] experimenting . . . with Western weapons [and] state-of-the-art American military technology, which provides a very significant input into China's defense modernization." * [146]

Recently, however, Beijing has been more willing to assert its priorities and worldview, even at the expense of its broader relationship with the United States. For example, Beijing's relationship with Tehran and its position on the Syrian conflict undermine U.S. objectives in the region. Dr. Murphy testified that China's position in the UN Security Council on Syria represents China's most strident challenge to the United States in the region to date and suggested China's position on Syria could represent a turning point in China's MENA policy toward a greater willingness to assert its own interests even if at the expense of its broader relationship with the United States.

* Dean Cheng, research fellow at the Heritage Foundation's Asian Studies Center, similarly asserts that both U.S. wars in Iraq are "very influential" to the PLA's tactical, operational, and strategic thinking. Dean Cheng, "Chinese Lessons from the Gulf Wars," in Andrew Scobell et al., *Chinese Lessons from Other Peoples' Wars* (Carlisle, PA: U.S. Army War College Strategic Studies Institute, November 2011), pp. 153–199.

China is becoming a more influential power in the region overall by virtue of its growing economic interdependence with the region's oil producers, particularly Saudi Arabia. According to Dr. Alterman, "Many [MENA] petroleum producers see China as the future, a rising power that will be consuming their oil for decades more. China's eagerness for economic growth makes [China] a necessarily less fickle power, and one with a reliance on the Middle East that the United States does not share in the same way. Some see the U.S. relationship as something that can only diminish, while the relationship with China is something that will only grow." [147]

Dr. Murphy testified that alignment in values between the Chinese government and some MENA governments could be a cause for concern in Washington as China's influence in the region grows. Regarding sovereignty, respect for human rights and democracy, and the role of the state in the economy, Dr. Murphy testified, "Many states in the Middle East share ... China's view of the world on those issues more than they share the U.S. view." [148] This kind of ideological alignment could have implications for relative U.S. and Chinese influence in the region in the future.

Conclusions

- China is expanding and deepening its trade and investment ties with countries in MENA. More than half of China's crude oil imports are from MENA producers, and China increasingly looks to the region as an export market for manufactured goods and services.
- Energy security is a key driver of China's engagement in MENA. As China's continued economic growth becomes more dependent on a steady supply of oil and natural gas from the region, Beijing likely will augment already robust economic ties with stronger political and security engagement.
- China, driven primarily by its growing demand for energy, seeks to promote a framework for stability in MENA that supports its own economic, political, and security interests. These efforts include supporting the resolution of the Israeli-Palestinian conflict, conducting counterpiracy operations, and participating in UN peacekeeping missions. Conversely, China's position on the Syrian conflict and its support for Iran undermine peace and stability in the region.
- China struggled to diplomatically adapt to regime changes across MENA during and after the Arab Spring. Beijing's instinct has been to support sitting regimes in Egypt, Libya, and Syria and to oppose international intervention in these countries.
- Most MENA governments appear to judge China plays a positive role in the region. Oil- and natural gas-producing states in particular look to China as their future primary market. Moreover, governments in China and some MENA countries appear to share similar stances on issues of sovereignty, human rights and democracy, and the role of the state in the economy. However, many MENA countries have criticized China for its support for the Assad regime in Syria.

- Historically, China largely has avoided challenging U.S. influence and power in the Middle East. In recent years, however, when key Chinese interests are at stake, China has made use of its permanent membership in the UN Security Council to oppose U.S. policies and objectives in the region.

ENDNOTES FOR SECTION 1

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SECTION 2: TAIWAN

Introduction

This section—based on the Commission's meetings with Taiwan officials in Washington and Taipei and independent research—examines cross-Strait relations; Taiwan's international space; Taiwan's role in the East and South China Sea disputes; U.S.-Taiwan relations; and cross-Strait military and security issues. The section concludes with a discussion of the implications of the current cross-Strait dynamic for the United States.

Cross-Strait Relations

Diplomatic Affairs

During the Chinese Communist Party's (CCP) 18th Congress in November 2012, outgoing CCP General Secretary Hu Jintao expressed hope that China and Taiwan "would jointly explore cross-Strait political relations and make fair and reasonable arrangements for them." [1] Mr. Hu also called for both sides to "discuss the development of a [cross-Strait] military confidence-building mechanism" and "reach a peace agreement," though he did not provide timelines to achieve these objectives.[2] Mr. Hu's remarks generated concern in Taiwan that China's incoming leadership might seek to shift the focus of cross-Strait diplomatic relations from economic to political and security issues.[3] However, Beijing has signaled in subsequent public statements its near-term preference to avoid more sensitive areas and concentrate on sustaining progress on cross-Strait economic agreements.

In a July 2013 meeting, Taiwan President Ma Ying-jeou told the Commission that his agenda for cross-Strait diplomatic relations during his second term includes securing follow-on agreements to the Economic Cooperation Framework Agreement (ECFA) signed between the two sides in 2010, expanding cross-Strait educational exchanges, and establishing reciprocal representation offices. President Ma has indicated "the time is not yet ripe for both countries to speak of political dialogue" on unification.[4] He has not discounted meeting President Xi before the end of his second term but said in July 2013 such a meeting would be conditional on "whether [Taiwan] needs it, whether the [Taiwan] people support it, [and] that we can meet with dignity." [5]

Since the Commission's 2012 Report, Taiwan's semiofficial Straits Exchange Foundation (SEF) and its Chinese counterpart, the Association for Relations across the Taiwan Strait (ARATS),*

* SEF and ARATS facilitate cross-Strait negotiations and manage cross-Strait relations in the absence of formal ties between the governments of Taiwan and China.

held talks from June 20 to June 22 in Shanghai. This meeting, the ninth round of SEF–ARATS talks since May 2008, resulted in a major agreement on trade in services. See below for full treatment of this agreement.

Talks between Taiwan's ruling Kuomintang (KMT) party and the CCP picked up after a brief slowdown around the CCP's 18th Party Congress in November 2012. Former Taiwan Vice President (1996–2000) and KMT party elder Lien Chan in February 2013 visited Beijing to meet with then President Hu and incoming president Xi Jinping.[6] In June 2013, former KMT Chairman Wu Poh-hsiung (2007–2009) met with President Xi.[7] In the absence of formal diplomatic ties, this party-to-party dialogue serves as a way for China and Taiwan to relay high-level information. Taiwan's main opposition party, the Democratic Progressive Party (DPP), has criticized KMT–CCP talks on grounds they are secretive and have not been authorized by the Taiwan people or Taiwan's legislature.[8]

Some prominent DPP members have publicly tied the party's defeat in Taiwan's 2012 presidential election to voter concerns that cross-Strait relations would deteriorate under a DPP administration. In response, the DPP has taken several actions designed to boost the party's image as a viable alternative to the ruling KMT and improve the Taiwan public's perception of its ability to interact with China.

- *Developing a new policy for cross-Strait engagement:* In November 2012, the DPP established the China Affairs Committee to formulate a new policy for cross-Strait engagement. Nine prominent DPP members, including Party Chairman Su Tseng-chang and former DPP presidential candidate Tsai Ing-wen, compose the committee. At its first meeting in May 2013, Chairman Su said the party's China agenda will be guided by a "new type of framework and thinking involving: how to persist and make the Taiwan Dream a reality, how to open a new order for cross-Strait interaction and how to contribute to regional stability and peace." [9]

- *Building cross-Strait ties:* In October 2012, Frank Hsieh, the DPP's 2008 presidential candidate, visited Xiamen and Beijing to meet with academics and high-ranking Chinese officials involved in cross-Strait affairs. According to Mr. Hsieh, the trip was intended as the "first step for bilateral exchanges" between the DPP and China. Mr. Hsieh added, "Cross-Strait engagement cannot be monopolized by the [KMT]. The DPP cannot stand still and neither should it be marginalized from the platform of bilateral dialogue." [10] Since then, more high-profile DPP officials have visited China.[11] A spokesperson for China's Taiwan Affairs Office* said it is "more than happy to help" DPP members visit China and that "any discussion, seminar, cooperation, or political talks that may help increase or elevate cross-Strait relations will be welcomed." [12]

*The Taiwan Affairs Office is an agency within China's State Council that is responsible for overseeing China's cross-Strait policies.

China's New Passport Design Creates Controversy in Taiwan

In May 2012, China introduced a new passport design that includes images of two popular tourist sites in Taiwan and depicts Beijing's South China Sea claims.* Taiwan's Mainland Affairs Council † responded with a strong statement: "[China's] inclusion of photographs of Taiwan's territory and landscape entirely ignores existing facts and provokes controversy, while at the same time not only harms the foundation of mutual trust established through efforts by the two sides over the recent years, but also hurts the feelings of Taiwan's 23 million people. [China's] action is absolutely unacceptable to the [Taiwan] government." [13]

Many South China Sea claimants harshly criticized China's new passports. Vietnam and the Philippines are not stamping the new passports and instead are issuing separate visa sheets. The Mainland Affairs Council explained that since Taiwan does not recognize China's passports, it could not take similar measures to protest the new design. A council official also said, "Since the entry papers of Chinese citizens bear the full name of [Taiwan] and its national flag, it is sufficient declaration of our nation's autonomy." After pressure from opposition legislators, a Mainland Affairs Council spokesperson in December 2012 said Taiwan would develop "countermeasures in response to the passport issue." [14] However, as of the writing of this Report, Taiwan has yet to announce these countermeasures.

Trade

From January through July 2013 (the most recent months for which official statistics are available), the total value of trade between China ‡ and Taiwan was $71.8 billion. The total value of cross-Strait trade during this period grew by 2.79 percent compared to the same period in 2012. Through the first seven months of 2013, China remained Taiwan's largest export market, accounting for approximately $47.3 billion worth of exports (26.9 percent of Taiwan's total exports). China followed behind Japan as Taiwan's second largest source of imports, accounting for approximately $24.5 billion worth of imports (15.5 percent of Taiwan's total imports).[15] See figure 1 for Taiwan's trade with China from 2008 to 2012.

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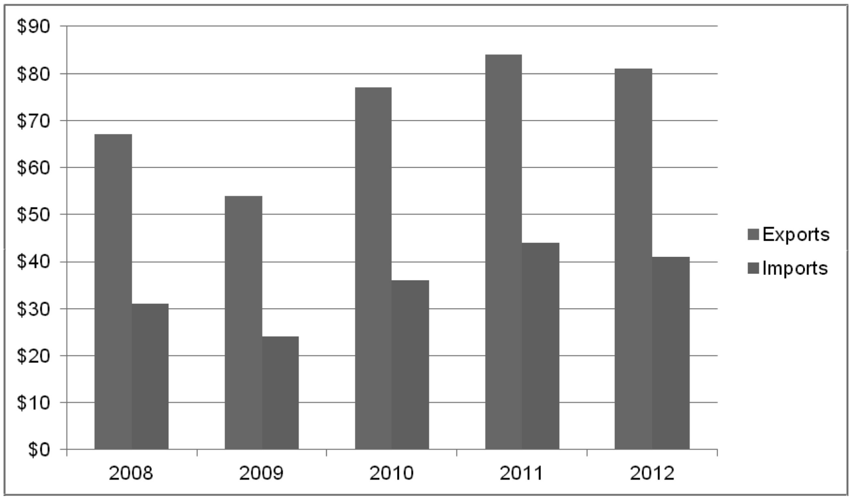
* Taiwan does not recognize China's passports. Chinese citizens visiting Taiwan must apply for a "compatriot pass" issued by Taiwan's National Immigration Agency.

† The Mainland Affairs Council is a cabinet-level agency in Taiwan's executive branch that is responsible for overseeing Taiwan's cross-Strait policies.

‡ Throughout the trade and investment subsections, "China" excludes Hong Kong and Macau.

Figure 1: Taiwan's Trade with China, 2008–2012 (U.S. $ billions)



Source: Bureau of Foreign Trade (Taiwan), "Trade Statistics." *http://cus93.trade.gov.tw/ENGLISH/FSCE/.*

In 2012, China's gross domestic product (GDP) was approximately $8.2 trillion while Taiwan's GDP was approximately $474 billion, according to the International Monetary Fund. On a per capita basis (purchasing power parity), China and Taiwan's GDPs were $9,055 and $38,356, respectively.*

Investment

Although China remained the top destination for Taiwan foreign direct investment (FDI) in 2012, Taiwan's approval of $10.9 billion in investments in China in 2012 represented a 16.6 percent decrease from the previous year and a three-year low.[16] From January through July 2013, the value of Taiwan FDI to China continued to decrease, slipping 17.23 percent from the previous year.[17] Officials at the American Institute in Taiwan (AIT), which serves as the de facto U.S. embassy in Taiwan, told the Commission that Taiwan businesses increasingly are looking for investment opportunities in Southeast Asia, Africa, and Latin America as manufacturing costs in China continue to rise.

Mainland investment in Taiwan continued to grow in the first seven months of 2013, with the value of investments increasing 79.34 percent compared to the same period in 2012.[18] In 2012, Chinese FDI in Taiwan totaled $328.1 million, a 650 percent increase from the previous year. The growth in 2012 was due largely to a $139 million investment by state-owned China Ocean Shipping

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*International Monetary Fund, "World Economic Outlook Database." *http://www.imf.org/external/pubs/ft/weo/2013/02/weodata/index.aspx*. According to the International Monetary Fund (IMF), the purchasing power parity (PPP) between two countries is the "rate at which the currency of one country needs to be converted into that of a second country to ensure that a given amount of the first country's currency will purchase the same volume of goods and services in the second country as it does in the first." In the IMF's World Economic Outlook online database, the implied PPP conversion rate is expressed as national currency per current international dollar.

(Group) Company and other Chinese shipping firms into Kaohsiung-based Kao Ming Container Terminal Corporation and the establishment of branches in Taiwan of two Chinese state-owned banks: Bank of Communications and Bank of China.[19]

Economic Agreements

Since President Ma's first term began in 2008, Taiwan and China have signed several agreements that have deepened and broadened cross-Strait economic relations. Most importantly, the two sides in June 2010 signed the ECFA, which serves as a roadmap for future economic integration through a series of four major follow-on agreements concerning investment protection, trade in goods, trade in services, and trade dispute settlement.[20] Since the Commission's 2012 Report, China and Taiwan have made further progress toward developing and implementing the ECFA follow-on agreements as well as advancing economic cooperation in other areas.

- *Trade promotion offices:* Taiwan opened its first trade promotion office in Shanghai in December 2012 and since then has established offices in Beijing and Guangzhou.[21] China opened its first trade promotion office in Taipei in January 2013.[22] These offices are designed to facilitate cross-Strait trade, primarily in the service sector, by providing local market information, product advertising, and consulting services to their side's businesses.
- *Trade in goods agreement:* As part of the ECFA, Taiwan and China agreed to reduce and gradually eliminate tariffs on select imports. The final group of these "early harvest" items became tariff free on January 1, 2013. Through this arrangement, China has removed tariffs on 539 items imported from Taiwan while Taiwan has removed tariffs on 267 items imported from China.[23] Taipei and Beijing intend to build on this progress by completing a more comprehensive trade in goods agreement, which President Ma told the Commission he hopes the two sides will sign by the end of 2013.
- *Currency clearing agreement:* In January 2013, Taiwan and China signed a direct currency clearing agreement. This followed an August 2012 memorandum of understanding on the subject between both sides' central banks.[24] In the past, Taiwan banks were not allowed to conduct transactions in China's renminbi (RMB), and China's banks were not able to deal in Taiwan's New Taiwan Dollar (NTD). As a result, trade deals or money transfers were initially denominated in a third currency (usually the U.S. dollar) and then converted to the local currency. Designated Chinese banks in Taiwan began conducting RMB transactions in February 2013, and designated Taiwan banks in China began conducting NTD transactions in April 2013.[25]
- *Trade in services agreement:* In June 2013, Taiwan and China signed a services trade agreement to eliminate investment restrictions and other barriers across 11 service sectors in both countries. Taiwan investors will gain access to 80 service sub-

sectors in China, including those in e-commerce, printing, construction, transportation, tourism, entertainment, and funeral services. In return, Chinese investors will gain access to 64 service subsectors in Taiwan, including those in car rental, cargo transportation, beauty parlors, online gaming, and funeral services.[26] As of the writing of this Report, Taiwan's legislature has not yet ratified the agreement due to political and public opposition.

- *Trade dispute settlement mechanism:* Taiwan and China in 2013 continued to discuss a mechanism to help resolve trade disputes between the two sides that might arise from the interpretation, implementation, and application of the ECFA follow-on agreements. This subject is on the agenda for the next SEF–ARATS meeting.[27]

Taiwan's International Space

Beijing's insistence on the "one China principle" precludes any country or international organization from simultaneously recognizing China and Taiwan, thereby restricting Taiwan's full participation in the international community. Nevertheless, Taiwan pursues greater international space by maintaining its official diplomatic relations with 23 countries,* expanding its participation in international organizations, and strengthening economic partnerships with countries other than China.

In 2008, China and Taiwan reached a tacit understanding—or what President Ma unilaterally declared to be a "diplomatic truce"—to stop poaching each other's diplomatic partners in order to maintain positive momentum in the cross-Strait relationship.[28] China appears to have adhered to this diplomatic truce during President Ma's first term, though Beijing's March 2013 call for the Vatican to sever ties with Taiwan shortly before President Ma's trip to the city-state for the Investiture Mass of Pope Francis runs counter to the tacit agreement. It is not clear if this action signaled a policy shift or was motivated by other factors, such as Beijing's longstanding rift with the Vatican.[29]

China continues to attempt to restrict Taiwan's participation in international organizations and activities. For example, Beijing pressured Indonesia to discourage Taiwan from attending the Jakarta International Defense Dialogue in March 2013. Taiwan ultimately did not participate in the event.[30] In another instance, China boycotted Japan's March 2013 commemorative ceremony for the 2011 Tohoku earthquake after Tokyo invited Taiwan to attend the event. Tokyo had faced domestic criticism for excluding Taiwan, the largest aid donor following the earthquake, from 2012's commemorative ceremony. China's Ministry of Foreign Affairs said Tokyo's decision to invite Taiwan "violated the principles and spirit of the China-Japan Joint Statement and the commitments of the Japanese side."[31]

* The following 23 countries have official diplomatic relations with Taiwan: Belize, Burkina Faso, the Dominican Republic, El Salvador, the Gambia, Guatemala, Haiti, the Holy See, Honduras, Kiribati, the Marshall Islands, Nauru, Nicaragua, Palau, Panama, Paraguay, Saint Christopher and Nevis, Saint Lucia, Saint Vincent and the Grenadines, São Tomé and Principe, Solomon Islands, Swaziland, and Tuvalu.

Nevertheless, Taiwan has made important progress on issues affecting its international space. In July 2013, President Obama signed legislation directing the U.S. Secretary of State to "develop a strategy to obtain observer status for Taiwan in the ICAO." [32] The president of the UN's International Civil Aviation Organization (ICAO) in September 2013 invited a Taiwan delegation to attend the upcoming ICAO assembly as his "guests." [33]

Furthermore, Taiwan has advanced its international trade ties. Taiwan and New Zealand signed a free trade agreement in July 2013, which marks Taiwan's first such deal with a country with which it does not have official diplomatic relations; Taiwan and Singapore agreed in principle to a free trade agreement in May 2013; [34] and Taiwan is participating in negotiations with 22 other World Trade Organization members, including the United States, on a multilateral Trade in Services Agreement.

Taiwan's Ministry of Economic Affairs told the Commission that Taiwan's efforts to expand its trade ties with the Asia Pacific region are part of President Ma's larger push to diversify Taiwan's economic partners to avoid overreliance on China. Other Taiwan officials explained to the Commission that the agreements will help promote Taiwan's inclusion in Asia's broader economic integration, including participation in multilateral trade pacts such as the Trans-Pacific Partnership and the Regional Comprehensive Economic Partnership.

Taiwan's Role in the East and South China Seas Disputes

Taiwan claims "historic" sovereignty over the Senkaku Islands (known as Diaoyutai in Taiwan) in the East China Sea and over all of the South China Sea. Japan objects to Taiwan's East China Sea claims; Brunei, Malaysia, Philippines, and Vietnam object to Taiwan's South China Sea claims. Taiwan thus far has called for peaceful solutions and joint development of resources to avoid escalation of tensions while defending its own territorial claims. Although Taiwan and China have not openly denied each other's claims since doing so would raise the sensitive issue of the definition of "one China," there is no evidence the two countries are cooperating in their positions or approaches to the maritime disputes.

East China Sea

On April 10, 2013, Taiwan and Japan signed a fisheries agreement after 17 years of intermittent negotiations. The agreement, concluded before the start of the annual fishing season, delineates a broad fishing zone of 1,750 square miles near the Senkakus—with the exception of the islands' 12 nautical mile territorial waters—where Taiwan and Japanese fishing boats can operate freely.[35] It includes no reference to sovereignty over the disputed territory. President Ma said the agreement demonstrates Taiwan's constructive role in reducing tension in the East China Sea without compromising Taiwan's maritime claims and could be used as a blueprint and impetus for a similar agreement between Taiwan and other countries with claims in the South China Sea.[36]

Beijing said it was "extremely concerned" about the agreement and urged Tokyo to "earnestly abide by its promises on the Taiwan issue."[37] After the signing of the fisheries agreement, Beijing also reiterated its call for China and Taiwan to "safeguard the overall interests of the Chinese nation."[38]

South China Sea

In the South China Sea, Taiwan adheres to the principles of the 2002 Declaration on the Conduct of Parties in the South China Sea.* However, Taiwan's political status precludes it from signing it or participating in any formal cooperation with other claimants in the region. Taiwan administers Itu Aba Island (also known as Taiping) and Pratas Reef (also known as Dongsha) and stations 100 to 150 Coast Guard personnel on each island to enforce local fisheries, conduct search and rescue, and demonstrate Taiwan's sovereignty. In 2013, Taiwan announced plans to upgrade Itu Aba by building a new wharf able to accommodate larger, more capable naval and maritime law enforcement ships. Currently, only small patrol craft can dock at the island. Furthermore, a greater capacity to dock larger ships will facilitate the planned extension of Itu Aba's existing runway by about 20 percent. The longer runway will allow larger and heavier military aircraft to take off and land there.[39] See figure 2 for a map of Taiwan-controlled islands in the South China Sea.

In March 2013, the Philippine Coast Guard opened fire on a Taiwan fishing boat operating in disputed waters in the South China Sea, resulting in the death of a Taiwan fisherman and sparking a diplomatic row with Taiwan. Manila and Taipei both claim the incident took place within their respective exclusive economic zones† in the South China Sea.[40] According to an AIT brief to the Commission, there is a long history of Philippine fishermen harassing Taiwan fishermen in the South China Sea, and this incident pushed Taiwan to a breaking point.

In the initial aftermath of the shooting, Taiwan called for the Philippines to issue a formal government apology, pay compensation to the victim's family, punish the perpetrators, and initiate cooperative fishery talks. After it claimed the Philippines failed to adequately address its demands, Taiwan stopped accepting new Filipino labor applications;‡ suspended trade, fishery, and technology exchanges with the Philippines; and removed the Philippines from Taiwan's visa waiver program.[41] Taiwan also deployed two naval ships and four maritime law enforcement ships to the disputed waters. Taiwan removed the sanctions in August after the Philippines offered an official apology on behalf of the Philippine president, agreed to pay compensation to the victim's family, and

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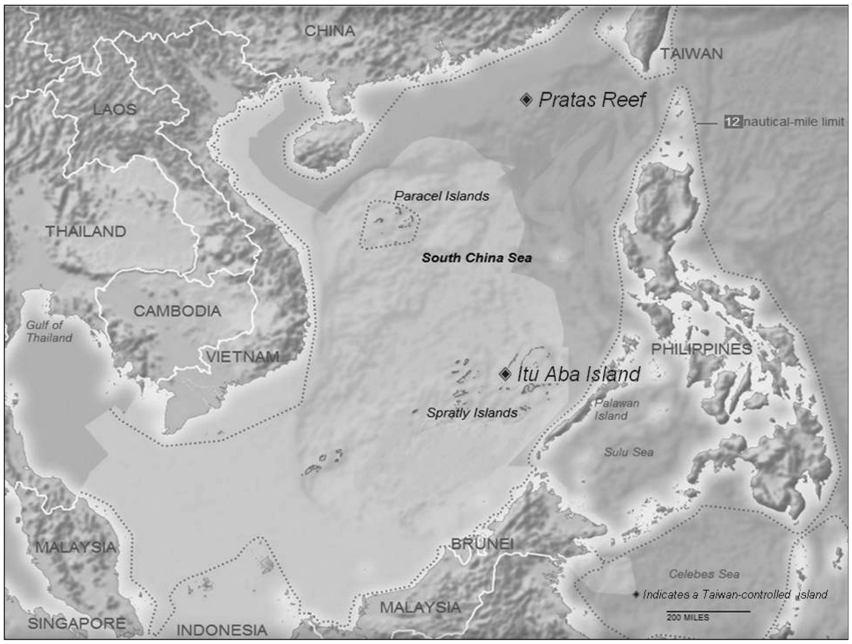
*A 2002 Declaration on the Conduct of Parties in the South China Sea adopted by China and the Association of Southeast Asian Nations encourages claimants to, among other measures, exercise self-restraint in occupying any previously unoccupied land features in disputed waters in order to avoid escalating ongoing disputes.

†According to the United Nations Convention on the Law of the Sea, a coastal state is entitled to an exclusive economic zone, a 200 nautical mile zone extending from its coastline within which that state can exercise jurisdiction to explore and exploit natural resources, but not full sovereignty.

‡According to an AIT brief to the Commission, there were approximately 80,000 Filipinos living/working in Taiwan before Taipei stopped accepting new Filipino labor applications.

recommended homicide charges for the Philippine Coast Guard personnel who opened fire on the Taiwan fishing boat.[42] Taiwan and the Philippines also are discussing measures to reduce the risk of future incidents and working to establish a bilateral fisheries mechanism.[43]

Figure 2: South China Sea



Source: New York Times, "Territorial Claims in the South China Sea," *http://www.nytimes/com/interactive/2012/05/31/world/asia/Territorial-Claims-in-South-China-Sea.html?ref=southchinasea*, adapted by the U.S.-China Economic and Security Review Commission. Locations of various features are not exact.

Next Media Controversy

In November 2012, Next Media Ltd.—a Hong Kong-based media company that is critical of Beijing—agreed to sell its Taiwan print and television media outlets to a group of Taiwan businessman with extensive commercial interests in China.[44] Before being finalized, however, the $600 million deal required the approval of Taiwan regulators.

Next Media's sale generated significant public opposition in Taiwan, primarily due to the involvement of Tsai Eng-meng as a principal investor. Mr. Tsai is a pro-Beijing billionaire whose corporation owns *Want China Times*, one of Taiwan's four largest newspapers. Freedom of the press advocates and the DPP charged that the deal, if approved, would give Mr. Tsai's group a near monopoly over Taiwan's print media as well as provide China greater opportunities to influence the Taiwan media.[45]

In March 2013, Taiwan's independent media regulator and antitrust agency proposed new antimonopoly rules, which apparently scuttled the deal.[46] Although Next Media maintains the buyers pulled out from the purchase,[47] Taiwan media speculated Mr. Tsai cancelled the deal because of growing public pressure and concern about a potential government inquiry into his media assets.[48]

U.S.-Taiwan Relations

Taiwan's Role in the U.S. Rebalance to Asia

In October 2011, then Assistant Secretary of State for East Asian and Pacific Affairs Kurt Campbell testified to the U.S. House of Representatives, Foreign Affairs Committee that "an important part of this turn to Asia is maintaining a robust and multidimensional unofficial relationship with Taiwan."[49] Since then, however, U.S. officials appear to have avoided making explicit references to Taiwan's actual or potential role in the U.S. rebalance to Asia in public statements. For example, U.S. Secretary of Defense Chuck Hagel in a June 2013 speech on the rebalance limited his remarks on Taiwan to the following: "The United States strongly supports the efforts made by [China] and Taiwan in recent years to improve cross-Strait relations. We have an enduring interest in peace and stability in the Taiwan Strait. The United States remains firm in its adherence to a one-China policy based on the three joint U.S.-China communiqués and the Taiwan Relations Act."[50]

Some U.S. security experts propose a more prominent role for Taiwan in the U.S. rebalance to Asia. According to Michael Mazza, research fellow at the American Enterprise Institute:

> *Taiwan's potential role in the U.S. pivot to Asia has been largely ignored ... Because of its proximity to and knowledge of China, Taiwan is uniquely equipped to help U.S. efforts to (1) expand presence and access in the region by ensuring U.S. forces can utilize facilities on the island in the event of a conflict; (2) build partnership capacity by improving its self-defense capabilities; and (3) improve military innovation by sharing experience, technology, and intelligence with the United States. Rather than fearing damaging bilateral ties with China, the United States should take advantage of the benefits this important partnership can offer.*[51]

Similarly, Mark Stokes, executive director of the Project 2049 Institute, and L.C. Russell Hsiao, research fellow at the Project 2049 Institute, argue:

> *Taiwan should be the central guiding focus of defense planning in the Asia Pacific region ... Taiwan is the principal security partner in the region that is willing and able to develop the kind of force needed for networked, integrated deep interdiction operations in an [antiaccess/area denial] environment. Taiwan's knowledge of single points of failure in the PLA's air and missile defense system could someday save many lives. Maintaining Taiwan's capacity to interdict single points of failure in the PLA's [antiaccess/area denial] system could relieve the United States of part of its heavy operational burden and reduce risks of escalation ... [Furthermore], Taiwan is uniquely positioned to contribute to regional situational awareness of the air, space, sea and cyber domains.*[52]

Diplomatic Affairs

In February 2013, AIT and the Taipei Economic and Cultural Representative Office in the United States (TECRO) signed an updated agreement on reciprocal privileges and immunities. The agreement, which replaces the 1980 agreement on this subject, enhances legal protection for AIT personnel in Taiwan and TECRO personnel in the United States. Specifically, according to the U.S. Department of State, certain AIT and TECRO employees now have "expanded protection from criminal jurisdiction and arrest as well as specified immunities from providing testimony."[53] Previously, these personnel only had such protections within the scope of authorized work functions.

Democratic Progressive Party Outreach to Washington

The opposition DPP has increased engagement with the United States to repair perceived damage to bilateral ties and to "rebrand" the party's image as a "responsible" alternative to the ruling KMT.[54] DPP Chairman Su Tseng-chang visited Washington, DC in June 2013 to inaugurate the DPP's new representative office * and to build closer ties with the United States. During a speech at the Brookings Institution, DPP Chairman Su said, "Friends here are anxious to learn how the DPP plans to manage Taiwan's relations with China. Past history has left its imprint and the DPP has to work hard to regain the confidence of our international friends."[55]

Trade

In March 2013, the United States and Taiwan held the first round of talks under the Trade and Investment Framework Agreement (TIFA) † since 2007. Talks had stalled over Taiwan's ban on importing U.S. beef containing ractopamine, a common feed additive,‡ but resumed after Taiwan's legislature lifted some restrictions on the use of ractopamine in beef in July 2012. However, Taiwan's ban on ractopamine in pork remains in place and could hinder future U.S.-Taiwan trade talks.

According to the Office of the U.S. Trade Representative, the March TIFA meeting, held in Taipei, "produced numerous results, including new joint statements on investment principles and information and communication technology services, and the launch of new TIFA working groups on investment and technical barriers to trade." Taiwan also agreed to "conduct bilateral technical exchanges to facilitate the establishment of science-based maximum residue levels for pesticides."[56] In a meeting with the Commission, President Ma said Taiwan hopes TIFA talks will lead to negotiations on a U.S.-Taiwan investment agreement and Taiwan's participation in the Trans-Pacific Partnership. Officials from Taiwan's

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* The DPP had an office in Washington in the 1990s but closed it during DPP President Chen Shui-bian's administration from 2000–2008. Shu-yuan Lin and Jay Chen, "DPP office in Washington to open by June," Central News Agency (Taipei), February 28, 2013. *http://focustaiwan.tw/news/aipl/201302280015.aspx*.

† The Trade and Investment Framework Agreement, established in 1994, serves as the primary mechanism for the United States and Taiwan to discuss trade- and investment-related issues in the absence of official diplomatic ties.

‡ The chemical ractopamine is used as a feed additive for livestock, intended to increase muscle size and leanness in livestock such as cattle and pigs. The U.S. government has approved the use of ractopamine since 2003 and has declared that meat from animals fed the additive is safe for human consumption.

Ministry of Economic Affairs acknowledged to the Commission that developing a bilateral investment agreement with the United States would be difficult due to Taiwan's political status but said they believed U.S. congressional members supported the agreement.

The new TIFA working group on investment held its first meeting in September. According to U.S. Deputy Assistant Secretary of State for East Asian and Pacific Affairs Kin Moy, "There was a discussion on promoting a transparent and predictable investment regime, and an exchange of preliminary views on a potential U.S.-Taiwan Bilateral Investment Agreement." [57] The new TIFA working group on technical barriers to trade is scheduled to meet in October. The next full TIFA meeting will occur in 2014 in Washington, DC.[58]

U.S. Arms Sales to Taiwan

Taiwan continues to be one of the largest buyers of U.S. arms in the world and is the largest in Asia. Since President Ma assumed office in 2008, Taiwan has agreed to purchase approximately $18.3 billion of U.S. arms. In August 2013, President Ma said, "Although cross-Strait relations have gradually eased and cross-Strait relations are now the most peaceful in more than six decades, we still cannot afford to be lax in terms of combat readiness . . . [Taiwan] will continue to purchase U.S.-built weapons that [Taiwan] cannot produce on [its] own." [59] Responding to concerns about the impact of Taiwan's declining defense budget on U.S.-Taiwan arms sales, Taiwan's Ministry of Defense said it will "increase the budget or apply for special funds from the [Taiwan legislature] if the United States agrees on more arms sales to Taiwan." [60] See figures 3–4 for more details on U.S. arms sales to Taiwan.

Figure 3: Value of U.S. Arms Sales Notifications to Taiwan

Year	Value of Arms Sales Notification (billion USD)
2001	1.082
2002	1.521
2003	0.775
2004	1.776
2005	0.280
2006	—
2007	3.717
2008	6.463
2009	—
2010	6.392
2011	5.852

Source: U.S.-Taiwan Business Council and Project 2049 Institute, *Chinese Reactions to Taiwan Arms Sales* (Arlington, VA: March, 2012), p. 38. *http://project2049.net/documents/2012_chinese_reactions_to_taiwan_arms_sales.pdf*.

Figure 4: U.S. Arms Sales to Taiwan

Year of Notifica- tion	Weapon, Item, or Service ‡	Projected Value (million USD) * †	Status	Delivery
2008	330 PAC–3 missiles and firing units	3,100	Not delivered	Beginning in 2014 [61]
2008	32 UGM–84L Harpoon missiles	200	Not delivered	Expected in 2013
2008	Spare parts for F–5E/F, C–130H, F–16A/B, and Indigenous Defense Fighter (IDF) aircraft	334	Ongoing deliveries	Not applicable
2008	182 Javelin missiles and command launch units	47	Delivered	2011
2008	Four E–2T aircraft refurbishment and upgrades	250	Completed	2011–2013 [62]
2008	30 AH–64 Apache helicopters and related ordnance	2,532	Six delivered	2013–2014
2010	114 PAC–3 missiles and firing units	2,810	Not delivered	Beginning in 2014 [63]
2010	60 UH–60M Black Hawk helicopters	3,100	Not delivered	2014–2018 [64]
2010	12 ATM–84L and RTM–84L Harpoon missiles	37	Unknown	Unknown
2010	60 MIDS/LVT–1 terminals to improve F–16A/B C4ISR § systems	340	Not delivered	Unknown
2010	Two OSPREY-class mine hunting ships (refurbishment and upgrades)	105	Delivered	2012 [65]
2011	145 F–16/AB aircraft refurbishment and upgrades	5,300	Not complete	2016–2017
2011	F–16 pilot training	500	Ongoing	Not applicable
2011	Spare parts for F–16A/B, F–5E/F, C–130H, and IDF aircraft	52	Ongoing	Not applicable

Source: Except where indicated, this information is compiled from the following three sources: U.S.-Taiwan Business Council and Project 2049 Institute, *Chinese Reactions to Taiwan Arms Sales* (Arlington, VA: March, 2012). *http://project2049.net/documents/2012_chinese_reactions_to_taiwan_arms_sales.pdf*; Shirley Kan, *Taiwan's Major U.S. Arms Sales since 1990* (Washington, DC: Congressional Research Service, July 23, 2013); and Piin-Fen Kok and David J. Firestein, *Threading the Needle: Proposals For U.S. And Chinese Actions On Arms Sales To Taiwan* (New York, NY and Washington, DC: East West Institute, September 2013).

Cross-Strait Military and Security Issues

Military Balance

Since the late 1990s, China's military modernization has focused on improving its capabilities for Taiwan conflict scenarios that in-

* These values represent amounts as presented to Congress at the time of notification, which may differ from the actual amount Taiwan pays for the weapon, item, or service.

† These are the weapons, items, and services as presented to Congress at the time of notification, which may differ from the actual weapons, items and services that the United States ultimately sells to Taiwan.

‡ Consistent with Figure 3, these values represent amounts as presented to Congress at the time of notification, which may differ from the actual amount Taiwan pays for the weapon, item, or service.

§ C4ISR refers to command, control, communications, computers, intelligence, surveillance, and reconnaissance.

clude U.S. intervention. This modernization program likely is designed to hedge against a failure of China's cross-Strait diplomatic strategy; deter Taiwan from taking steps toward de jure independence; signal to the United States that China is willing to use force against Taiwan if necessary; and enhance China's ability to deter, delay, or deny any U.S. intervention in a cross-Strait conflict.

China's People's Liberation Army (PLA) is more prepared than in the past to conduct several different military campaigns against Taiwan, including a partial naval blockade and a limited air and missile campaign.

- China has a large and sophisticated short-range ballistic missile (SRBM) force, including over 1,100 mobile SRBMs that are positioned in southeast China and able to strike Taiwan. China continues to improve the range, accuracy, and payloads of its SRBMs with the introduction of new missiles or variants and component upgrades.[66]
- The PLA has approximately 2,300 combat aircraft capable of participating in large-scale air operations, 490 of which are based within range of Taiwan. By contrast, the Taiwan Air Force has approximately 410 combat aircraft.[67]
- The PLA Navy has approximately 75 major surface combatants, 85 missile patrol boats, and 60 conventional and nuclear submarines. These units are available for a range of missions, such as enforcing a blockade of Taiwan. As China's naval modernization continues, an increasing percentage of these ships and submarines will feature advanced weaponry. In contrast, the Taiwan Navy has 26 major surface combatants, 45 missile patrol boats, and two operational submarines.[68]
- Although China at this time does not appear to be pursuing the amphibious capabilities necessary to conduct a large-scale invasion of Taiwan, the PLA Navy since 2008 has commissioned three new amphibious transport docks. These large amphibious ships—which can carry a mix of air-cushion landing craft, amphibious armored vehicles, helicopters, and marines—improve China's ability to seize and hold Taiwan's offshore islands.[69]

Furthermore, major elements of China's military modernization focus on developing long-range strike capabilities to place U.S. ships, aircraft, and bases in the Western Pacific at risk. (See chapter 2, section 1, "Military and Security Year in Review," for full treatment of China's antiaccess/area denial capabilities.)

Taiwan's ability to defend against China's growing military capabilities is declining. The key shortcomings in Taiwan's defensive capabilities are its insufficient infrastructure hardening and lack of mobile systems.[70] For example, Taiwan relies on fixed land-based coastal surveillance radars for maritime surveillance. The PLA likely would destroy these vulnerable sites during initial air and missile strikes in a campaign against Taiwan, severely degrading Taiwan's ability to defend itself. China's overwhelming quantitative and qualitative advantage over Taiwan also would challenge the Taiwan military's ability to sustain high-intensity operations during a conflict.

Defense Spending Trends

Cross-Strait defense spending trends since 2001 have dramatically shifted in China's favor. The officially reported budget gap in 2013 totaled more than $100 billion.

China's official defense budget rose to approximately $117 billion in 2013 from $106 billion in 2012, marking the 22nd consecutive year-on-year increase. Furthermore, China's total defense-related expenditure likely is significantly higher than the official budget figure. The Institute of International Strategic Studies assesses China's actual defense spending is 40 to 50 percent higher than the official figure.[71] Most analysts expect China's defense spending will continue to grow steadily in the near term, even if economic growth slows. (See chapter 2, section 1, "Military and Security Year in Review," for full treatment of China's 2013 defense budget.)

Taiwan's defense budget, on the other hand, continues to decline. Taiwan's official defense budget contracted to $10.5 billion in 2013 from $10.6 billion in 2012. Taiwan's 2013 defense spending represents 2.1 percent of its GDP, a record low matched only in 2006 and 2011. This is less than 3 percent of GDP—the level at which President Ma pledged to maintain defense spending—and marks a substantial decrease from 3.8 percent of GDP in 1994. Furthermore, 2013 defense spending accounts for only 16.2 percent of the total government budget, down from 24.3 percent in 1994.[72] In response to concerns about Taiwan's declining defense budget relative to GDP, President Ma has explained defense spending cannot be expected to keep pace with Taiwan's GDP growth.[73] Taiwan's GDP growth rate was 10.7 percent in 2010, 4 percent in 2011, and 1.3 percent in 2012.[74]

Taiwan's defense spending likely will remain stagnant through at least the end of President Ma's term in 2016 as he continues to implement a strategy he described to the Commission as the "institutionalization of rapprochement as the first line of defense." Moreover, President Ma has little incentive to increase the defense budget, since improved cross-Strait relations have reduced public perceptions of the China threat in Taiwan[75] while domestic and social welfare issues have become more salient as Taiwan's economy attempts to recover from the global financial crisis and its workforce ages. U.S. officials and outside observers suggest that if this trend continues, then the Taiwan military may struggle to maintain a credible deterrent capability.[76]

Chinese Espionage against Taiwan

Despite warming cross-Strait ties, China continues to engage in aggressive espionage activities against Taiwan. Since September 2012, Taiwan has arrested at least six former or active Taiwan military officers, including one flag officer, for espionage.[77] In one case, a former Taiwan Navy commander, who had served as the head of the political warfare division at Taiwan's Naval Meteorological and Oceanographic Office, may have provided to China classified submarine nautical charts as well as hydrographic information about the waters surrounding Taiwan.[78] These cases underscore the breadth and depth of China's espionage activities against Taiwan and demonstrate Taiwan's vulnerability to espionage.

Former AIT director William Stanton said in March 2013 that espionage cases in recent years "have been harmful not only because of the potential loss of unknown quantities of classified information, but also because their success and frequency serves to undermine U.S. confidence in security cooperation with Taiwan." [79] AIT told the Commission the Chinese espionage threat to Taiwan is "a real concern" that the United States has raised with Taiwan "at the highest levels" but emphasized recent espionage cases do not mean the U.S.-Taiwan arms sale process has been infiltrated.

Taiwan Defense Policy and Reform

Quadrennial Defense Review

In March 2013, Taiwan published its second Quadrennial Defense Review.* [80] The *2013 Quadrennial Defense Review* offers no major changes to Taiwan's defense strategy from the 2009 version. It reiterates President Ma's emphasis on force preservation and infrastructure hardening while maintaining the ability to combat China's air and naval forces in the Taiwan Strait. The defense review also endorses and refines key defense reforms that are in various stages of implementation, such as fielding a smaller, better educated, and more effective all-volunteer force and developing and fielding innovative and asymmetric capabilities.

All-volunteer Force Transition

Since 2008, Taiwan has been implementing a program to gradually convert its conscript-heavy active duty military into an all-volunteer force. The all-volunteer force transition has been more expensive than anticipated, and the military has had difficulty recruiting high-quality volunteers due to a number of factors, including a declining birth rate, a quickly aging workforce, and a culture that does not hold military service in high esteem. While the all-volunteer force was originally scheduled for completion by the end of 2014, the Taiwan Ministry of National Defense announced in September 2013 that Taiwan will continue to conscript some active duty personnel until 2017 in order to maintain readiness and overcome current manpower shortfalls.[61]

Taiwan is diverting funds from other portions of the defense budget to ease the rising personnel costs resulting from the all volunteer transition. Between 2009 and 2013, Taiwan increased the share allocated for personnel by approximately 10 percent while reducing shares allocated for operations and investments.[82]

The Taiwan military's ability to attract volunteers may be further hampered by the death of a 24-year old conscript in July 2013. Army Corporal Hung Chung-chiu, found with a banned camera-

*Taiwan began the Quadrennial Defense Review process as a result of 2008 legislation stipulating that the Ministry of National Defense must submit a Quadrennial Defense Review to the legislature no later than 10 months after each presidential inauguration. The Quadrennial Defense Review serves as Taiwan's most authoritative public statement on its defense strategy and provides the foundation for defense policymaking. Taiwan also uses the Quadrennial Defense Review as a public relations tool to inform and attempt to influence domestic and foreign opinion. The Quadrennial Defense Review is drafted by the Ministry of National Defense's Integrated Assessment Office and includes input from ministry staff units and agencies, Taiwan's military services, and civilian experts. Alexander Chieh-cheng Huang, *A Midterm Assessment of Taiwan's First Quadrennial Defense Review* (Washington, DC: Brookings Institution, February 2011).

equipped mobile phone while on a military base, was placed in solitary confinement for a week and forced to perform strenuous exercises in summertime heat that ultimately caused him to die from heat stroke. An investigation uncovered further hazing and abuses of power by Taiwan military officials. Corporal Hung's death triggered large public demonstrations against the military, including an August 3 protest near the presidential office in Taipei that drew a crowd of over 100,000. Minister of Defense Kao Hua-chu resigned over the incident, and 18 military officers and noncommissioned officers, including a general officer, were indicted with various crimes for their roles in the soldier's death.[83] Then Deputy Minister of National Defense Andrew Yang told the Commission that Taiwan must "face the problem [of abuse of power and unprofessionalism in the military], fix it, and take responsibility."

Downsizing and Streamlining

In order to cover the recruitment and retention costs inherent in an all-volunteer force, the Taiwan military is downsizing its active duty force from approximately 270,000 to 215,000. Furthermore, the Taiwan legislature in November 2012 passed six laws that provide the legal foundation to begin streamlining the military's structure under the "Jingtsui Program." The most significant change is the planned consolidation of the service branches from six to three. The functions of the Combined Logistics Command, Military Police Command, and Reserve Command will be merged into the remaining service branches—the army, navy, and air force. Other changes include the reduction of general and flag officer billets by approximately 25 percent and the consolidation of the Ministry of National Defense's six departments into four.[84]

Integrating Innovative and Asymmetric Capabilities

Taiwan has focused on integrating innovative and asymmetric platforms and weapon systems into its military since approximately 2009. Taiwan fielded 30 stealthy patrol craft from 2009 to 2011 and 32 unmanned aerial vehicles in 2012 and continues to develop other asymmetric platforms and systems, including unmanned combat aerial vehicles and land attack cruise missiles (LACMs).[85] This approach is designed to improve Taiwan's ability to defend against the PLA's rapidly growing capabilities and allow the Taiwan military to target assessed vulnerabilities in the PLA's strategy and weapon systems. Furthermore, Taiwan judges asymmetric systems will be more cost-effective and will reduce its reliance on major, conventional weapon systems that are expensive, difficult to maintain, and vulnerable to the PLA's precision strike capabilities.[86]

Accepting New Missions

Taiwan's perception of its security environment has evolved since 2008 due to a number of developments, including the devastation caused by Typhoon Morakot in 2009, heightened tension over maritime territorial disputes in the region, and increased levels of piracy in important maritime trade routes. In response, Taipei is pushing its military to gradually improve its ability to conduct nontraditional missions, such as humanitarian assistance/disaster relief inside and outside of Taiwan, defense of Taiwan's sovereignty and commercial interests in the East and South China Seas, and protection of distant maritime trade routes.[87] As part of its effort to meet these requirements, the Taiwan Coast Guard in March 2013 commissioned the first two ships under a new development program that calls for the construction of 37 new units over the next 10 years.[88]

Strengthening Cyber and Electronic Warfare Capabilities

China conducts extensive cyber operations against Taiwan's government and corporate networks. For example, China targeted the publicly accessible websites of Taiwan's National Security Bureau approximately 3.34 million times in 2012, according to the agency. Taiwan is increasing its budget for cyber warfare, integrating cyber warfare into Taiwan's routine training and large-scale exercises, adding a fourth unit to the Communication Electronics and Information Bureau, and constructing an "experimental" facility that will simulate cyber attacks on the nation's critical infrastructure to help train Taiwan's cyber defenders.[89]

Taiwan's Military Modernization

Taiwan continues to domestically produce military platforms and weapon systems. Key programs under development or recently completed include the following:

- *Missile corvette:* Taiwan began work on a prototype of a new class of catamaran-style missile corvette in November 2012. Taiwan plans to build up to 11 corvettes by 2014. The new ship will carry long-range antiship cruise missiles and feature better sea-keeping ability, range, and endurance compared to Taiwan's current patrol fleet. In a potential conflict with China, the corvette will enhance the lethality and survivability of Taiwan's antisurface force.[90]
- *Replenishment oiler:* Taiwan began to construct its long-planned second replenishment oiler in December 2012. The additional oiler, scheduled for completion in 2014, will help the Taiwan Navy sustain operations at sea and improve Taiwan's ability to conduct humanitarian assistance, presence patrols, and port visits to countries that retain diplomatic relations with Taiwan.[91]
- *Land attack cruise missiles:* Taiwan began to field its Hsiung Feng (HF)-2E LACM in May 2012, with deployments to three mobile missile squadrons complete by early 2013. The missile's 375–500 mile range suggests it is designed to strike targets on mainland China, such as airfields and air defense sites. Taiwan also is developing a longer-range LACM, known as the "Yun Feng." Public information on the Yun Feng is limited, but press reporting indicates it will be able to achieve supersonic speeds and strike targets at twice the range of the HF–2E.[92]
- *Multiple-launch rocket system:* Taiwan certified its long-delayed Ray Ting (RT)–2000 multiple-launch rocket system dur-

ing an April 2013 military exercise and since has deployed it operationally. In a potential Chinese invasion, the RT–2000 will provide Taiwan with quick-fire capability against Chinese amphibious ships as they cross the Taiwan Strait. With a range of up to 25 miles and a wheeled chassis allowing for easy maneuverability, the RT–2000 is a significant improvement over its predecessor, the Kung Feng VI.[93]

Taiwan also continues to acquire and pursue military equipment and training from the United States. Select programs include the following:

- *P–3C Orion maritime patrol aircraft:* Taiwan in September 2013 received the first of the 12 refurbished P–3C Orion maritime patrol aircraft that it purchased from the United States in 2007. The aircraft will supplement and ultimately replace Taiwan's aging S–2T maritime patrol aircraft. The P–3C will increase the capability and endurance of the military's fixed-wing maritime patrol aircraft force, improving Taiwan's ability to perform antisubmarine warfare and intelligence, surveillance, and reconnaissance.
- *Apache attack helicopters:* In 2010, the United States agreed to sell 30 AH–64 Block III Apache attack helicopters to Taiwan for $2.04 billion. Taiwan began pilot and crew training in November 2012 and is scheduled to receive the helicopters in groups from October 2013 to July 2014. Taiwan has yet to order the Apache's principal weapon, the AGM–114L Hellfire missile,[94] suggesting Taiwan may be concerned about cost or developing its own missile.
- *PAC–3 missiles:* In January 2013, the United States awarded Lockheed Martin a $755 million production contract to supply Taiwan with 168 Patriot Advanced Capability (PAC–3) missiles and 27 launcher modification kits. Taiwan is scheduled to begin receiving the missiles in early 2014.[95] The PAC–3 is an air defense missile designed to intercept aircraft and ballistic and cruise missiles.
- *Submarines:* In 2001, the United States approved Taiwan's request to purchase diesel-electric submarines via the foreign military sales process. However, the sale has stalled for a number of reasons on both sides. These include partisan political gridlock in Taiwan's legislature, delays in Taiwan's commitment of funds, and disagreements between Washington and Taipei over costs. Furthermore, the United States has not built a diesel-electric submarine since the 1950s or operated one since 1990. Multiple reports in recent years claim Taipei is no longer committed to acquiring the submarines from the United States and is considering designing and manufacturing the submarines domestically, with U.S. and possibly other foreign technical assistance. Taiwan officials over the last several years reportedly have met with government officials or commercial entities from a number of countries—including Russia, Greece, Germany, Japan, and Spain—seeking assistance on submarine construction, submarine technology, or the purchase of used submarines.[96] Furthermore, Taiwan's Ministry of Na-

tional Defense in March 2013 announced plans to conduct a feasibility study over the next four years to determine Taiwan's ability to produce submarines domestically.[97] Taiwan officials continue to stress to the Commission the importance of acquiring submarines. During the Commission's recent trip to Taiwan in July, Taiwan officials emphasized that the navy's ability to counter China's expanding and modernizing submarine fleet will continue to erode as Taiwan's aging submarine force increasingly is unable to support Taiwan Navy antisubmarine training. Taiwan's current fleet of four submarines includes two former U.S. boats that were built in the 1940s and transferred to Taiwan in the 1970s.

- *Fighters:* In October 2012, the United States awarded Lockheed Martin a $1.85 billion contract to begin performing a midlife upgrade on Taiwan's existing fleet of 145 F–16 A/B fighter aircraft. The upgrades will occur from 2017 to 2022 in groups of 24 aircraft.[98] However, many analysts believe the retrofit program does not adequately address all of Taiwan's air defense requirements. Without additional acquisitions, Taiwan's fighter force will face substantial numerical shortfalls as Taiwan's F–5 fighters are retired over the next five to 10 years. In response to Congressional concerns over U.S. arms sales to Taiwan, Robert Nabors, Assistant to the President and Director of the Office of Legislative Affairs, wrote in an April 2012 letter that the Obama Administration is "committed to assisting Taiwan in addressing the disparity in numbers of aircraft through our work with Taiwan's defense ministry on its development of a comprehensive defense strategy vis-à-vis China." Mr. Nabors also said the Obama Administration would decide on a "near term course of action on how to address Taiwan's fighter gap, including through the sale to Taiwan of an undetermined number of U.S.-made fighter aircraft." [99] This language differs from an earlier White House letter on the subject, which definitively stated the Obama Administration's position that "the F–16 A/B upgrade effectively meets Taiwan's current needs." [100]
- *OLIVER HAZARD PERRY-class guided-missile frigates (FFG):* The U.S. Fiscal Year 2013 National Defense Authorization originally contained provisions authorizing the transfer of up to four surplus PERRY FFG to Taiwan. However, the legislation did not pass due to disagreements over other parts of the bill. Both the 2012 and 2013 versions of the Naval Vessels Transfer Acts called for the transfer of four PERRY FFG to Taiwan, but neither act has been passed. Taiwan currently has eight PERRY FFG, which were partially built in Taiwan in the 1990s and early 2000s with U.S. authorization and assistance. These ships are equipped with U.S. medium-range air defense missiles and indigenous long-range antiship cruise missiles. Additional major surface combatants like the PERRY would replace Taiwan's KNOX-class frigates, which are scheduled for retirement in the next few years.[101]

Taiwan Military Training

The Taiwan military routinely conducts exercises to train in core combat competencies, integrate new weapon systems and tactics, evaluate and refine operational concepts and plans, and demonstrate to China and the United States that it has a credible deterrent capability. In 2013, high-profile exercises included the following:

- *Han Kuang:* Han Kuang, Taiwan's only national-level joint exercise, is conducted annually and consists of a field training exercise and a command post exercise. The 2013 field training exercise, which occurred in April, focused on air defense, maritime interdiction, antiamphibious landing, and ground defense. Taiwan media portrayed the event—in which 81 rockets were fired from nine RT–2000 multiple rocket launchers and over 7,500 soldiers participated—as the largest display of force by Taiwan since 2008.[102] The command post exercise, which occurred in July, simulated a full-scale Chinese invasion of Taiwan in 2017 to test the military's ability to conduct command and control for joint operations.[103]
- *South China Sea Live-Fire Exercises:* In April 2013, the Taiwan Coast Guard conducted its biannual live-fire exercise near Itu Aba. This was the second live-fire drill on the island since Taiwan transferred long-range artillery and mortars there in August 2012 and the first drill in which those weapons were fired.[104]
- *Friendship and Training Cruise:* In spring 2013, the Taiwan Navy conducted its annual Friendship and Training Cruise to the Caribbean and Central America. The deployment, which consisted of two naval combatants and a replenishment ship, called at Belize, Panama, Nicaragua, Honduras, El Salvador, Guatemala, and the Dominican Republic. Taiwan uses these cruises to train for long-distance navigation and strengthen ties with countries that maintain diplomatic relations with Taiwan.[105]
- *Surface-to-Air Missile Test:* In September 2013, the Taiwan Navy successfully fired a Standard Missile 2 (SM–2)—Taiwan's most capable air defense missile—against a drone target during a simulated Chinese air attack. This is the first time Taiwan has fired a SM–2 since 2007 and only the sixth time since Taiwan acquired the missiles from the United States in the mid-2000s.[106] Taipei-based military analyst J. Michael Cole, citing Taiwan military sources, explains, "Taiwan must first obtain permission from the [United States] before it can proceed with firing the Raytheon Corporation-made fleet area air defense weapon, primarily over fears that the Chinese military will use the occasion to collect sensitive information about the system (Chinese 'fishing' vessels, some bristling with antennas, are often spotted in sea areas near where Taiwanese naval exercises are held). Additionally, because of its maximum range of about [105 miles], the [United States] has expressed con-

cerns over the risks involved in firing the weapon, along with the political implications of doing so." [107]

Implications for the United States

Since 2008, Taipei and Beijing have taken steps to reduce cross-Strait tension and increase economic, cultural, and educational ties. The recent cross-Strait rapprochement benefits the United States by reducing the likelihood of a U.S.-China conflict over Taiwan; contributing to peace, prosperity, and stability in East Asia; and allowing U.S. policymakers to focus their time and attention on other priorities in the U.S.-China and U.S.-Taiwan relationships.

At the same time, warming ties between China and Taiwan raise concerns for Washington and Taipei. Increasing cross-Strait economic integration will continue to tie Taiwan closer to China. This could strengthen China's bargaining power over Taiwan and allow Beijing to make progress toward its long term goal of unification. Responding to these concerns, officials from Taiwan's National Security Council insisted to the Commission that Taipei's economic engagement with Beijing is carefully calibrated to promote both Taiwan's economic growth and continued autonomy.

Furthermore, the counterintelligence risks to Taiwan and U.S. military information shared with Taiwan are increasing as cross-Strait ties expand and Chinese citizens visit Taiwan in greater numbers. China now has greater access to Taiwan and better opportunities to conduct intelligence operations against Taiwan citizens both in Taiwan and China.

Despite the recent cross-Strait rapprochement, the core sovereignty and security issues between Taiwan and China remain unresolved. China's military modernization has significantly increased Beijing's ability to achieve air, sea, and information superiority against Taiwan and to project power across the Taiwan Strait. Furthermore, important elements of the PLA's modernization are designed to restrict U.S. freedom of action throughout the Western Pacific. These "antiaccess/area denial" capabilities raise the costs and risks to the United States for intervention in a potential Taiwan conflict involving China.

As the cross-Strait military balance of power continues to shift in China's favor, Taiwan may seek to develop closer political ties with Washington and to acquire additional U.S. arms and related military assistance. Taiwan's diminishing ability to maintain a credible deterrent capability may provide incentives and create opportunities for Beijing to take on greater risk in its approach to cross-Strait relations, including pressuring Taiwan to move toward political talks or using military force to achieve political objectives.

Conclusions

- Cross-Strait economic, cultural, and educational ties continue to expand and deepen. However, domestic political dynamics and priorities in China and Taiwan still constrain movement on political and security issues.

- Since the Commission's 2012 report, Taiwan has used creative diplomacy to sign two free trade agreements and secure participation in a key international organization. Taiwan's expanding international space helps the country counterbalance its economic reliance on China by increasing its competitiveness in the world economy, raises the cost to Beijing of military coercion against Taiwan, and promotes regional stability.
- President Ma since his reelection in January 2012 has accelerated efforts to increase Taiwan's economic engagement with the United States and gain U.S. support for expanding Taiwan's international space while continuing to advocate for future U.S. arms sales.
- Taiwan's military over the last decade has improved its ability to conduct joint operations and has developed some asymmetric capabilities. However, China's rapid military modernization during this time has outpaced these improvements and negated many of the military advantages Taiwan previously held over China.

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SECTION 3: MACAU AND HONG KONG

Introduction

China exercises sovereignty over two former European colonies, Macau and Hong Kong. Both former colonies operate as special administrative regions (SAR) of the People's Republic of China (PRC) under the "one country, two systems" framework.* Control of Macau was officially transferred from the Portuguese Republic to the PRC in 1999, and control of Hong Kong reverted from British control to the PRC in 1997. While geographically close, the two former colonies are quite distinct, and the governance issues that Hong Kong presents differ markedly from those of Macau. Whereas Macau has experienced an economic rebirth, with booming prosperity and dramatic reduction in street crime under Chinese rule, Hong Kong was already a well-run, thriving economic powerhouse prior to its handover, and many of its citizens have felt more acutely the drawbacks of living under the new regime. The result, as one former Hong Kong official noted in a July meeting with Commissioners, is that "Macau is the patriotic SAR, while Hong Kong is the defiant one."[1]

During the 2013 report cycle, the Commission held a hearing in Washington, DC, on June 27 on Macau and Hong Kong. The Commission heard from expert witnesses on the evolution of the gaming industry in Macau and the investments there by three U.S.-based casino companies. The Commission also examined the implications to U.S. regulators and to the U.S.-based casinos of the gaming industry in Macau. The Commission hearing in June included testimony on the efforts in Hong Kong by prodemocracy forces to achieve universal suffrage in the elections of the legislature and executive as promised under Hong Kong's Basic Law. The Commission examined the increasing police surveillance of the prodemocracy movement and the decline of press freedom in Hong Kong. The Commission also visited Hong Kong in July and met with current and former government officials and representatives of nongovernmental organizations.

* The "one country, two systems" framework is a policy measure adopted by the PRC following the establishment of Hong Kong and Macau as SARs. The system grants Hong Kong and Macau the right to self govern their economy and political system to a certain extent, excluding foreign affairs.

A Note on this Section

The Commission is not an investigative or regulatory body but functions as a policy advisor to Congress. The purpose of the Commission's work in holding its June 27 hearing and in travelling to Hong Kong and the People's Republic of China in July 2013 was to collect information that would enable it to assess the risk to U.S. national and economic security from a variety of perspectives. As in all of its work, the Commission's ultimate goal is to report to Congress on the topics within its mandate and to make recommendations to Congress for appropriate policy and legislative changes. The Commission did not seek nor did it find evidence of wrongdoing by any U.S.-based casino company, either in Macau or Las Vegas.

Macau's Economy Depends on Gambling

The gaming sector is the most important element of the Macau SAR economy, and Macau's government is heavily dependent on a 35 percent tax on gross gaming revenue.[2] Macau's tax collections from the gaming sector in 2012 totaled $13.9 billion, which accounted for 87.5 percent of total government revenue.[3] As Macau's gambling sector has grown rapidly, Macau has accumulated the world's third-largest budget surplus as a percentage of gross domestic product (GDP).[4] Macau's per capita GDP, at $78,275, is 12 times the size of mainland China's and considerably higher than that of the United States at $49,964.[5]

Although gambling is illegal on the Mainland (with the exception of state-run lotteries), Beijing allowed Macau's gaming industry to continue operations following its reversion to PRC sovereignty.[6] Macau's gaming sector thrived and, in 2006, officially surpassed Las Vegas as the world's largest gambling market. Macau's official annual gross gaming revenue is now more than six times that of Las Vegas, surpassing $38 billion in 2012.[7] Taking off-book profits into consideration, the actual gaming market is estimated to be much higher. During the Commission's trip to Hong Kong in July 2013, Steve Vickers, former head of the Royal Hong Kong Police's Criminal Intelligence Bureau and an acknowledged authority on Macau's gaming sector and Asian organized crime issues, estimated that the real value of Macau's gaming industry is likely six times larger than the official reported size, making the actual market worth more than $200 billion, over four times Macau's 2012 official GDP.[8] (Mr. Vickers is now a private consultant and investigator in Hong Kong.)

The exponential growth of Macau's gaming revenue has been driven primarily by visitors from mainland China. According to the Macau government, 16.9 million people visited Macau from mainland China in 2012, accounting for 60 percent of total visitors. Other visitors are primarily from Hong Kong or Taiwan, accounting for 30 percent.[9]

Money Laundering in Macau

Macau in 2001 liberalized a home-grown, monopolistic concession system and opened bidding for casino operation licenses to a limited number of foreign casino operators.[10] The introduction of new and larger casinos led to substantial increases in cash flow, which consequently presented an increased risk for money laundering within Macau's financial and gaming institutions.* Among all financial institutions, casinos generally present the greatest risk for money laundering.[11] "It is the variety, frequency and volume of transactions that makes the casino sector particularly vulnerable to money laundering. Casinos are by nature a cash intensive business and the majority of transactions are cash based . . . It is this routine exchange of cash for casino chips or plaques, TITO [ticket-in, ticket-out] tickets,† and certified cheques, as well as the provision of electronic transactions to and from casino deposit accounts, casinos in other jurisdictions, and the movement of funds in and out of the financial sector which makes casinos an attractive target for those attempting to launder money,"[12] according to the Asia-Pacific Group on Money Laundering and the Financial Action Task Force, a Paris-based intergovernmental body.

In Macau there is an even larger risk of money laundering within the VIP gaming room operations, which are physically conducted within the casinos but remain outside of the casino's official oversight.[13] The risk is further enhanced because so much of the money that is wagered in Macau goes through the loosely regulated VIP rooms. In 2012, VIP baccarat rooms in Macau casinos accounted for 69.3 percent of total revenue from games of chance.[14]

The structure of VIP gaming operations—as an independent contractor of the casino—dates back to the 1930s and is legal under Macau law. But regulatory oversight of VIP rooms, junket operators, and affiliates who supply the clients and manage the money remains opaque and prone to substantial abuse.[15,16] "The movement of funds associated with gaming-related tourism is poorly understood and may pose particular money laundering risks, e.g., international movement of funds for casino junket operations."[17] The PRC's strict capital controls that limit the amount of money individuals can carry to or otherwise transfer from mainland China to Macau have created a unique opportunity for the VIP gaming rooms to participate in a grey financial market. Large sums of renminbi (RMB) are moved through the independent VIP gaming room operations with the help of junket operators and their affiliates on the Mainland. That renminbi can be converted to Hong Kong dollars by gamblers in the casino and then transferred abroad through a variety of legitimate means, such as bank or casino wire transfers.

According to I. Nelson Rose, professor of law at Whittier Law School, who testified at the Commission's June 27 hearing, Macau's weak enforcement of anti-money-laundering prohibitions comes, in part, "from lack of experience, since big-scale casino gambling is

* According to the most recent Macau government statistics, U.S. direct investment in Macau totaled $677.3 million at the end of 2011, although unofficial numbers put the figure between $8 billion and $10 billion. There are more than 30 U.S. firms doing business in Macau. U.S. Department of State, "U.S. Relations with Macau" (Washington, DC: August 16, 2013).

† A ticket representing large slot machine payouts in lieu of coins.

less than ten years old. And part comes from the enormous amounts of money coming in and the junket system, which make it difficult to track all the transactions and gives incentives to ignore what may be going on. And China likes the economic booms of Macau and Hong Kong, and has plans to spend hundreds of billions of dollars to create large regional centers around the two SARs."[18] Nevada regulators generally agree that the problem lies more with Macau and its loose regulations of VIP gaming room operators and junket operators in Macau and on the Mainland. While Nevada's affiliated casinos in Macau offer "robust compliance" with anti-money-laundering protocols, "that robust compliance, however, is only up to a point; that point is where the VIP room operators assume responsibility," said Nevada State Gaming Control Commission Chairman A.G. Burnett in testimony before the Commission.[19]

According to a 2013 report from the U.S. Department of State, the gaming industry in Macau "relies heavily on loosely-regulated gaming promoters and collaborators, known as junket operators,[20] for the supply of wealthy gamblers, mostly from nearby mainland China."[21] The report notes that in addition to supplying customers, the junket operators bear much of the risk that high rollers will renege on the unsecured loans that casinos and junket operators typically extend to heavy gamblers. (In the Macau system, the junket operators are allowed to extend credit to gamblers from the Mainland and buy chips directly from the Macau casinos to supply to their customers. If the customers fail to repay the loans, it is the junket operator who is not repaid. The casinos have already collected from the junket operators.) "Increasingly popular among gamblers seeking inscrutability and alternatives to China's currency movement restrictions, junket operators are also popular among casinos aiming to reduce credit default risk and unable to legally collect gambling debts in China, where gambling is illegal," the State Department report notes.[22]

One problem is the abuses of the junket operators in collecting debts from customers through threats of violence and other nonjudicial means. "Other extra-legal means of debt collection may indeed come into play," according to a 2007 University of Nevada study. "The extent to which extra-legal means of debt collection (i.e., threats, intimidation, violence, induced crime such as embezzlements, etc.) occurs is an obvious concern for regulators, especially those from outside Macau that oversee companies which are concession or subconcession holders in Macau."[23]

All of these concerns have led American companies operating casinos in Macau to take additional steps to prevent illegal activity in their operations. Some of those steps were detailed in a submission by the companies to the Commission and are set forth at the end of this section. The Commission is not in a position to evaluate the adequacy of these measures to insulate these companies from the danger of association with illegal activity. However, Mr. Rose, who was one of the witnesses at the Commission hearing, has in a subsequent article warned that in evaluating the danger of illegality "it is important . . . to distinguish between casinos (in Macau) that are licensed by U.S. states and those that are not." Mr. Rose noted further that, "in practice, there are two separate regulatory systems working in Macau. There are the casinos that are subject only to Macanese regulations. And there are those that are also subject to controls by states and nations outside of the PRC—in particular, the three casino operators who are also licensed by Nevada and other states."

Macau's junket operations have a history of affiliation with Asian organized crime,[24] which presents added risks for U.S.-licensed companies operating casinos in Macau, according to Nevada's state gaming regulators. Numerous junkets may have ties to organized crime, and public media and intelligence sources "have affiliated all but one of the seven VIP Room operator groups of interest with reputed Asian organized crime figures," according to Mr. Burnett.[25] "It is common knowledge [that] the operation of VIP rooms in Macau casinos had long been dominated by Asian organized crime commonly referred to as triads [and] the same [organized crime] figures are allegedly still working the VIP operations."[26]

U.S.-based casino companies are also subject to "suitability requirements" under state gaming laws that prohibit consorting with criminal elements, even outside the United States. Furthermore, the grey market nature of Macau's loosely regulated junket operators and underground banking system raises the possibility for exploitation of casinos by international criminals seeking to launder illicit funds. Although U.S.-licensed casinos have implemented strict safeguards to prevent criminal activity from occurring within their Macau casinos,[27] loose regulation by China and Macau of third-party junket operators and their affiliates that support the success of Macau casinos presents considerable risks.

Macau has taken steps to improve the efficacy of its laws preventing the abuse of gaming and financial institutions by criminals; however, according to Assistant Secretary for Terrorist Financing at the U.S. Department of the Treasury Daniel L. Glaser, Macau's regulators have fallen far short in complying with internationally recognized standards, and numerous deficiencies remain in its regulatory framework.[28] The PRC has also recently expressed interest in closer monitoring of Macau's gaming industry as part of its nationwide initiative to crack down on corruption. However, to date, the PRC has not implemented any significant policy measures to regulate Macau's grey market VIP gaming system.

The Role of Money Laundering and Capital Flight from the Mainland

The PRC maintains strict capital controls to limit the amount of cash taken out by individuals from mainland China to $3,260 per day and $50,000 per year.[29] Despite these restrictions, individuals from mainland China are able to bypass the PRC's capital controls and move large sums of money into Macau by making money transfers through various grey market channels. One of the most common methods is for individuals to physically smuggle cash.[30] Mainland Chinese may also bypass the PRC's capital controls via "pawn shops" and "jewelry dealers" in Macau.* Underground banks also

*It is common to witness individuals making purchases at "pawn shops" or "jewelry shops" using China's domestic bank card Unionpay to purchase items and immediately return them for Hong Kong dollars, which then can be moved out of the country. The "front" shops, which are play a key role in moving illicit funds outside of mainland China, directly transferring RMB to VIP accounts at Macau casinos.[31] Individuals will then collect the RMB in the form of special gambling chips at Macau casinos and cash them out in Hong Kong dollars after using the chips for gambling.[32,33] Although the exact amount of money moved through underground banks in unknown, Yan Lixin, secretary general of the China Center for Anti-Money-Laundering Studies at Fudan University in Shanghai, estimates that 30–40 percent of all capital moving through underground banking channels is dirty money being laundered.[34]

There is a high risk to Macau for money laundering, especially considering its gaming-driven economy. Macau is noted as a "jurisdiction of primary concern" in a 2012 report by the U.S. Department of State in its *International Narcotics Control Strategy Report*.[35] A 2013 State Department report specifically identifies Macau's junket operators as contributing to the vulnerability for money laundering and notes that "Macau Government officials indicate the primary sources of laundered funds—derived from local and overseas criminal activity—are gaming-related crimes, property offenses, and fraud."[36] The U.S. Central Intelligence Agency also notes that "Macau continues to face the challenges of managing its growing casino industry, money-laundering, and the need to diversify the economy away from heavy dependence on gaming revenues."[37] Moreover, *The Economist* reported that a memo sent in December 2009 from the U.S. consulate in Hong Kong to the U.S. Secretary of State said that "[Macau's] phenomenal success is based on a formula that facilitates, if not encourages, money laundering."[38] The memo noted that "[s]ome of these mainlanders are betting with embezzled state money or proceeds from official corruption, and substantial portions of these funds are flowing on to organized crime groups in mainland China, if not Macau itself."[39]

A 2009 report by the Financial Action Task Force, a multinational organization that sets standards for the prevention of money laundering and the financing of terrorism, provided multiple case studies outlining cash smuggling and money laundering in Macau. According to one case study, "Cash Smuggling and Underground Remittance," a Mainland customer who wanted to gamble in a Macau casino entrusted a junket affiliate with a large sum of money. The junket affiliate then brought the cash to a "front" shop that he operates as an underground bank in Zhuhai, a city in the Guangdong Province near the border of Macau. The cash was then divided into small lots, which were then smuggled into Macau by many "professional commuters." A junket operator in Macau then collected the cash and deposited the money into a casino account in the form of cash, checks, bank transfers, and remittances. When the full sum was deposited, the casino agent converted the sum into a cashier's order to the VIP room of the casino. The VIP room then issued chips to the Mainland customer, who could start gambling.[40]

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located throughout Macau and within casinos, also operate as underground banks by extending high-interest-rate loans to gamblers. *Financial Times*, "Macao Casino Boom Fuelled by Illicit Cash," January 3, 2012. *http://www.ft.com/intl/cms/s/0/833b06bc-1a63-11e1-ae4e-00144feabdc0.html*; U.S.-China Economic and Security Review Commission, *Hearing on Macau and Hong Kong*, testimony of I. Nelson Rose, June 27, 2013.

An indicator of the money-laundering problem in Macau is evident in the rising number of suspicious transaction reports * filed with Macau's financial intelligence unit. In 2012, the total number of "suspicious transaction reports" filed increased to 1,840 from 1,563, up 18 percent from 2011.[41] The top three reasons triggering suspicious transaction reports in 2012 were (1) the inability of clients to provide identification or important personal information, (2) the possible match of a client with an internal watch list or other black list, or (3) a client's attempt to convert gambling chips without partaking in gambling activities.[42] Reports originating specifically from Macau's gambling institutions have increased as a share of total suspicious transaction reports from 52 percent in 2007 to 72 percent in 2012,[43] indicating a potential, growing, money-laundering problem in Macau's gaming institutions or a growing willingness to report.†

Money Laundering in Macau's Gaming System

In Macau, one of the main channels for money laundering is in the gaming sector through underregulated junket operators or VIP room operators and their affiliates on the Mainland, which include the underground banking system that supports their operations. The junket operators "smooth a money-laundering route that processes billions of dollars every year," according to *The Times of London*.[44] U.S. regulators have also described junket operators and their affiliates as especially able to offer money-laundering services.

Junket operators attract high-stakes gamblers to VIP rooms within Macau casinos by offering clients special services, including travel arrangements, hotel rooms, loans and money transfers, and a stack of chips waiting at a reserved chair at a baccarat table. In return, the junket operators receive a commission on the amount of chips they deal and a percent of the gambling losses incurred by their VIP clients.‡ Unlike gambling industries in the United States and Singapore, casinos operating in Macau—including subsidiaries of U.S.-licensed casinos—are heavily dependent on the junket system as the primary source of income. Mr. Vickers noted the heavy reliance of U.S.-licensed casinos on the Macau junket system during a briefing with the Commission in July: "Without the junkets,

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* The Macau SAR Financial Intelligence Office requires casino concessionaires, subconcessionaires, and junket promoters to report any "transaction relating to the practice of gaming or betting that, given its nature, unusual nature or complexity, indicates an activity of money laundering or terrorist financing." Jorge Godinho, "The Prevention of Money Laundering in Macau Casinos," *Gaming Law Review and Economics* 17:4 (2013): 272.

† Suspicious transaction reports from the casinos rose from 347 in 2007 to 1328 in 2012. Reports from all other financial sources in Macau rose from 343 to 510 during the same period. Government of Macau, *Financial Intelligence Office Newsletter for Gaming Sector* (Macau, SAR: Financial Intelligence Office, 2007–2013), *http://www.gif.gov.mo/web1/doc/Newsletter/Casino_Newsletter_Issue_8_201305.pdf*.

‡ Junkets frequently receive a commission from the casino based on total gaming play, or "rolling chip turnover." This commission is based on the number of chips dealt, guaranteeing the junket will receive a commission whether the client wins or loses. The commission is determined in the contract between the junket and the casino and usually ranges from 0.8 percent to 1.25 percent. Carlos Siu Lam, "Controlling Internal Operations Risk: VIP Rooms in Macau," *Casino Enterprise Management*, *http://www.casinoenterprisemanagement.com/articles/october-2012/controlling-internal-operational-risk-vip-rooms-macau*; Wuyi Wang and William R. Eadington, "VIP-Room Contractual System of Macau's Traditional Casino Industry" (Reno, NV: University of Nevada, Working Paper 07–001, 2007), p. 6. *http://www.business.unr.edu/econ/wp/papers/unreconwp07001.pdf*.

none of the U.S. operators would make a red cent."[45] In 2012, baccarat, the preferred game of high rollers in VIP rooms, accounted for 69 percent of total casino-generated revenue in Macau.[46]

Although junket operators are common throughout the world—including Las Vegas, where they are referred to as "independent agents"—junket operators in Macau are significantly more involved in gambling operations and operate very differently, with far fewer restrictions. According to the written testimony submitted for the June 27 Commission hearing by Mr. Rose:

> *The Macau VIP Gaming promoters, on the other hand, are nothing like the traditional junket operators associated with American casinos, who were often paid a flat fee per head to bring in players. The Macau VIP gaming promoters can do virtually every part of the gambling transaction: recruit players, arrange transportation, provide credit, operate the gaming room in the casino, and collect the gambling debt.*[47]

Not only is the heavy reliance on the junket system and the direct involvement of junket operators in gaming transactions uncommon outside Macau, the business relationship between Macau casinos and junket promoters is also unique. Macau's junket system is not subject to the same regulatory requirements as casinos, and it is up to casinos, not the gaming regulator, to craft due diligence procedures with junket operators.[48] Also, unlike states such as Nevada, where junket operators are subject to in-depth background checks, strict internal control standards, and independent audits that are conducted in VIP rooms, in Macau, obtaining a junket license is a cursory process, and VIP rooms rely on in-house accountants to report on the financial status of their business.* [49]

According to experts who provided testimony to the Commission, Macau's junkets may have links to organized crime. During the Commission's June 2013 hearing, Mr. Burnett noted that "it is common knowledge that the operation of VIP rooms in Macau casinos had long been dominated by Asian Organized Crime (AOC), commonly referred to as 'triads.'"[50] Former Director of the Financial Crimes Enforcement Network of the U.S. Treasury Department James H. Freis, Jr., also recognized the possible link between Macau junkets and the triads in his written testimony. He wrote that "in some capacity, the involvement of organized crime groups such as China's triads is likely." Finally, during the Commission's trip to Hong Kong in July, Mr. Vickers noted the junkets' connection to organized crime: "The junket model in Macau should be the enemy, not the industry in Macau, because it is demonstrably connected to organized crime." However, despite likely affiliation with the triads, junkets continue to proliferate in Macau casinos. From 2006 to 2013, the total number of licensed junket promoters grew from 76 to 202.[51]

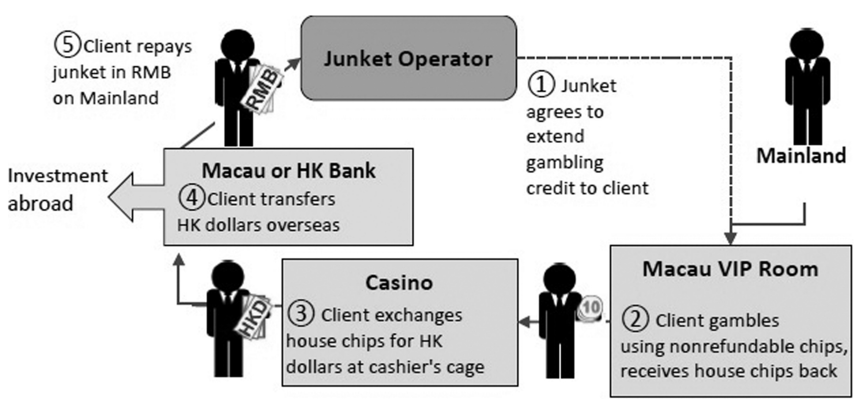
* Representatives of Wynn Resorts and MGM Resorts met with the Commission on October 21 and 23 and indicated that they maintain supervision of all the VIP gaming rooms through surveillance videos, cash room auditing, and personnel controls.

Role and Risks of Macau's Junket System

Due to the PRC's limit on the amount of money an individual can move outside of mainland China, Macau VIP room operators hire or partner with junket affiliates, or "subjunkets," to make arrangements in mainland China to extend credit to wealthy Mainland Chinese clients to gamble in Macau's casinos—essentially bypassing the PRC's capital controls. In turn, junket affiliates are then required to collect debts incurred by clients in Macau casinos back on the Mainland in the form of RMB (see figure 1, below).

Although junket promoters are licensed in Macau, VIP room operators and their affiliates are composed of an extensive network of junket financiers, credit guarantors, and other profit participants, which are all unlicensed by Macau's gaming regulator. Such junket affiliates are often comprised of local groups that have knowledge of Mainland clients' credit histories to ensure that they will be able to collect gaming debts when the client returns to the Mainland.[52] However, the collection of gambling debts is illegal in mainland China, presenting the risk of junket operators and their affiliates resorting to extrajudicial measures to collect incurred debts, which can lead to threats and violence, according to Mr. Rose.[53] A 2008 report published by the Macau Polytechnic Institute shed light on the risks of unenforceable debt collection when it examined 99 publically reported cases of VIP gamers from mainland China.[54] The report found that seven of the "high rollers" included in the study ended up either committing suicide or were murdered.[55]

Figure 1: Simplified Money-laundering Technique Using Junket/Casino System



Source: U.S.-China Economic and Security Review Commission (Washington, DC).

Money Laundering in Financial Institutions

Outside of the gaming industry, Macau's banks have also been involved in money-laundering activities. One well-known example occurred in 2005 when the U.S. Treasury Department's Financial Crimes Enforcement Network found a Macau-based bank, Banco Delta Asia, to be participating in the laundering of counterfeit U.S. dollars on behalf of the North Korean government.[56] The Financial Crimes Enforcement Network recognized Banco Delta Asia as a primary money-laundering concern, stating, "Banco Delta Asia's special relationship with the DPRK [Democratic People's Republic of Korea] has specifically facilitated the criminal activities of North Korean government agencies and front companies. One well-known DPRK front company that has been a client of [Banco Delta Asia] for over a decade has conducted numerous illegal activities, including distributing counterfeit currency."[57]

The bank was also linked to drug smuggling. "In addition to facilitating illicit activities of the DPRK, investigations reveal that [Banco Delta Asia] has serviced a multi-million dollar account on behalf of a known international drug trafficker," the Financial Crimes Enforcement Network noted.[58] Following the investigation, in 2007 the U.S. Treasury Department finalized a rule to ban the Macanese bank from access to the U.S. financial system under the USA Patriot Act.[59]

Vulnerabilities in Macau's Regulatory System

Macau first passed legislation requiring financial and gaming institutions to report suspicious transactions* in 1998, which was replaced by a revised set of laws in 2006 that criminalized money laundering and required stricter reporting in the gaming sector.[60] The legal reforms in 2006 brought Macau more in line with global anti-money-laundering standards. Improvements included reporting requirements for suspicious transactions over a certain cash value; customer due diligence procedures intended to prevent gambling by corrupt officials using public funds; and additional recordkeeping requirements.[61] However, according to Mr. Glaser, multiple deficiencies still exist in Macau's anti-money-laundering and counter-terrorist-financing framework, including Macau's refusal to seize stolen money.[62]

Compliance with International Standards

The premier international standards for effective anti-money-laundering and combating the financing of terrorism are set by the Financial Action Task Force, a multinational body established in 1989.[63] The organization, of which the United States and Macau are both members, has created a list of 40 recommendations to prevent money laundering and the financing of terrorism. Macau is subject to a periodic review of its compliance with the recommendations as a member of the Asia-Pacific Group on Money Laundering, Asia's regional Financial Action Task Force body. The most recent evaluation of Macau's compliance with Financial Action Task Force

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*The Macau SAR Gaming Inspection Coordination Bureau defines a suspicious transaction as "The operation relating to the practice of gaming or wagering which, by its nature, non-habitual manner or complexity, indicates any activity of money laundering or terrorist financing." Macau SAR Gaming Inspection Coordination Bureau, "Instruction No. 2/2006 Preventive Measures against Crimes of Money Laundering and Terrorist Financing," p. 2. *http://www.gif.gov.mo/web1/en_law.html*.

recommendations was conducted in 2006 and published by the Asia-Pacific Group in 2007. Macau's next evaluation will occur in 2015 or 2016, and its compliance will be gauged against a new set of Financial Action Task Force recommendations that were revised in 2012.[64]

The 2007 evaluation recognized the risk of money laundering in Macau's gaming sector and noted multiple deficiencies in its anti-money-laundering and counter-terrorist-financing framework. According to the report, "[Macau's] close proximity [to the] border with [the] PRC and its open economy do pose a threat to ML/FT [money laundering and financing of terrorism] activities."[65] The evaluation also discovered several specific deficiencies in Macau's compliance with the Financial Action Task Force recommendations, including the refusal to respond to foreign requests to freeze assets, the inability to effectively implement UN Security Council resolutions on the financing of terrorism, and the inability of Macau's Customs Service to investigate money-laundering cases. Other shortcomings specific to the gaming sector included a lack of a risk-based assessment of gaming customers and operators, inadequate inspection and oversight of casinos and junket operators and promoters, a lack of communication among gaming regulators, and a high threshold ($62,500) for reporting large transactions at casinos.[66] In the report, Macau received a "compliant" rating in only seven of a total of 49 recommendations,* with the majority receiving a rating of only "partially compliant." Against the same recommendations, the United States was "compliant" in 15 of 49 recommendations in its 2007 evaluation, with the majority receiving a rating of "largely compliant."[67]

Since the report was published in 2007, "Macau has yet to address a number of deficiencies in its AML/CFT [anti-money-laundering and counter-terrorist-financing] framework that were identified by the APG [Asia-Pacific Group on Money Laundering]," according to Mr. Glaser.[68] He noted four major deficiencies identified in the evaluation report that have yet to be addressed: (1) Macau still has not implemented a method to freeze bank accounts in anti-money-laundering and counter-terrorist-financing cases; (2) Macau has not yet enacted a number of legal enhancements to its customer due diligence requirements; (3) Although Macau has been asked to lower its high transaction reporting threshold for casinos to $3,000 as recommended by the Financial Action Task Force,† Macau continues to allow a very high threshold of $62,500 for reporting large transactions at casinos; (4) Macau has yet to implement an effective, cross-border, cash declaration system.[69]

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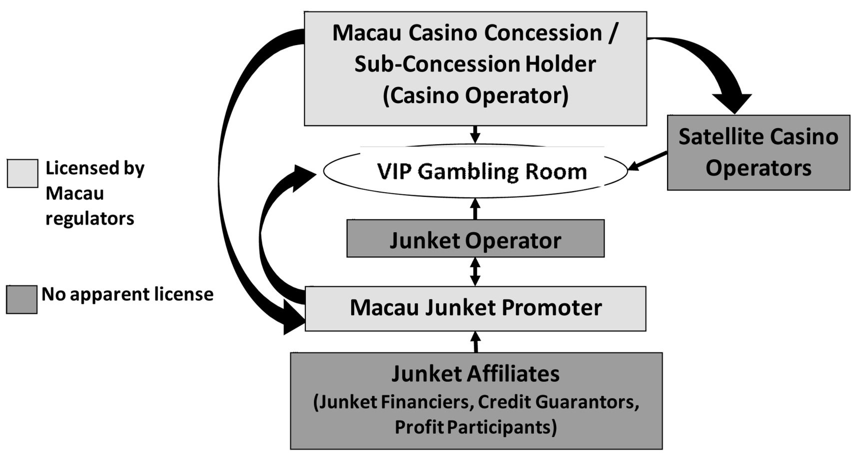
* The mutual evaluation measured compliance with the Financial Action Task Force's 40 recommendations (2003) and included an additional nine special recommendations on counter-terrorist-financing measures. Compliance with the Financial Action Task Force recommendations is rated on a scale that includes "compliant, largely compliant, partially compliant, and non-compliant." Asia-Pacific Group on Money Laundering, *APG/OGBS Mutual Evaluation Report on Macau, China* (July 24, 2007), p. 210. *http://www.apgml.org/documents/default.aspx?s=date&c*=7.

† Financial Action Task Force Recommendation 12 sets the reporting threshold at $3,000 for gaming institutions. Financial Action Task Force, "FATF Recommendation 16: Reporting of Suspicious Transactions and Compliance, Text of the Recommendation and Interpretative Note" (Paris, France). *http://www.un.org/en/sc/ctc/docs/bestpractices/fatf/40recs-moneylaundering/fatf-rec16.pdf*.

Shortcomings in Macau's Gaming Sector Regulation

Although casinos and junket promoters are licensed by Macau's gaming regulator, there remain significant vulnerabilities with unlicensed junket operators, junket affiliates, and satellite casinos * that play an integral role in Macau's gaming system. These entities are not subject to the same regulations and reporting requirements as licensed entities and thus are more susceptible to money laundering and influence from organized crime (see figure 2, below). During the Commission's June 27 hearing, Mr. Burnett noted this vulnerability in his written testimony, that "criminal transactions are widely alleged to take place just out of the direct purview of the casino," pointing to the susceptibility for criminal organizations to infiltrate junket groups.[70] "Such activities include back-betting, side-betting, loan sharking, violent loan collections, underground banking, and money laundering." [71]

Figure 2: Vulnerabilities in Macau's Licensing System



Source: U.S.-China Economic and Security Review Commission (Washington, DC).

Macau's junket operators are not subject to the same transparency requirements as casinos, and strict privacy controls prevent U.S. regulators from obtaining information on individuals operating in Macau subsidiaries of U.S. parent casinos.[72] The Macau SAR Gaming Inspection and Coordination Bureau (Portuguese acronym, DICJ), Macau's gaming regulator, is also only required to publically disclose the names of licensed junket promoters in Macau and does not disclose financial information. More importantly, information about the unlicensed junket operators, their affiliates, and third-party satellite casinos is inaccessible to the public and regulatory counterparts overseas. The lack of information presents difficulties in determining the origin of money flowing through such operations, and U.S. state regulators do not have the

* Satellite casinos are owned and operated by third parties and are not considered concession or subconcession holders. I. Nelson Rose, "Does Macau Create Legal Risks for American Operators?" *Gaming Law Review and Economics* 14:6 (2010): 454.

authority or resources to independently conduct investigations in Macau or other foreign jurisdictions.[73] Mr. Burnett explained the legal barrier in obtaining relevant information from Macau regulators in his testimony to the Commission:

> *The Macanese Privacy Act 8/2005, which took effect February 2006, has varying degrees of interpretation. It essentially forbids businesses there from transferring data on individuals to any other country. In general, therefore, it has precluded us from obtaining information from our operators to the degree we are accustomed to.*

Although Macau regulators require reporting for transactions that are deemed "suspicious" in nature, there are shortcomings in the reporting requirements of gaming institutions. Macau's eyes and ears for the gaming sector, the Gaming Inspection and Coordination Bureau, require gaming institutions to automatically report all transactions above $62,500.* In the 2007 evaluation published by the Asia-Pacific Group, this threshold is considered too high to comply with Financial Action Task Force recommendations.[74] Moreover, the Gaming Inspection and Coordination Bureau does not report detailed information on the number or nature of such reports filed to the public; however, Gaming Inspection and Coordination Bureau officials have indicated that the number of reports filed annually is increasing, reaching hundreds of thousands per year.[75]

Influence of PRC Regulations on Macau

Capital controls implemented by the PRC that are intended to prevent illicit cross-border transfers should, in theory, hinder Macau's economic growth. In reality, capital controls have caused more money to cycle through Macau due to Macau's thriving VIP gaming industry, which relies on junkets and their affiliates to facilitate cross-border money transfers for clients via underground banks. The circumvention of capital controls by junkets to get money from mainland China to Macau has been tolerated by Beijing and, according to Mr. Rose, "Beijing doesn't view this as much of a problem, unless it becomes a scandal, as when government officials embezzle [money] and lose it in Macau."[76] Recent reports, however, have signaled that Beijing is beginning to take measures to prevent illicit cross-border transfers and money laundering in Macau as part of the nationwide crackdown on corruption promoted by PRC President Xi Jinping. A December 2012 *Wall Street Journal* article reported that police in mainland China and Macau detained multiple individuals who work for Macau's biggest junket operators, a move described by a Macau casino executive as "an attempt by the Chinese government to tell people in the market that they need to behave, especially regarding underground money transfers."[77] The recent appointment of the PRC's former Hong Kong liaison Li Gang to deputy director of the Central Liaison Of-

* All transactions under the $62,500 threshold that are deemed suspicious in nature are required to be reported to the Macau SAR Financial Intelligence Office. Jorge Godinho, "The Prevention of Money Laundering in Macau Casinos," *Gaming Law Review and Economics* 17:4 (2013): 271–272.

fice in Macau was also seen as an effort to gain closer oversight over Macau's gaming industry.[78] Despite these actions, analysts such as Grant Govertsen of Macau-based Union Gaming Research, remain skeptical about China engaging in a large-scale crackdown.[79] In response to comments from Beijing's liaison office, Mr. Govertsen predicted in February that "there would not be any changes in policy on Macau," based on Beijing's official pronouncements.[80]

Experts have argued that Macau's heavy reliance on junkets operating in the grey market can only be reduced if mainland China repeals its strict capital controls or permits the collection of gambling debts in mainland China.[81] The PRC's capital controls have encouraged clients to utilize junkets to facilitate money transfers, thus making it difficult to determine the origin of funds coming from mainland China. On top of the capital controls, PRC regulations forbidding the collection of gambling debts have given rise to a troubling grey market. Unlike the United States, where collection lawsuits by casinos can be filed and gamblers can be charged criminally for writing bad checks,* casinos are not allowed to collect gaming-related debts through the courts in mainland China. This prevents Macau casinos from directly seeking VIP customers, and they instead rely on unsupervised junket operators to attract clients. Casinos in Macau would prefer to attract VIP clients themselves and, according to Mr. Rose, "the casinos want to get rid of [VIP operators because the casinos themselves] want to be the VIP operators."[82]

Implications for the United States

In Macau, undeclared cross-border cash flows, criminal influence in the opaque junket system, an ambiguous privacy law preventing disclosure of criminal activities, and substandard anti-money-laundering and counter-terrorist-financing regulations have several implications for the United States. First, Macau's junket system and its apparent link with organized crime present legal risks for the foreign affiliates of U.S.-licensed casinos operating in Macau. Those affiliates are dependent for their revenues on the same loosely regulated junket and shadow banking system. Second, Macau's gambling system has attracted the attention of Chinese nationals seeking to circumvent the PRC's strict capital controls. Some are corrupt officials hoping to invest abroad funds received through bribery and extortion—money that may be used for other illegitimate purposes in order to escape notice and taxation. Third, individuals or criminal groups involved in activities that have the potential to threaten U.S. national security may be able to exploit Macau's underregulated financial and gaming institutions to disguise illegally obtained funds, which could be used in a variety of nefarious ways against the United States. North Korea has used Macau's fi-

* Gambling debts in the United States can be collected through some state courts, but the process can be difficult and expensive. Some courts outside Nevada may choose not to honor debts for gambling if that activity is considered illegal in that state. Holders of unpaid gambling debts have sometimes resorted to criminal prosecutions for fraud in order to coerce payments from debtors. Casinos also make a practice of partially forgiving debts in order to collect a fraction of money owed by gamblers. I. Nelson Rose, telephone interview with Commission staff, September 14, 2013.

nancial system to launder counterfeit U.S. dollars, for example. Money laundering has proven useful in other criminal activities, such as the international smuggling trade in small arms, drugs, and cigarettes.

Macau's junket system and its susceptibility to organized crime and money laundering present direct legal risks for U.S.-licensed casinos operating in Macau. The business models of U.S. parents' Macau casinos are based on the losses of VIP clients introduced to the casinos by junket operators. As Mr. Burnett noted, "It is what the business model allows to occur outside of the casino's purview (in the VIP rooms and with the junket operators) that may pose problems."[83] U.S.-based casinos risk loss of their state-issued license if they become associated with crime figures abroad. Such rules are known as "suitability" requirements. According to the trade publication *Casino Enterprise Management*:

> *At its core, suitability involves a judgment about an individual's character based on his or her history and a prediction about his or her likely future behavior. It necessarily immerses the regulator in the murky areas of social science, psychology and even philosophy. In making a licensing decision, a gaming board or commission must determine the eligibility and suitability of each applicant and, in the case of business entity applicants, associated qualifiers. The burden is always on the applicant to establish eligibility and suitability through clear and convincing evidence as to his or her character, reputation, integrity, business probity, experience and ability, financial means and responsibility, and any other criteria that the board or commission may deem appropriate.*[84]

All U.S. casinos are licensed by at least one U.S. state.[85] Respective state regulators have the power to monitor the activity of U.S. companies in Macau and can exercise the right to revoke a casino's state license if a casino licensed in its state is determined to be associating with criminals, even if those associations are outside U.S. borders. Nevada, for example, requires that it review the overseas operations of casinos licensed in the state to determine if a licensee is complying with its Foreign Gaming Statute, which prohibits licensees from engaging in activity that "reflects or tends to reflect discredit or disrepute upon this state or gaming in this state."[86] New Jersey's Casino Control Act has similar stipulations, requiring licensees to be of "good character, honesty and integrity" on a continuing basis, obliging them to provide clear and convincing evidence in support.[87]

Issues Facing U.S.-licensed Casinos in Macau

U.S.-licensed casinos began operating in Macau in 2004, when Sands opened its first gambling establishment. Currently, three U.S.-licensed casinos have operations in Macau: MGM Resorts International, Las Vegas Sands Inc., and Wynn Resorts Ltd. All three casinos have come under various forms of regulatory scrutiny regarding their Macau operations.

Issues Facing U.S.-licensed Casinos in Macau—*Continued*

MGM—In 2009, MGM ran into trouble when a New Jersey gaming regulator investigated the casino's joint-venture partnership with the daughter of the Macau casino mogul Stanley Ho. In a special report by the New Jersey Division of Gaming Enforcement, Stanley Ho's daughter was deemed unsuitable under New Jersey's Casino Control Act, based on family links to organized crime in Macau and the PRC.[88] As a result of the report, in March 2010 MGM decided to enter into a settlement with the New Jersey Division of Gaming Enforcement that required MGM to divest 50 percent of its stake in a New Jersey casino. The agency also barred MGM from applying for a casino license.[89] In 2013, a petition was approved to allow MGM to apply for permission to retain its interest in its New Jersey assets, but a decision on the application will not be made by New Jersey regulators until a more thorough investigation is conducted to determine MGM's compliance with the state regulations."[90] MGM noted in a meeting with Commissioners and staff on October 23 that Nevada, Maryland, Illinois, Michigan, and Mississippi regulators had found no suitability issues relating to MGM's partnership with Ms. Ho.

Las Vegas Sands—Intracompany transfers* have presented a risk of junkets associated with triads transferring money from Macau into the United States. Evidence from a 2010 lawsuit filed by a former Sands executive included a ledger detailing that Sands had transferred over $28 million for more than two dozen junket operators between Macau and Las Vegas.[91] Two junket operators who were listed on the ledger, Cheung Chi Tai and Charles Heung, were identified by the U.S. Senate Permanent Subcommittee on Investigations as officers of triad groups in a 1992 report on organized crime in Asia.[92] In the report, Charles Heung was identified as an officer of the Sun Yee On triad,[93] and Cheung Chi Tai was identified as an officer of the Wo Hop To triad.[94]

As a result of increasing concerns from regulators, Sands has reportedly restructured its compliance functions, which entailed discontinuing intracompany transfers on behalf of its "high-rolling customers."[95] In addition, the casino also hired three former Federal Bureau of Investigation (FBI) agents to strengthen anti-money-laundering efforts and improve background checks of VIP customers and junket operators.[96]

Wynn—In 2012, Macau police detained a partner of one of Macau's major junket operators that had ties with the former Communist Party chief in Chongqing, Bo Xilai. The junket operator the individual was affiliated with was reported to operate in both Wynn and Las Vegas Sands casinos.[97]

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* Intracompany transfers, or "cross-property deposits," are common between foreign subsidiaries of U.S. casinos and their U.S. parent casinos. They are subject to compliance with the Currency and Foreign Transactions Reporting Act of 1970 (commonly referred to as the "Bank Se-

Continued

The success of Macau's gaming sector is closely tied to the underground and shadow banking system to facilitate money transfers from mainland China.[98] Junket operators and their affiliates utilize underground and shadow banks to extend loans and facilitate cross-border transfers for Mainland customers who want to gamble in Macau, allowing them to bypass China's capital controls. Although the exact amount of credit extended to Macau gamblers and the amount of money flowing from mainland China to Macau via underground banks is unknown, the Chinese shadow banking system overall "poses serious risk to China's financial and social stability."[99]

Furthermore, the loosely regulated junket and shadow banking system that support Macau's gaming industry may allow individuals involved in criminal activities that threaten U.S. national security to exploit financial and gaming institutions in Macau to disguise illegally obtained funds. After money has effectively been "laundered," criminals may freely move those funds in the international financial system, and there is a risk of "dirty money" making its way into the United States or other countries to be used for illegitimate purposes. Criminals may exploit intracompany accounts to move money from casino subsidiaries in Macau into the United States.[100]

Macau's banking institutions have also presented a risk to the United States. As in the case of Banco Delta Asia, individuals or organizations involved in activities against the interests of the United States may exploit financial institutions in Macau to launder counterfeit U.S. dollars, disguise financial transfers, or deposit funds from illegal activities such as drug trafficking. Because Macau's law enforcement agencies lack certain capabilities to effectively freeze or seize assets as identified in the 2007 mutual evaluation, it may be difficult to prevent the financing of criminal or terrorist activities in a timely manner.[101]

Submissions from U.S.-based Casino Operators

The Commission met with two U.S. casino companies, Wynn Resorts and MGM Resorts International, on October 21 and 23 at their request. The two companies disagreed with some portions of this section and offered additional information of their own with respect to actions they have taken to mitigate the risks the Commission and others have identified. Their information follows.

Wynn: "Macau's junkets operators are under continual supervision and audit by the gaming regulator, financial intelligence unit and monetary authority. Further, Macau casino companies such as Wynn are active participants in VIP rooms providing dealers, supervisors, pit managers and security. The rooms are also under surveillance by Wynn staff and the gaming regulator who has full access to Wynn's surveillance system. In addition to regulatory audits, Wynn's internal audit group audits junket compliance with AML [anti-money-laundering] rules/procedures.

crecy Act" or "BSA"). Nevada Gaming Control Board, telephone correspondence with Adriana Fralick and Commission staff, September 23, 2013.

Submissions from U.S.-based Casino Operators—*Continued*

"Wynn files Suspicious Transaction Reports every month. Recently, Wynn Macau employees became suspicious of an attorney gambling with funds wired to the casino from a questionable account. The report Wynn Macau made to the Hong Kong Police resulted in uncovering and prosecuting a system of embezzling from client trust funds. Wynn Macau is actively vigilant, using years of experience in law enforcement and gaming, with respect to suspicious financial activities. The company has a strong incentive to report such activities because the company is legally required to do so and the gaming licenses of the company are at risk. The company trains its employees to be zealous in reporting anything that may be even considered slightly suspicious. For example, if a customer comes to the casino, plays for cash, and wins $25,000 or more and refuses to provide proper identification when he attempts to cash out, we not only file a Suspicious Transaction Report, we also refuse to cash out the customer.

"The Macau authorities and Wynn are active participants in VIP rooms providing dealers, supervisors, pit managers and security. The rooms are also under surveillance by Wynn staff and the gaming regulator who has full access to Wynn's surveillance system. In addition to regulatory audits, Wynn's internal audit group audits junket compliance with AML rules/procedures.

"Junkets and subjunkets are licensed by the gaming regulator if they pass a background check and police clearance. Wynn Macau then engages in its own due diligence of its junkets prior to allowing them to commence operations. Wynn Macau only does business with licensed junket operators (after all background screening is completed and the junket found suitable to do business with Wynn Macau).

"With respect to know-your-customer-protocols, Macau casinos are required to screen their patron databases and Wynn Macau employs the Worldcheck Database to screen for patrons who may pose AML, crime/fidelity, terrorism, OFAC [Office of Foreign Assets Control] or PEP [politically exposed persons] risk. Macau is in the process of exploring currency importation declarations."

MGM: "Macau's internal controls are sufficient to safeguard assets and promote fair and equitable gaming within the Macau jurisdiction. In addition the Maryland Lobbying Gaming Control Commission found that MGM Macau has policies and procedures that not only minimally satisfy the rules, regulations and laws of the Macau government, but have instituted procedures that go substantially above and beyond these minimum requirements.[102]

"MGM background checks are conducted on the following entities related to gaming promoters: Individual applicants and company's shareholders and directors (and) any individual, entity or group providing a guarantee of credit in connection with the VIP room operations in MGM Macau."

Universal Suffrage, Press Freedom, and Police Surveillance in Hong Kong

Tensions over erosions of Hong Kong's traditional civic freedoms appear in Hong Kong street demonstrations and in social media sites. Issues of particular concern include the Hong Kong government's slow progress in granting the universal suffrage stipulated in the region's Basic Law, tightening restrictions on the press, and stepped-up police surveillance of civil rights activists. Several legislators who met with Commissioners in Hong Kong in July expressed concerns that growing political polarization and heavy-handed efforts by the pro-Beijing-controlled government to stifle dissent threaten to render the city ungovernable.[103] These concerns are borne out by the numbers. In one July poll, the pro-Beijing chief executive scored a record low approval rating of just 15.8 percent, while 37 percent of respondents reported that they do not trust the Hong Kong government.[104,105]

Hong Kong never enjoyed a fully democratic government under British rule. But before Hong Kong's return to the PRC, Hong Kong's citizens enjoyed popular participation in political affairs as well as "a vibrant media," "an effective and meritocratic bureaucracy," rule of law, and the protection of key civil rights and liberties under the Letters Patent and Royal Instructions that served as Hong Kong's principal constitutional documents.[106] Hong Kong's Basic Law, a sort of "mini-constitution promulgated to implement the basic policies of the central government toward Hong Kong," provides for "the separation and preservation of the two economic, social, political and legal systems through the legal entrenchment of Hong Kong's [preexisting] systems" until 2047.* [107,108]

Sophie Richardson, China director at the Human Rights Watch's Washington office, testified at a Commission hearing on June 27 that since its return to PRC sovereignty in 1997, Hong Kong has "remained the only part of China with a robust and independent legal system, relatively strong protections on the freedom of expression, and limited but regular elections." [109] But she noted that since the handover, there have been very worrying developments, as maintaining the economic strength of the region's traditionally capitalist system has clearly been prioritized by Beijing, whereas preservation of the civil rights associated with political autonomy has not. Dr. Richardson noted that "large numbers of Hong Kong residents continue to object to what are considered intrusions on Hong Kong's autonomy and rally in remarkable numbers to remember events like the Tiananmen massacre," but government efforts to restrain their freedom have grown.[110] Freedom House's Madeline Earp told the Commission that in the initial years following the handover of Hong Kong to mainland China, the region's role as a "golden goose" for the Mainland helped to insulate it from anti-democratic pressures in Beijing.[111] Nowadays, however, the rel-

*The Basic Law of the Hong Kong Special Administrative Region (SAR) is a constitutional document that sets out the basic principles agreed to in the 1984 Sino-British Joint Declaration on the Question of Hong Kong. The Joint Declaration spelled out agreed-upon terms for the government of Hong Kong after Great Britain's return of the region to the sovereignty of the PRC. According to this declaration, the Hong Kong SAR would retain its capitalist system and lifestyle for 50 years. The declaration went into effect after the handover of Hong Kong on July 1, 1997. The Basic Law was drafted by a committee of Mainland and Hong Kong Chinese and was formally adopted by the National People's Congress on April 4, 1990.

ative affluence of many Mainland coastal cities and ports, such as Shanghai, has reduced Hong Kong's economic importance to the Mainland. While Hong Kong does still play a unique economic role within the PRC that Beijing is "loathe to tinker too much with," Hong Kong's prosperity is not the impenetrable shield of civic freedoms it once was.[112] Beijing also wields greater political leverage in the region, because many Hong Kong business leaders now hold Mainland investments that they did not have 20 years ago.

Recent examples of Beijing's constraints on Hong Kongers' freedom include more frequent requests to the National People's Congress Standing Committee to interpret the Basic Law, appointments of pro-Beijing partisans in key Hong Kong institutions, denials of Hong Kong visas to Chinese dissidents, and an inflammatory proposal designed by the Hong Kong Curriculum Development Council* to require Hong Kong schools to teach students the nationalistic version of history taught on the Mainland.[113,114] Backlash against this national education initiative reached a crescendo in the summer and fall of 2012. At least 30,000 people reportedly attended a July 2012 protest against the education plan, while roughly 30,000 attended a September 2012 protest.[115] Many thousands of protestors waved colonial flags. To the organizers, the flag symbolized an era of greater protection of civil rights and liberties under British colonial rule.[116,117] In the end, the colonial flag demonstrations grew so big and intense that the Hong Kong government retracted plans for the new patriotic history lessons.[118] But while popular resistance to the nationalistic education requirements demonstrated the persistence of self-determination for Hong Kong's citizens, it contrasts with many more examples of how important rights and liberties in the region are eroding.

Universal Suffrage

The most significant problem for democratic rights activists is the Hong Kong government's lack of progress toward ensuring universal suffrage in the election of the Legislative Council and the chief executive. Although the Basic Law articulates a goal of achieving some form of universal suffrage in the elections of both the chief executive and the legislature, the dominance of the Hong Kong government by politicians allied to Beijing has stymied progress in achieving universal suffrage. Beijing-friendly current Chief Executive Leung Chun-ying (CY Leung) is described as "a populist on economic issues" with "a limited tolerance of democracy and public demonstrations."[119]

Despite assurances by Chief Executive Leung that he supports universal suffrage, neither the Mainland government nor the Hong Kong chief executive has "outlined clear plans on how universal suffrage might be instituted."[120,121] In March 2013, Chief Executive Leung said in meetings with Chinese President Xi Jinping that he was committed to the process of achieving universal suffrage in Hong Kong by 2017. He reiterated this commitment in July, promising that free and open elections for the Legislative Council would

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*The Mainland government did not design the contested educational curriculum. Rather, it was designed by the Hong Kong Curriculum Development Council, a body whose members are appointed by the Hong Kong chief executive, whose leanings are decidedly pro-Beijing.

follow in 2020. But as Dr. Richardson noted in her testimony, these dates have been Beijing's tentative targets since statement decision made by the National People's Congress Standing Committee in 2007.[122] Many Pan-Democrats* are afraid that the Mainland is seeking to postpone universal suffrage or stop it altogether by rigging elections to limit them to candidates who are pro-Beijing. The idea would be to ensure that the Hong Kong government continues to be dominated by pro-Beijing representatives. Article 22 of the Basic Law stipulates that no offices or Mainland authorities may interfere in the affairs of the Hong Kong SAR, but pro-Beijing sympathies are not deemed interference. In elections of the chief executive and the Legislative Council, Mainland sympathizers continue to enjoy a distinct advantage due to the configuration of the electoral system.[123,124]

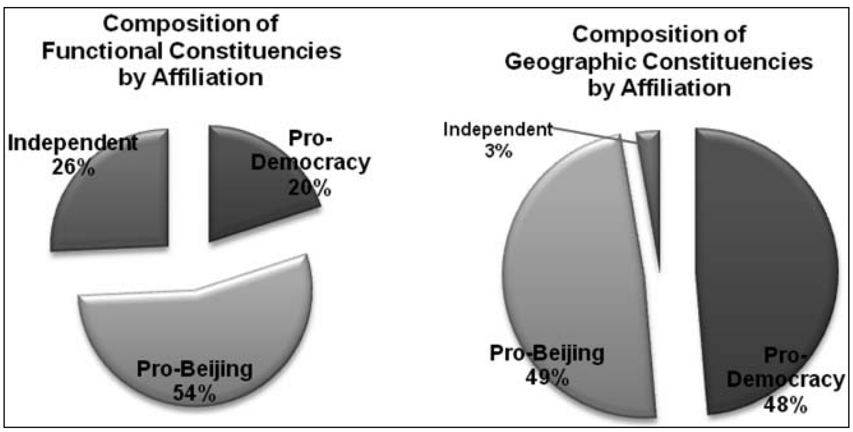
Article 45 of the Basic Law specifies that "the ultimate aim" for selection of the chief executive, the highest office in the Hong Kong government, is "universal suffrage upon nomination by a broadly representative nominating committee in accordance with democratic procedures."[125] At present, the chief executive is chosen from a slate of nominees by a 1,200-person election committee. Shi Zhangshan, a Washington, DC-based Hong Kong expert, notes that "it took 10 years to increase the members of the Hong Kong Election Committee from 400 to 800 and then 1,200" and that by sticking to the pace of this so-called progressive approach, it would take Hong Kong 10,000 years to gain universal suffrage for its seven million citizens.[126] The current election committee is heavily populated with business figures, who have investments in mainland China, as well as politicians and labor leaders with strong connections to Beijing, giving it a distinctly pro-Beijing slant. A former Legislative Council member told Commissioners that Beijing effectively controls roughly 950 of the 1,200 election committee votes for chief executive.[127] In the 2012 chief executive election, pro-Beijing candidate CY Leung won with 689 votes, while Henry Tang, the runner-up and also a pro-Beijing candidate, received 285.[128] By contrast, the most popular prodemocracy candidate, Albert Ho of the Democratic Party, received a mere 79 votes.

Article 68 of the Basic Law specifies that "the ultimate aim is the election of all the members of the Legislative Council by universal suffrage."[129] For the time being, 35 members of the 70-person legislature are directly chosen through geographical constituencies in which members of the general population are each afforded one vote. Another 30 members are elected by traditional functional constituencies, in which professionals in specific fields such as insurance, transportation, health care, education, accounting, commerce, industry, finance, and tourism are allowed to cast a vote in addition to their vote in their geographic constituency," giving them greater voting power than the general populace.[130] Certain business entities and professional organizations are also given votes in the functional constituencies. Five Legislative Council members are elected by district council constituencies, which are made up of regular voters not in professional sectors already represented by the

*Politicians and members of civil society affiliated with a variety of prodemocracy groups often band together to promote their common cause and are collectively referred to as pan-democrats.

traditional functional constituencies. The greater representation of some segments of society as a result of the functional constituencies, combined with the dominant support for pro-Beijing candidates among functional constituency voters, has ensured that the Legislative Council remains in the control of pro-Beijing representatives. Since 2004, the split has stood at roughly 60/40. Figure 3 illustrates the politics of legislators elected by the functional constituencies vs. those elected by the geographic constituencies. Figure 4 shows the pan-Democrat vs. pro-Beijing split in the Legislative Council over time.

Figure 3: Pan-Democrat vs. Pro-Beijing Representatives in Legislative Council, 2012–2016



Source: Chung-Kai Sin, "Political Elections, Parties and Reforms since 1984," June 8, 2013.

Figure 4: Pan-Democrats vs. Pro-Beijing Representatives in Legislative Council, 1998–2012

Term	Pan-Democrat Camp	Pro-Beijing Camp	Total Seats
1998 (1st term)	20 (33.33%) (13 seats—DPHK) (3 seats—The Frontier)	40 (66.67%) (9 seats—DAB) (10 seats—Liberal Party)	60
2000 (2nd term)	21 (35.00%) (12 seats—DPHK) (2 seats—The Frontier)	39 (65.00%) (11 seats—DAB) (8 seats—Liberal Party)	60
2004 (3rd term)	25 (41.67%) (9 seats—DPHK) (4 seats—Article 45 Concern Group)	35 (58.33%) (10 seats—DAB) (10 seats—Liberal Party)	60
2008 (4th term)	23 (38.33%) (8 seats—DPHK) (5 seats—Civic Party)	37 (61.67%) (10 seats—DAB) (7 seats—Liberal Party)	60
2012 (5th term)	27 (38.57%) (6 seats—DPHK) (6 seats—Civic Party)	40 (61.43%) (13 seats—DAB) (6 seats—Liberal Party)	70

* DPHK—Democratic Party of Hong Kong; DAB—Democratic Alliance for the Betterment and Progress of Hong Kong; HKFTU—Hong Kong Federation of Trade Unions.

Source: Chung-Kai Sin, "Political Elections, Parties and Reforms Since 1984," June 8, 2013.

Since two-thirds of all Legislative Council members are required to endorse any amendment to the process of electing the chief executive, pro-Beijing dominance in the Legislative Council dims the prospects for amendments that would advance universal suffrage. The pall that this has cast on hopes of achieving universal suffrage is amplified by a December 29, 2007, statement by the National People's Congress Standing Committee that universal suffrage in the election of the Legislative Council will be implemented only after implementation of universal suffrage in the election of the chief executive.[131,132]

In discussions with Commissioners during a July fact-finding trip to Hong Kong, Legislative Councilor Chung-Kai Sin explained that Pan-Democrats' worries over prospects for universal suffrage have been stoked by recent statements from the Mainland.[133] In March, for example, Qiao Xiaoyang, chairman of the legal committee of the National People's Congress, warned that Beijing "would not accept a chief executive candidate who adopted a confrontational attitude towards the central government."[134] In July, Zhang Xiaoming, director of the central government's liaison office in Hong Kong, used a sieve to illustrate the advantages of a screening and filtration process to ensure that all candidates for chief executive are acceptable to Beijing.[135] Chief Executive Leung says he favors allowing all adults to vote but is vague about whether he would support allowing the chief executive ballot to feature candidates opposed by Beijing.[136]

In March 2013, 27 lawmakers from 12 pan-democratic groups formed the Alliance for True Democracy to demand that the government deliver universal suffrage in the 2017 election, but it is unclear if this coalition will remain united. Past efforts by the various democratic parties to promote universal suffrage have dissolved into disagreement. Mr. Shi notes that Beijing has lots of practice dividing the opposition, and these divisions are surfacing once again. Some Pan-Democrat lawmakers have backed Martin Lee Chu-ming, former chairman of the Democratic Party, in his recent suggestion for a screening committee to ensure that at least five candidates stand for election and that one of them is prodemocracy, but others have chastised him for recommending a screening mechanism at all.[137]

April 2013 saw the formation of a civil disobedience movement to support 2017 suffrage. Dubbed "Occupy Central" (Hong Kong's core downtown financial district), the movement was started by Benny Tai, a law professor at Hong Kong University. Professor Tai says the Occupy Central movement will be peaceful and will feature several days of deliberation culminating in early 2014, when occupiers will gather in small groups to discuss political reform. The movement's plan is to follow this deliberation with a Hong Kong-wide ballot allowing people to choose their vision of reform. It would then demand that the government carry out the popular will. Sit-in protests would follow in the central city should the government resist.

"The key point of the movement is about developing a democratic culture of rational discussion and consensus building by the people themselves," says Professor Tai.[138] But business groups, led by the Chinese General Chamber of Commerce, fear that the movement will hurt the city's economy, while pro-Beijing groups argue that it will hurt the city's interests more broadly. One pro-Beijing group, Voice of Loving Hong Kong, staged counterprotests at the first Occupy deliberation on June 9.[139] One former official describes the movement as having "touched a nerve" with Beijing and notes that many companies with ties to Beijing have been persuaded to take out full page advertisements against Occupy Central in various Hong Kong newspapers.[140] The Hong Kong government has also publicly warned that it sees no possibility of the Occupy Central gatherings being lawful, and former Central Policy Unit head Lau Siu-kai expressed concerns that the movement would become radical and "end in bloodshed."[141,142]

Press Freedom

Pro-Beijing newspapers such as *Wen Wei Po* have accused "external powers" of being behind the Occupy Movement, while a leading mainstream English-language newspaper, the *South China Morning Post,* ran an editorial earlier this year saying that "Hong Kongers need genuine democracy—of that there can be no doubt," but then followed the editorial by declaring its opposition to Occupy Central's peaceful civil disobedience plans.[143] Within the Hong Kong press community and among international free press advocacy groups, such editorial kowtows to the pro-Beijing government are widely perceived as demonstrative of the Mainland's increasing sway over the Hong Kong press. Article 27 of the Basic Law grants

Hong Kong residents "freedom of speech, of the press, and of publication" and, on the surface, it would seem that a vibrant Hong Kong press remains alive and well today, given that the city of seven million people supports 46 daily newspapers and 642 periodicals as of 2010.[144] But the large number of media outlets belies what Ms. Earp and other critics say is a diminishing diversity of voices in the Hong Kong press.[145] According to Ms. Earp, in the early years after the handover, PRC media interventions in Hong Kong were generally limited to Mainland political issues, but political pressures and the influence of Mainland economic interests on Hong Kong media owners are increasingly evident.[146] Beijing's Hong Kong Liaison Office, for example, "played a uniquely aggressive role in the run-up to the chief executive election last year, effectively ordering news outlets to support the eventual winner."[147]

In 2005, Freedom House ranked Hong Kong 28th in the world among 197 countries and territories in terms of press freedom and assigned it a status of "free," but by 2012, Hong Kong's ranking had fallen to 33rd and "partly free."[148] In January, Reporters without Borders released its *World Press Freedom Index 2013*, showing Hong Kong press freedom at a five-year low of 58th out of 179 locations worldwide.[149,150] Its 2002 ranking had been 18th.[151] Reporters without Borders ranked mainland China 173 for 2013, while Taiwan garnered the top spot among Asian localities, coming in at 47.[152] But Taiwan may not be a regional gold standard for long, as Mainland pressures on the media are increasingly apparent there, too. In both places, potential media buyouts threaten to give pro-Beijing business magnates control over independent news outlets currently known for being critical of the Mainland government. For example, in late 2012, Jimmy Lai, the outspoken owner of Hong Kong-based Next Media and the pro-Democracy *Apple Daily* paper, sold his Taiwan media holdings to a group of businessmen supportive of the Beijing government.[153] In early 2013, *China Daily* reported that a Shanghai real estate tycoon was seeking a controlling stake in Hong Kong's cash-strapped and increasingly pro-Beijing broadcaster Asia Television Limited.[154]

The Hong Kong press itself reports a sense of diminishing freedom. In 2007, a major Hong Kong Journalists Association survey showed that 58.4 percent of the industry respondents felt press freedom had been eroded since the 1997 handover.[155] In early 2012, a survey asked if press freedom had deteriorated since Donald Tsang took over as chief executive seven years before. The survey showed that 87 percent of the 663 journalists polled indicated that they felt it had.[156] Growing political interference from Beijing, tighter government controls on information, and rising self-censorship by the media outlets themselves were the key reasons cited in this trend.* More than 92 percent of respondents in the Hong Kong Journalists Association's spring survey felt that government restraints on information had surpassed self-censorship as the main factor undermining press freedom.[157] This sense of diminishing

*According to a spring 2013 Hong Kong Journalists Association poll, of the 663 reporters, photographers, editors, and media management respondents, 92.7 percent attributed the erosion of press freedom to the Hong Kong government's tighter grip on information; 71 percent attributed it to increased self-censorship; and 67.5 percent attributed it to the growing influence of the Chinese central government.

press freedom correlates with survey data indicating that the Hong Kong public perceives newspapers as less credible, though it is worth acknowledging that U.S. media credibility has been on a downward trajectory over the past decade, too.[158]

Following the election of Mr. Leung to chief executive in 2012, press freedom advocates reported an escalation in government efforts to censor and control media access to official information. This is viewed as problematic, because it is not simply the Hong Kong government that controls the release of information to the press but specifically the governing party dominating access to official information.[*] [159] Decisions to grant or refuse media licensing under Hong Kong's Broadcasting Ordinance are made by the executive branch. Some prodemocracy stations, such as Citizens' Radio, have had difficulty obtaining licenses.[†][160,161] Free press advocates also contend that the government has reduced the number of full press conferences it holds for Hong Kong media and more often opts to communicate information via press releases, thereby denying journalists the opportunity to ask questions.[162] The government has also reportedly begun offering information on background without specific attribution or via anonymous statements.[163,164] Hong Kong officials contend that the Hong Kong government's issuance of press releases and video clips has actually declined over the past five years (from 177 in 2008 to 127 in 2012), while the number of press conferences and briefings has steadily increased (from 1,181 in 2008 to 1,372 in 2012). The Hong Kong Journalists' Association cites its own research to contend that those numbers do not tell the full story, since full press conferences are typically held only for noncontroversial issues, whereas off-the-record background briefings are more frequently used for politically sensitive matters.[165] In 2012, press complaints rose about police blocking media access to emergency hotlines and restricting access to political protests and other politically sensitive events.[166] In August 2011, for example, the media were largely denied access during a three-day visit by Chinese Vice Premier Li Keqiang, and press that were admitted to the official ceremonies were confined to a designated press area remote from event activities.[167] Though it is not clear that police treatment of the press has improved since that time, a government report on the complaints arising from the Li Keqiang visit does note, "Public concerns over the magnitude of the security operation have unfortunately created an overcast on the reputation of the Police." The report also stresses that the episode provides a valuable opportunity to make "improvements in the planning and execution of security operations, to avoid similar complaints in the future and to reaffirm commitment [by the Hong Kong police] to discharging duties professionally and lawfully without any political consider-

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* Mak Yinting, chairperson of the Hong Kong Journalists Association, notes in a July 2012 CNN op-ed, "Hong Kong press freedom under Chinese attack": "In one recent example, a population policy report was presented at a Rotary Club lunch by Chief Secretary Stephen Lam. A closed-door briefing was held, during which no audio or video recording was allowed. The full report was also not provided to the media, who were told to find it on the government's website."

† The Hong Kong government contends that over a several year period, Citizens' Radio repeatedly failed to submit requested additional information and clarification regarding its proposed use of frequency spectrum and that the Broadcasting Authority decided not to grant a license because of these information insufficiencies in the Citizens' Radio application. Unlicensed broadcasting is criminal in Hong Kong, and *HKSAR v Wong Yuk Man and others* (2012) notes that the unlicensed and uncoordinated use of radio frequencies may interfere with licensed users and emergency, air, and navigational services users.

ation, and safeguarding fundamental rights and freedoms of the public." [168]

Newly proposed legislation would further limit journalists. An antistalking bill that may be considered this year could hinder journalists' ability to seek out information from sources. The Hong Kong Journalists Association has said that while it agrees that "innocent people should be protected from harassment in the form of stalking," the new law, "if implemented, will have an adverse impact on legitimate journalistic activities and could be abused to block genuine investigative activities by journalists." [169] Another law would limit personal data that corporate directors must make public. While supporters argue that this law is important for enhancing protections of individual personal data, detractors are concerned that it will unduly shield directors from media scrutiny.[170] The debate over the corporate director data law comes in the wake of major U.S. media outlets embarrassing the Chinese leadership with allegations of corruption, nepotism, and profiteering that were partially substantiated by research involving Hong Kong's corporate databases. The databases helped the media to confirm that multi-billion-dollar business interests were vested in the families of then Chinese Premier Wen Jiabao and President-designate Xi Jinping. Press freedom advocates contend that reporting the business details of the families of government is a legitimate press function, but supporters of the proposed data restrictions argue that business directors should be afforded greater personal privacy.[171]

Media self-censorship is also a pervasive concern. A poll conducted in May 2013 by the Public Opinion Program of the University of Hong Kong found that 48 percent of respondents believed that the local news media practiced self-censorship. The veracity of this perception was borne out by the 2012 Hong Kong Journalists Association poll results, which showed 36 percent of media employees conceding that "they or their supervisors had practiced self-censorship in the past 12 months." [172] In that same Hong Kong Journalists Association survey, 79.2 percent of journalists said self-censorship has grown since 2005.[173,174]

Self-censorship has increased as the Chinese central government has co-opted media company owners. According to the 2013 annual report of the Hong Kong Journalists Association, roughly 50 percent of Hong Kong media owners have been appointed to the National People's Congress or the Chinese People's Political Consultative Conference. Publishers of the four leading pro-Beijing newspapers—*Ta Kung Pao, Wen Wei Po, Hong Kong Commercial Daily*, and the Hong Kong edition of *China Daily*—are "routinely appointed to one of the two national bodies." [175] These four papers, which make up 13.3 percent of news outlets in Hong Kong, have also recently implemented special vetting groups for articles pending publication.[176] Owners of an additional 36.7 percent of Hong Kong's news outlets have been appointed to the Chinese bodies. Only four news outlets (13.3 percent) are clearly free of Beijing or Hong Kong government ties. These are the two newspapers published by Jimmy Lai's Next Media Group (*Apple Daily* and *Sharp Daily*); *am730*, a free newspaper published by the fiercely independent Hong Kong businessman and philanthropist Shih Wing-ching; and *Metropolis Daily*, the Hong Kong edition of the international *Metro* newspaper series published by Swedish-owned Metro International.[177]

According to the Belgium-based International Federation of Journalists, during the legislative and chief executive elections in 2012, the Hong Kong media received "a white-list of pro-establishment candidates whom they were expected to promote unconditionally."[178] At least some in the media establishment followed the government's suggestions. In one incident, *Sing Pao Daily News* newspaper editors admitted to having altered veteran columnist Johnny Lau's opinion column to support Mr. Leung ahead of the election. After the election, Mr. Lau's column was dropped from the paper following a piece he wrote on the death of a Mainland dissident.*[179] Such reports of internal censorship within the top ranks of the Hong Kong media have risen as media owners have established closer ties with the Mainland. Many Hong Kong media owners have business interests in mainland China to protect, and others have accepted honorary political titles in the PRC, despite the fact that accepting such titles poses a conflict of interest.[180]

While violent retaliation against the press in Hong Kong for its political reporting remains uncommon, some press advocates say it is on the rise. There were 11 attacks against journalists and media outlets in Hong Kong in 2012 and the first half of 2013, and the attackers in only two of those incidents were brought to justice. In February 2013, a *South China Morning Post* photographer was slapped, shoved, and verbally assaulted while covering a sensitive story on parallel importers.†[181] In July 2012, a New Tang Dynasty television reporter covering a Falun Gong protest was threatened by a pro-Beijing counterprotestor wielding a butcher knife.[182] In August and September 2012, *Sing Tao* News Corporation's offices were attacked by masked men who smashed equipment and windows with an axe.[183] *Apple Daily* parent company *NextMedia* and owner Jimmy Lai were the targets of a series of attacks in June 2013, including a raid in the early hours of June 30 in which masked men armed with knives intimidated workers and burned 26,000 copies of the forthcoming *Apple Daily* issue.[184] On June 26, the driver of a truck unloading copies of *Apple Daily* was chased by knife-wielding assailants who then set the truck and cargo on fire. On June 19, attackers rammed Mr. Lai's house gate with a car and left behind two axes. Mr. Lai offered a reward for information leading to the attackers, whom he believed were motivated by anti-democratic sentiments. Police believe the attacks are related, and two arrests have been made, but no charges have yet been filed.[185]

A few attacks have also occurred in the presence or at the hands of police, suggesting a degree of official coercion or complacency. On August 7, 2013, the International Federation of Journalists condemned a series of attacks on members of the press at an August

*Although *Sing Pao Daily News* is not one of the four leading pro-Beijing newspapers, it maintains clear ties to Beijing. As of December 2012, *Sing Pao Daily News* has been run by Tian Bingxin, a veteran journalist for Chinese government–run Xinhua News Agency. Prior to Mr. Tian's appointment, *Sing Pao* was run by mainland Chinese businessman Xie Haiyu.

†Parallel trading, buying in demand goods like foreign baby formula tax-free in Hong Kong and reselling them on the Mainland for a profit, is a growing industry in Hong Kong. It is also a growing cause of local unrest because it has increased prices and decreased the supply of certain goods in Hong Kong.

4 incident in which photographers covering a pro- and antipolice protest were blocked and pushed to the ground by unidentified assailants. One of the photographers, Yel Tang of *Ming Pao* newspaper, noted that policemen on the scene declined to intervene on the journalists' behalf.[186] (Hong Kong authorities dispute this contention, noting that five people were arrested and charged with "common assault" and "disorderly conduct in a public place.") A handful of journalists have also been detained by police while covering protests and official events. In June 2012, a journalist for *Apple Daily* was detained and questioned after shouting a question at Hu Jintao about Hong Kongers' support for the victims of the 1989 Tiananmen Square massacre.[187]

Police Surveillance

Under British rule of Hong Kong, police had longstanding, unofficial authority to conduct surveillance, but the 2006 posthandover Interception of the Communications and Surveillance Ordinance granted police broader and more explicit authority to conduct physical and communications surveillance for the sake of public security.[188] The law does impose restrictions on law enforcement's ability to intercept communications without authorization, but it does not explicitly ban surveillance for political purposes, and breach of the ordinance is not criminal. The bill passed 32 to zero after Pan-Democratic lawmakers in the 60-member Legislative Council walked out of the chamber in protest when all of the 200 amendments they sought to introduce were defeated or ruled out of order.[189] In 2011, authorized wiretaps and covert surveillance led to the arrest of 137 people, and there is growing concern among democracy advocates that the surveillance is targeted at them.

In 2013, police began testing video cameras clipped to their uniforms, which they are not permitted to use to film the public unless they have a "justifiable reason," such as gathering evidence in confrontational scenarios or incidents where a breach of the peace has occurred or is deemed likely to occur. Like highway patrol cameras, they will record the actions of citizens and officers alike. Hong Kong democracy rights activists have expressed concerns that the cameras will be used to monitor political activists. Human Rights Watch has reported that police are using these cameras to take close-up shots of demonstrators even when there is not criminal behavior during the demonstrations "and even when protestors have explicitly told the police that they do not wish to be filmed." [190] If a person blocks the camera, he or she can be charged with obstructing a police officer in the execution of his duty.[191]

The introduction of police cameras comes at a time when protests against the Hong Kong leadership are up sharply. In addition to the Occupy Central efforts and the rallies against the national education proposal, thousands of Hong Kong residents have participated in protests calling for the resignation of Chief Executive Leung, and anywhere from 100,000 to 400,000 Hong Kongers turned out to participate in July 1 prodemocracy rallies despite heavy rain. In addition, tens of thousands of Hong Kongers also turned out for the June 4 vigil commemorating the victims of the 1989 violence in Tiananmen Square. Some prodemocracy advocates worry that police might use the cameras at such events to build up a database on social activists for "political prosecutions." [192,193] Indeed, Pan-Democratic legislators meeting with Commissioners in Hong Kong reported that police are now monitoring and arresting prodemocracy demonstrators as much as 12 to 24 months after their participation in political events.[194] In July 2013, for example, Yau Ka-yu was reportedly arrested and charged with illegal assembly in relation to her 15-month-old participation in an April 2012 protest outside the China Liaison Office in Hong Kong.[195]

Article 27 of the Basic Law grants Hong Kong residents "freedom of association, of assembly, of procession and of demonstration," but demonstrations and protests are also governed by the Public Order Ordinance. This ordinance was amended in 1997, shortly before the handover, to stipulate that organizers of groups of more than 50 protestors or processions of more than 30 protesters "have to both notify the police seven days in advance and receive a 'notice of no objection' from the government before they can be held." [196] According to Hong Kong-based Civil Human Rights Front, there were 444 arrests of protestors in 2011, "which surpassed the total number of protestors arrested since 1997." [197] The increase in arrests may also be partially attributed to a threefold increase in protests and processions, from 2,300 in 2002 to 6,800 in 2011. According to Ms. Richardson, police insisted that the increased arrests are due to increased violence, but "protestors allege that the government is using parts of the Public Order Ordinance, which includes vague standards such as whether at a given protest 'a breach of the peace is likely to be caused,' to punish and deter protestors." [198]

A watchdog system exists for police abuses of power, but while it can report on complaints and make recommendations to the commissioner of police and the chief executive, it cannot take direct action to rectify problems. From mid-2010 to mid-2011, complaints to the Independent Police Complaints Council surged over 50 percent from the prior year. There were 2,672 allegations against police in 2008; 4,257 allegations in 2009; and 7,964 allegations in 2010.[199] The biggest spikes involved allegations of the fabrication of evidence, and assault, but Hong Kong authorities note that more than 80 percent of total complaints received have been for minor issues such as "misconduct," "improper manner," "use of offensive language," and "neglect of duty." [200] Some of these incidents involved Hong Kong authorities apprehending and handing over Chinese political dissidents to Beijing without due process and despite there being no extradition treaty between Hong Kong and the Mainland.[201]

Police requests for electronic data also appear to be on the rise. In late 2012, for example, Google reported that in the first half of the year it had received 192 requests for data to use in investigations compared to 325 in all of 2011 and 140 in all of 2010. The increase prompted calls for an investigation into privacy violations. However, Hong Kong laws no longer protect data privacy where the data are obtained for "prevention, preclusion, or remedying of unlawful or serious improper conduct." [202] Without explicit protections for the exercise of free speech and freedom of assembly, existing protections may be inadequate to protect the exercise of such civil liberties.[203]

Implications for the United States

While the U.S. approach to bilateral relations with China and the SARs has allowed integrated discussion and consideration of a range of security and economic issues, Hong Kong's civil rights and liberties concerns have increasingly fallen through the cracks as other China-related issues have taken precedence.

Hong Kong's traditional civic values continue to be integral to its international economic power and importance. It is these civil rights and political freedoms that have ensured that transparency and the rule of law remain hallmarks of Hong Kong's trade and investment culture. This makes Hong Kong an important gateway for business relations with the Mainland. As these traditions are permitted to erode, it will be to the detriment of U.S.-China bilateral economic relations more broadly.

Furthermore, the United States has long taken the position that it expects Beijing to uphold the democratic commitments it made in the Sino-British Declaration and in the Basic Law. To the extent that these issues are marginalized in our bilateral engagement with China, the United States is not only overlooking important economic interests but also compromising fundamental American values for the sake of diplomatic expedience.

Conclusions

- The rapid inflow of money to Macau, its casino-oriented economy, and its proximity to the PRC present a significant risk of money laundering and financing of terrorism, particularly in the under-regulated shadow banking and junket system supporting the VIP gaming business in Macau.

- A combination of the PRC's strict capital controls and restrictions on the collection of gambling debts has given rise to grey market alternatives to facilitate the movement of gambling funds into Macau. Gambling debt collection conducted by unregulated third-party affiliates in the Mainland is susceptible to organized crime and violence.

- Macau's junkets with alleged criminal affiliations present legal risks for U.S.-licensed casinos operating VIP rooms in Macau. Casinos found to be working with junkets directly or indirectly associated with Asian organized crime may be subject to revocation of their state-issued license to operate in the United States.

- Macau's loose regulation of the junket system and its strict privacy law prevent U.S. regulators from accessing information they are accustomed to, and U.S. state regulators lack the authority and resources to independently conduct investigations in foreign jurisdictions. This prevents U.S. regulators from accurately accessing the situation in Macau and effectively stops them from evaluating individuals conducting business with U.S.-licensed casinos.

- Macau's anti-money-laundering and counter-terrorist-financing framework has fallen short in complying with internationally recognized standards. Numerous vulnerabilities remain in its regulations, including deficiencies relating to Macau's inability to effectively freeze financial assets and its inadequate inspection and oversight of casinos and junket operators and promoters.

- Despite reports that the PRC aims to more closely monitor Macau's gaming industry as part of its nationwide initiative to crack down on corruption, there is no substantial evidence to suggest that Beijing intends a crackdown on illicit money transfers and money laundering in Macau.
- To protect their licenses to do business in the United States, American casinos have adopted a number of measures designed to prevent illegal activities in their VIP rooms. The Commission is not in a position to evaluate whether those measures are fully adequate to insulate the operations of those rooms from illegal activity.
- Despite official statements of support from Beijing and the Hong Kong chief executive, the continued lack of meaningful progress calls into question Beijing's real intentions. Prospects for universal suffrage by 2017 are dimming. Political interference, government restraints on access to information, and self-censorship continue to take a toll on press freedom in Hong Kong. Public perceptions of media credibility have declined since the handover. Violent attacks on prodemocracy news outlets and their owners are on the rise, and the totality of the evidence suggests that Beijing does not intend to allow real democracy to develop in Hong Kong.
- Prodemocracy activists express alarm over stepped-up police surveillance at protests, which they fear may be aimed at chilling public discourse or quelling public dissent.
- All of these trends run counter to the Basic Law's assurances that Hong Kong's traditional democratic and civil rights would be preserved for the first 50 years following the handover.
- The systematic disenfranchisement of those who support greater democratic freedoms and civil liberties has created a climate of political polarization that may undermine Hong Kong's fundamental governability.

ENDNOTES FOR SECTION 3

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203. Simpson Cheung, "Google reports Surge in Data Requests from Hong Kong Police," *South China Morning Post* (Hong Kong), November 16, 2012.

RECOMMENDATIONS

China and the Middle East and North Africa

The Commission recommends:

- Congress support efforts by the Department of Defense to strengthen cooperation with China on counterpiracy in the Gulf of Aden and elsewhere.
- Congress consider the merits of including fuel oil purchases in the current sanctions regime prohibiting countries from purchasing crude oil from Iran.
- Congress work with the Departments of State, Commerce, and the Treasury to utilize the full range of incentives and disincentives to encourage China to reduce its ties with Iran, including exploring conditioning Chinese energy companies' future investments in the United States on limiting commercial ties with Iran.
- Congress urge the Department of State to elevate the U.S.-China Middle East Dialogue to include an annual meeting at the Cabinet level and to increase meetings at the undersecretary level from once to twice per year.
- Congress direct the Administration to provide a report to Congress on China's enforcement of its export controls, to include an assessment of the level of scrutiny the Chinese government applies to end users in transfers that are of proliferation concern.

Taiwan

The Commission recommends:

- Congress direct the Administration to transmit an unclassified report to Congress on U.S. arms sales to Taiwan from 2001 to 2013. It should detail each of Taiwan's requests for purchase of U.S. weapons, defense items, or defense services during this period; describe Taiwan's justification for each request; report on any Administration decision to reject, delay, or alter each request; and provide an update on the status of sales that have been previously approved.
- Congress encourage the Administration to continue discussions between the United States and Taiwan concerning a bilateral investment agreement.
- Congress urge Cabinet-level officials to visit Taiwan to promote commercial, technological, and people-to-people exchanges and direct the Administration to permit official travel to Taiwan for Department of State and Department of Defense personnel above

the rank of office director or, for uniformed military personnel, above the level of O6.

Macau and Hong Kong

The Commission recommends:

- Congress urge the State Department to negotiate with the Macanese government to fix the shortcomings in its regulatory framework. Potential reforms would include implementing an effective asset freezing mechanism, an increase in due diligence procedures in casinos, reduction in the high threshold for reporting suspicious transactions within casinos, establishing more transparent cross-border reporting requirements, and a requirement that junket operators and their affiliates disclose detailed financial information and implement stricter licensing requirements
- Congress reconvene a congressional caucus on Hong Kong to ensure continuous attention to the region's democracy and civil rights issues.
- Congress adopt a resolution urging China to keep its commitments to universal suffrage as articulated in the 1984 Sino-British Joint Declaration on the Question of Hong Kong and the Basic Law of the Hong Kong Special Administrative Region.
- Congress reaffirm its support for human rights and the rule of law in Hong Kong.
- Congress renew the biennial reporting requirements of the U.S.-Hong Kong Policy Act of 1992.

COMPREHENSIVE LIST OF THE COMMISSION'S RECOMMENDATIONS

Chapter 1: The U.S.-China Trade and Economic Relationship

Section 2: Trends in Chinese Investment in the United States

The Commission recommends:

1. Congress assess the extent to which existing laws provide for inadequate or ineffective remedies against the anticompetitive actions of Chinese state-owned or state-invested enterprises operating in the U.S. market. Additional remedies may be required to account for the fact that these enterprises may not be operating based on commercial considerations.
2. Congress assess whether to amend the Committee on Foreign Investment in the United States (CFIUS) statute to allow review of greenfield investments for threats to U.S. national security.
3. Congress direct the Department of Commerce to develop a comprehensive, ongoing inventory of Chinese foreign direct investment (FDI) in the United States and, on an annual basis, update the inventory. The inventory should identify the ownership structure of the entity engaging in the investment. In preparing the inventory, the department should call on private sector entities engaged in monitoring Chinese investments in the United States and such other entities to ensure that its report is complete and accurate. The department should prepare a comprehensive report to Congress on an annual basis identifying the FDI by Chinese entities that were made in the previous calendar year. In its report, the department should indicate those investments that received any assistance from the "Select USA" program. The department should also identify, on an ongoing basis, the lines of commerce that each of the investments are engaged in.

Section 3: Governance and Accountability in China's Financial System

The Commission recommends:

4. Congress direct the Administration to press China for more cooperation with the international community in order to address the global economic risks of unregulated and underregulated shadow banking and ask the Department of the Treasury to provide an annual report to Congress on the risks of shadow banking.

5. Congress direct the Administration, in any bilateral investment treaty negotiations, to make fair and equitable market access and treatment for financial services firms a priority.
6. Congress direct the Administration to assist the Securities and Exchange Commission (SEC) and the Public Company Accounting Oversight Board by encouraging China to develop better regulatory oversight enforcement capabilities and more transparent markets, during annual and biannual bilateral dialogues, as well as multilateral dialogues.
7. Congress empower the SEC to set minimum standards for companies listing and maintaining listings on U.S. exchanges and enable the SEC to directly delist foreign companies not in compliance with these standards.

Section 4: China's Agriculture Policy, Food Regulation, and the U.S.-China Agriculture Trade

The Commission recommends:

8. Congress monitor the implementation of the U.S.-China Plan of Strategic Cooperation in Agriculture (2012–2017) to ensure that U.S. funding is being allocated in such a way as to improve the safety, sustainability, efficiency, and security of food production in China and the United States.
9. Congress require the U.S. Department of Agriculture (USDA) and the U.S. Trade Representative to conduct a comprehensive review of China's agricultural subsidies, discriminatory taxes, state trading, and procurement practices; take account of the damages incurred by U.S. farmers and downstream industries; and suggest appropriate remedies.
10. Congress urge the Secretary of Agriculture to engage, as part of the Joint Committee on Commerce and Trade and the Strategic and Economic Dialogue, with his/her Chinese counterparts to address those Chinese policies and practices that limit U.S. exports of value-added products.
11. Congress direct the Interagency Trade Enforcement Center (ITEC) to conduct a review of the selective use of value added tax (VAT) rebates by China and determine whether they have a trade-distorting effect and whether the selective use of VAT rebates is consistent with the original intent of the General Agreement on Tariffs and Trade (GATT) provision allowing for VAT rebates. The ITEC should prepare a report for the U.S. Trade Representative and the relevant Committees of jurisdiction and identify what steps should be taken to address any GATT inconsistencies, should they be found.
12. Congress direct the USDA to negotiate with China to synchronize approvals of biotechnology to ensure stable and predictable market access for U.S. seed companies and crop growers in the Chinese market.
13. Congress require that the USDA prepare an annual report on competitive factors in the pork industry. In preparing such reports, the department shall evaluate the impact, if any, of the

recent purchase of Smithfield Foods on the ability of other U.S. producers to export pork products to China. In addition, the report shall identify any changing pricing structures throughout the pork production chain to determine whether there is price or profit suppression as a result of the Smithfield transaction.

14. Congress direct the USDA to exercise extreme caution in negotiating equivalency status for Chinese exports of processed poultry using Chinese-origin birds. Congress should also increase its support of USDA's Food Safety and Inspection Service in its role as protector of meat and poultry food safety so that the United States serves as a world model for high-quality, science-based regulations.
15. Congress ensure that the Food and Drug Administration makes it a priority to increase the number of physical inspections of Chinese food imports at the border; to increase the rigor of those inspections to include testing for pathogens and chemical, pesticide, and drug residues, and processed food ingredients; and to conduct more frequent and thorough inspections in food facilities in China. Congress should also urge the USDA to permanently assign inspection personnel to China so that the exporting plants receive regular visits by USDA inspectors.
16. Congress require the Secretary of Agriculture to prepare a report to Congress identifying those organic food products being imported into the United States from China. The report should include a comprehensive evaluation of the different methodologies employed by the United States and China to certify that a product is organic and what steps, if any, are being taken to harmonize any discrepancies that might exist.
17. Congress evaluate whether a requirement that U.S. food importers purchase insurance against food-borne illnesses and pathogens from Chinese imports would improve food safety. Such a program would involve private sector risk insurance with insurance companies evaluating the safety of various sources and charging risk-based premiums based on the methods employed by Chinese exporters to address food-borne illnesses and pathogens.

Chapter 2: China's Impact on U.S. Security Interests

Section 2: China's Cyber Activities

The Commission recommends:

18. Congress adopt legislation clarifying the actions companies are permitted to take regarding tracking intellectual property stolen through cyber intrusions.
19. Congress amend the Economic Espionage Act (18 U.S.C. § 1831–1839) to permit a private right of action when trade secrets are stolen.
20. Congress support the Administration's efforts to achieve a high standard of protection of intellectual property rights in the

Trans-Pacific Partnership and the Transatlantic Trade and Investment Partnership.

21. Congress encourage the Administration to partner with other countries to establish an international list of individuals, groups, and organizations engaged in commercial cyber espionage. The Administration and partner governments should develop a process for the list's validation, adjudication, and shared access.

22. Congress urge the Administration to continue to enhance its sharing of information about cyber threats with the private sector, particularly small- and medium-sized companies.

23. Congress direct the Administration to prepare an inventory of existing federal use of cloud computing platforms and services and determine where the data storage and computing services are geographically located. Such inventory should be prepared annually and reported to the appropriate committees of jurisdiction.

24. Congress urge the Administration to expedite progress in its implementation of Section 806 of the National Defense Authorization Act for Fiscal Year 2011 (Public Law 111–383), which was intended to enhance the Department of Defense's ability to address supply chain risks.

Section 3: China's Maritime Disputes

The Commission recommends:

25. Congress fund the U.S. Navy's shipbuilding and operational efforts to increase its presence in the Asia Pacific to at least 60 ships and rebalance homeports to 60 percent in the region by 2020 so that the United States will have the capacity to maintain readiness and presence in the Western Pacific, offset China's growing military capabilities, and surge naval assets in the event of a contingency.

26. Congress fund Departments of Defense and State efforts to improve the air and maritime capabilities of U.S. partners and allies in Asia, particularly with regard to intelligence, surveillance, and reconnaissance, to improve maritime domain awareness in the East and South China Seas.

27. Congress urge the Department of Defense to continue to develop the U.S.-China maritime security relationship in order to strengthen strategic trust. The relationship should be within the bounds of the National Defense Authorization Act for Fiscal Year 2000 (Public Law 106–65) and based on the principles of reciprocity and transparency.

28. Congress fund U.S. Coast Guard engagement efforts with coast guard and maritime law enforcement agencies in the Western Pacific to increase understanding among civilian maritime bodies in the Asia Pacific.

Chapter 3: China and the World

Section 1: China and the Middle East and North Africa

The Commission recommends:

29. Congress support efforts by the Department of Defense to strengthen cooperation with China on counterpiracy in the Gulf of Aden and elsewhere.
30. Congress consider the merits of including fuel oil purchases in the current sanctions regime prohibiting countries from purchasing crude oil from Iran.
31. Congress work with the Departments of State, Commerce, and the Treasury to utilize the full range of incentives and disincentives to encourage China to reduce its ties with Iran, including exploring conditioning Chinese energy companies' future investments in the United States on limiting commercial ties with Iran.
32. Congress urge the Department of State to elevate the U.S.-China Middle East Dialogue to include an annual meeting at the Cabinet level and to increase meetings at the undersecretary level from once to twice per year.
33. Congress direct the Administration to provide a report to Congress on China's enforcement of its export controls, to include an assessment of the level of scrutiny the Chinese government applies to end users in transfers that are of proliferation concern.

Section 2: Taiwan

The Commission recommends:

34. Congress direct the Administration to transmit an unclassified report to Congress on U.S. arms sales to Taiwan from 2001 to 2013. It should detail each of Taiwan's requests for purchase of U.S. weapons, defense items, or defense services during the immediately preceding one-year period; describe Taiwan's justification for each request; report on any Administration decision to reject, delay, or alter each request; and provide an update on the status of sales that have been previously approved.
35. Congress encourage the Administration to continue discussions between the United States and Taiwan concerning a bilateral investment agreement.
36. Congress urge Cabinet-level officials to visit Taiwan to promote commercial, technological, and people-to-people exchanges and direct the Administration to permit official travel to Taiwan for Department of State and Department of Defense personnel above the rank of office director or, for uniformed military personnel, above the level of O6.

Section 3: Macau and Hong Kong

The Commission recommends:

37. Congress urge the State Department to negotiate with the Macanese government to fix the shortcomings in its regulatory framework. Potential reforms would include implementing an effective asset-freezing mechanism, an increase in due diligence procedures in casinos, reduction in the high threshold for reporting suspicious transactions within casinos, establishing more transparent cross-border reporting requirements, and a requirement that junket operators and their affiliates disclose detailed financial information and implement stricter licensing requirements.
38. Congress reconvene a congressional caucus on Hong Kong to ensure continuous attention to the region's democracy and civil rights issues.
39. Congress adopt a resolution urging China to keep its commitments to universal suffrage as articulated in the 1984 Sino-British Joint Declaration on the Question of Hong Kong and the Basic Law of the Hong Kong Special Administrative Region.
40. Congress reaffirm its support for human rights and the rule of law in Hong Kong.
41. Congress renew the biennial reporting requirements of the U.S.-Hong Kong Policy Act of 1992.

ADDITIONAL VIEWS OF COMMISSIONER PETER BROOKES

I continue to have concerns with the Macau section of the report and question its inclusion in the final edition.

DISSENTING VIEWS OF COMMISSIONER ROBIN CLEVELAND

Over the past several years, the Commission has taken an increasingly anti-business tone and approach in its reporting. Frustrated by the Chinese government's unwillingness to implement the reforms and policies some commissioners deem necessary, the Commission reports have become increasingly critical of US companies doing business in China. This approach is abundantly clear in the chapter on Macau. The final result was a slanted, speculative diatribe based on a flawed and unbalanced process. In short, we failed our public duty to provide a useful, reliable report.

Commission efforts to secure a complete range of views on a given hearing have on occasion fallen short, but no other hearing has so deliberately excluded panelists in order to shape the outcome. In this instance, staff consulted with Commissioners hostile to the industry then chose not to invite the US companies whose operations were the subject of the hearing. Worse, staff failed to inform Commissioners they had chosen not to invite the companies, then, when asked, misled the Commission about efforts to contact them. To date, no explanation has been provided as to why gaming companies were deliberately excluded from a hearing on gambling in Macau. While two companies were granted private meetings after the report was made publicly available, they were unfairly denied the timely opportunity during the public hearing to describe their operations and safeguards and address Commissioners concerns. Following the private meetings and faced with new, relevant information, the chapter was hastily edited to remove glaring inaccuracies. Commissioners also felt it necessary to formally acknowledge that no evidence of wrongdoing was uncovered. Since the companies presented their perspective so late in the process, it was impossible to determine in a careful or comprehensive manner whether additional information in the chapter may have been contrived, irresponsible or just plain wrong. Similarly, it was not possible to deliberately evaluate or vet the views presented by the companies.

The Commission's bias is also evident when discussing law enforcement and compliance. While multiple opinions are included criticizing deficiencies in Macau's supervision of gambling, the Commission chose to exclude the bulk of a key State Department report which addresses efforts to strengthen law enforcement and financial regulation. An example of this selection bias is the Commission claim that "an indicator of the money laundering problem is evident in the rising number of suspicious transaction reports." (p. 360) Why is this an indicator of an increased problem rather than evidence of more vigilant pursuit of law enforcement efforts? Indeed, the Commission seems to contradict itself by including a recommendation to increase the number of these reports.

In addition to bias, the report is replete with contradictory and questionable assertions that are represented as Commission judgments when, in fact, they are the views of individuals. For example, in one place the report states, "junket operations **have** a history of affiliation with Asian organized crime" (p. 358) and a few pages later says instead, they "**may** have links to organized crime." (p. 361) Although appearing to be a Commission assertion of fact, the inconsistent statements rely on the views held by a Nevada industry regulator with a good reputation, but no professional history or experience supervising the Macau markets.

Macau is a complicated and hugely challenging operating environment with a reliance on an industry that is growing rapidly and has had a dubious legal past. Regulators have understandably had difficulties keeping pace with the growth. However, no effort was made by the Commission to learn from anyone actually engaged on the ground in the business, regulation or supervision of gambling. It may well be an industry and region demanding additional legal, financial and policy scrutiny. Certainly that is a subject worthy of consideration. But when the Commission prejudicially promotes one view over another and explicitly disregards all facts, we have compromised the integrity of the process, the report and any conclusions which could be drawn.

ADDITIONAL VIEWS OF COMMISSIONER WILLIAM REINSCH

Once again this year I support issuing the report, notwithstanding my disagreement with some of its conclusions and recommendations, which I discuss below.

Overall, the report does a fair job of detailing the Commission's work in 2013, and its recommendations accurately reflect the views of a majority of commissioners. Once again, however, I want to express my disappointment at the report's consistent tendency to avoid acknowledging any good news and to focus unrelentingly on the bad news. There is no shortage of the latter, and it is largely true that we seem to be at a point where business, labor and numerous nongovernmental organizations are all dissatisfied with aspects of the bilateral relationship. Certainly, our government has not been reluctant to make clear its displeasure with Chinese actions—or inactions—that have adversely affected our relationship.

At the same time, the leadership transition in China brings with it the prospect of economic change more rapid than we have witnessed for the past ten years. At this point that prospect is unrealized, but there are more than a few signs that is going to change, possibly fairly soon. In that regard, the report could do a better job of recognizing not only the imbalances in the Chinese economy—which it does with enthusiasm—but also the forces within China pressing for meaningful reform and the occasional steps, however modest, that are taken in that direction.

Similarly, with respect to the military relationship, the report correctly focuses on China's military buildup and growing aggressiveness in the region but is quicker than I would be to see the situation in black and white rather than gray and to ascribe hostile intentions to China. It is a fair point that when it comes to our military security, it is better to be safe than sorry, but I nonetheless would have preferred that the report take a more nuanced view of recent developments.

With respect to recommendations that are disappointing, at the top of the list is the Commission's willingness to inject itself into the debate over Iran sanctions, particularly the suggestion we consider conditioning Chinese energy investments in the U.S. on their limiting commercial ties with Iran. Making this and other suggestions far exceeds the Commission's mandate, gets it into issues where it has little expertise, and ignores the impact it could have on domestic oil production at the very moment it is growing rapidly. More important, the recommendation is singularly ill-timed as it comes at precisely when the U.S. for the first time in years has the prospect of making progress at the negotiating table with Iran. There is a significant national debate on this issue right now, and I hope that those engaged in it will recognize that the Commission has no business wading into it and will ignore our advice.

Second, the recommendations on cyber security, while highlighting an important and growing problem and making some useful recommendations for dealing with it, veer off prematurely into cloud computing, an issue which deserves more study before the Commission produces a recommendation on it.

Third, the Commission has once again fallen victim to paranoia about Chinese investment in the U.S. In my judgment, the U.S. has adequate means in place via CFIUS to review a foreign investment's national security implications, which is the appropriate criterion. There is no good justification presented for treating Chinese investment more harshly than others, yet the Commission has once again proposed doing so. We went through this with Japan in the 1980s and did not distinguish ourselves as a people for having done so, and I hope we will not make the same mistake again. We should be better than that.

Finally, readers of the various additional and dissenting views this year will note some controversy over the Commission's discussion of Macau and gambling. This is the first time in the Commission's existence that it has studied Macau—overdue in my view—and it is impossible to look at Macau without addressing gambling. My conclusion from our work is that the nexus with U.S. interests is clear. Money laundering and the alleged involvement of organized crime raise important issues for law enforcement. The possibility that large sums of money could end up in the hands of our adversaries is something we should not simply dismiss. More work needs to be done on this by U.S. authorities, and I hope it will be.

As far as the process of considering Macau is concerned, my task as chairman this year was to make sure it was a fair one, and I believe that was accomplished. The parties that wished to talk to commissioners had the opportunity to do so; divergent views were heard and in many respects were recognized in the report. I believe the report accurately reflects what we learned through testimony, interviews and study. The fact that a large bipartisan majority of the Commission supported this section as well as the final report, attests to that.

ADDITIONAL VIEWS OF COMMISSIONERS JAMES TALENT AND MICHAEL WESSEL, CAROLYN BARTHOLOMEW, DENNIS SHEA, KATHERINE TOBIN, AND LARRY WORTZEL

We are pleased to join the Report which the Commission is issuing today and want to add these additional views to highlight for Congress our particular concern over the significant military buildup in which China has been engaged since the mid-1990s.

No one born since the end of World War II has known a time when the United States has not had overwhelming naval superiority in the Western Pacific. The United States has used that power to support its treaty obligations, protect the freedom of trade and travel, deter aggression that could lead to war, and promote the resolution of disputes peacefully through the application of international norms and processes. All of these are vital American interests; in using its power to uphold them, the United States has created an environment conducive to peace, economic opportunity, and the progress of democracy in countries like Taiwan, Japan, South Korea, and the Philippines.

As the Report notes, the Chinese military buildup is changing the balance of power in the Asia Pacific, challenging 65 years of uncontested U.S. military preeminence in the region. China is building a modern Navy that will, according to our Report, consist of 313–342 mostly modern vessels by the year 2020. If current trends in American naval shipbuilding continue, the Chinese Navy will be larger than America's; and China can and will concentrate its presence almost entirely in the Western Pacific, whereas the United States Navy has and will continue to have global responsibilities.

The Report also documents one of the purposes for which China is engaged in this military buildup. China has made expansive claims of sovereignty in the East and South China Seas. It has eschewed multilateral talks to resolve these disputes and is instead pursuing a policy of coercive action by flooding disputed areas with both civilian maritime enforcement and PLA Navy ships in order to assume de facto administrative control over those areas. Other claimants are left with the alternatives of assenting to China's claims or starting an armed conflict with Beijing's highly capable maritime force.

The Chinese Communist Party leaders are serious about continuing this policy. As the Report notes, they are asserting a hegemonic presence in large parts of Asia and the Pacific, both in support of their specific claims of sovereignty and as part of realizing the "China Dream" by which they hope to legitimize their rule in the minds of the Chinese people despite the fact that they have specifically disavowed any intention of establishing democracy at home. These are vital interests in the minds of Chinese leaders, and there is no reason to believe they will abandon them as long as the balance of power in the region is moving in their favor.

We support the Administration's policy of "rebalancing" towards the Pacific. The Report notes that the purpose of this policy is to strengthen America's ties with its allies and ensure a peaceful resolution of disputes in the region. If the policy is supported with vigorous diplomacy, a military presence adequate to deter China, reliance on international norms and institutions, and a firm but respectful approach to Chinese ambitions, it has a good chance of preserving the peace while protecting the vital interests of the United States and the rights of all countries in the Western Pacific. But if the military balance continues to shift in China's direction, there is a danger that the rebalance policy will provoke the Chinese leadership without adequately deterring them from aggressive action.

America is not alone in its desire for peace and the recognition of the rights of all nations in the Western Pacific. As is our custom, the Commission travelled to several countries in the Far East this year, including Taiwan and Japan as well as Hong Kong and mainland China. America's allies and partners are concerned about the growing danger of armed conflict in the East and South China Sea—a danger recognized in our Report—and are eager for the United States to continue its leadership role in the area. There is a good chance that other countries will assist the United States in maintaining the burden of peace and security. Japan, in particular, has the means and increasingly the desire to increase its capabilities. But given the historical context, a Japanese military buildup, however benign its intent, has the potential to be destabilizing unless it occurs under the umbrella of American leadership and continued commitment to the region.

For all of these reasons, the Report recommends that Congress fund America's shipbuilding program at a level adequate to support increasing America's naval presence to at least the modest degree called for by the rebalance policy. We are writing these additional views to emphasize the importance of that recommendation. China's military buildup, along with its aggressive legal, administrative, and diplomatic efforts in support of its sovereignty claims, is disturbing the equilibrium in the Western Pacific. The consequences are potentially staggering, and we feel it our duty to emphasize to the Congress the importance of a purposeful, bipartisan, and timely response.

ADDITIONAL VIEWS OF COMMISSIONERS MICHAEL WESSEL AND JAMES TALENT, AND KATHERINE TOBIN

This year, for the first time, the Commission examined issues relating to Macau. Macau receives a massive amount of revenue from gambling. The revenue dwarfs that of Nevada's approximately $11 billion with an estimated $45 billion in gaming revenues last year for Macau.

Macau, like Hong Kong, is a Special Administrative Region of the People's Republic of China. It falls under the policy of "one country, two systems" and the ultimate control of the PRC's central government. While gambling is illegal on the Mainland, the gambling culture has deep roots in Macau. Since its transfer back to China in 1999, Macau has blossomed as *the* gambling destination for Mainland Chinese citizens.

In part, Macau's success is due to the arrival of U.S.-headquartered and licensed casino operators who have created world-class destinations for gamblers around the globe. Their investments in Macau enhanced consumer confidence in the operations, quality of accommodations, and property attractions.

The Commission heard testimony of a Nevada state regulator, of federal government officials, and academic and legal experts on gaming law and operations. Their testimony also addressed the potential for money laundering and other illegal activities that have typically accompanied gambling operations in the past.

The Commission is not a law enforcement or regulatory body: It was created by Congress as an accompaniment to the grant of Permanent Normal Trade Relations to China and that country's accession to the World Trade Organization. The Commission's charge is to report to Congress on issues in the bilateral relationship that may affect U.S. interests. The Commission, over the years, has identified important matters that deserved the attention of Congress and other policymakers, including China's manipulation of the value of its currency, China's cyber-espionage activities, the rise of China's military, and numerous other issues.

It is our view that the underlying questions about the integrity of operations in Macau bear further scrutiny by Congress. As part of this review, Congress should examine whether federal oversight and, potentially, regulation of the overseas activities of domestically-licensed gambling enterprises is merited.

Macau operates differently than many, if not most, other jurisdictions. In Las Vegas, for example, there are entities which essentially operate as tour operators, seeking to attract gamblers to the casinos. For their efforts, they receive compensation from the casinos.

In Macau, the structure is different. Junket operators, also known as VIP room operators, receive licenses from Macau authorities and may act independently from the casinos. These operators may further subcontract operations. But, their operations occur within the casino property. A significant portion of the U.S.-based casinos revenue—over two-thirds, according to one casino—occurs in these VIP or junket rooms.

Two U.S.-based gaming companies contacted the Commission to share their views on the matters and issues raised during the June

27 Commission hearing and the subsequent debate that took place during the Commission's report drafting sessions. These enterprises noted that they recognize the challenges of operating in Macau. They insisted that they have taken extraordinary measures to limit or eliminate the potential for illegal activities to occur, including money laundering, on their licensed property or within the junket and VIP room operations.

According to the written testimony of the Chairman of Nevada's State Gaming Control Board, A.G. Burnett, U.S.-licensed casino operators may operate differently than their competitors also operating in Macau. That, in our opinion, does not eliminate the prospect for activities counter to U.S. interests to take place on their properties or to be facilitated by the VIP room/junket operators.

As the section noted, the "Commission did not seek nor did it find evidence of wrongdoing by any U.S.-based casino company, either in Macau or Las Vegas." We support that statement. Nevertheless, we believe that further scrutiny is appropriate.

As Chairman Burnett stated in his written testimony,

> "it is common knowledge, the operation of VIP Rooms in Macau casinos had long been dominated by Asian Organized Crime (AOC), commonly referred to as "triads." With the evolution of gaming in Macau, the same AOC figures are allegedly still working the VIP Operations; only now they do it behind a façade of "legitimate" public corporations, complex corporate structures, financial guarantees, and third-party assignments. Public media and intelligence sources have affiliated all but one of the seven VIP Room Operator groups of interest with reputed AOC figures. Many of these associations are linked through documented public records. As such, since March 2010, the industry has been facing an increasing deluge of media scrutiny concerning the Nevada gaming companies' ties to organized crime in Macau."

Chinese triads—the term applied to its organized crime gangs—are known to be involved in global activities. Indeed, a 2003 publication of the Congressional Research Service, *Transnational Activities of Chinese Crime Organizations*, noted the participation of these groups "in all major types of crime, including trafficking of human beings and various commodities, financial crimes, extortion, gambling, prostitution, and violent crimes."

The question for Congress, and federal authorities, is whether U.S. gaming enterprises are being used as venues—knowingly or not—that advance the illegal activities of the Chinese triads. The steps these U.S.-based casinos have taken, which they indicate are constantly being upgraded and enhanced, may very well be sufficient. But the stakes are high enough to warrant further investigation.

With bets worth billions of dollars from unknown origins flowing through the gambling rooms in these U.S.-licensed casinos operating in Macau, America cannot afford to turn a blind eye to the real possibility that this massive flow of funds is being used to mask money laundering. Further scrutiny is appropriate. That inquiry exceeds the expertise of the Commission and requires further investigation.

ADDITIONAL VIEWS OF COMMISSIONER LARRY WORTZEL

Captain Louis Renault, Claude Rains' character in the film *Casablanca*, is known for a number of great lines, including "I'm shocked . . . shocked to find that gambling is going on in there." And some of us on the U.S.-China Economic and Security Review Commission seem to be shocked that organized crime syndicates or money laundering may be associated with gambling in Macau. However, I do not see the issue of gambling in Macau and the potential legal risks to a few Nevada-based casino companies as a threat to the national security or economy of the United States. The section on Macau never should have found its way into the Commission's annual report.

In attempting to craft a section for the annual report, we had to deal with an initial draft that, in my view, was filled with bias and innuendo. To address these problems, at the final stages of preparing the report, two groups of attorneys associated with casino companies descended on the Commission's offices seeking to ensure that the report included some statement of how these companies address supervision of the gaming industry in Macau.

The flawed process aside, the transactions and activities in Nevada casino companies' operations and investments in Macau may present legal problems for the casinos, Nevada and the Office of the United States Attorney; but this particular excursion into how events in greater China may affect U.S. security and the economy went far outside the Commission's legislative mandate.

That said the examination of Macau and gambling amounts to only about five percent to six percent of the total information in this year's annual report to Congress. It is a good report and contains a lot of valuable recommendations to Congress. For this reason, rather than dissent on the entire report, I have signed it but presented my additional views.

APPENDIX I

UNITED STATES–CHINA ECONOMIC AND SECURITY REVIEW COMMISSION CHARTER

22 U.S.C. 7002 (2001)

The Commission was created on October 30, 2000, by the Floyd D. Spence National Defense Authorization Act for 2001 § 1238, Pub. L. No. 106–398, 114 STAT. 1654A–334 (2000) (codified at 22 U.S.C. § 7002 (2001), as amended by the Treasury and General Government Appropriations Act for 2002 § 645 (regarding employment status of staff) & § 648 (regarding changing annual report due date from March to June), Pub. L. No. 107–67, 115 STAT. 514 (November 12, 2001); as amended by Division P of the "Consolidated Appropriations Resolution, 2003," Pub. L. No. 108–7 (February 20, 2003) (regarding Commission name change, terms of Commissioners, and responsibilities of Commission); as amended by Pub. L. No. 109–108 (enacted November 22, 2005) (regarding responsibilities of Commission and applicability of FACA); as amended by Pub. L. No. 110–161 (enacted December 26, 2007) (regarding changing annual report due date from June to December; reporting unobligated balances and submission of quarterly financial reports; deemed Commission a committee of Congress for printing and binding costs; amended employee compensation levels, and performance-based reviews and awards subject to Title 5 USC; and directed that travel by members of the Commission and its staff shall be arranged and conducted under the rules and procedures applying to travel by members of the House of Representatives and its staff).

§ 7002. United States-China Economic and Security Review Commission

(a) Purposes. The purposes of this section are as follows:

(1) To establish the United States-China Economic and Security Review Commission to review the national security implications of trade and economic ties between the United States and the People's Republic of China.

(2) To facilitate the assumption by the United States-China Economic and Security Review Commission of its duties regarding the review referred to in paragraph (1) by providing for the transfer to that Commission of staff, materials, and infrastructure (including leased premises) of the Trade Deficit Review Commission that are appropriate for the review upon the submittal of the final report of the Trade Deficit Review Commission.

(b) Establishment of United States-China Economic and Security Review Commission.

(1) In general. There is hereby established a commission to be known as the United States-China Economic and Security Review Commission (in this section referred to as the "Commission").

(2) Purpose. The purpose of the Commission is 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.

(3) Membership. The United States-China Economic and Security Review Commission shall be composed of 12 members, who shall be appointed in the same manner provided for the appointment of members of the Trade Deficit Review Commission under section 127(c)(3) of the Trade Deficit Review Commission Act (19 U.S.C. 2213 note), except that—

(A) Appointment of members by the Speaker of the House of Representatives shall be made after consultation with the chairman of the Committee on Armed Services of the House of Representatives, in addition to consultation with the chairman of the Committee on Ways and Means of the House of Representatives provided for under clause (iii) of subparagraph (A) of that section;

(B) Appointment of members by the President pro tempore of the Senate upon the recommendation of the majority leader of the Senate shall be made after consultation with the chairman of the Committee on Armed Services of the Senate, in addition to consultation with the chairman of the Committee on Finance of the Senate provided for under clause (i) of that subparagraph;

(C) Appointment of members by the President pro tempore of the Senate upon the recommendation of the minority leader of the Senate shall be made after consultation with the ranking minority member of the Committee on Armed Services of the Senate, in addition to consultation with the ranking minority member of the Committee on Finance of the Senate provided for under clause (ii) of that subparagraph;

(D) Appointment of members by the minority leader of the House of Representatives shall be made after consultation with the ranking minority member of the Committee on Armed Services of the House of Representatives, in addition to consultation with the ranking minority member of the Committee on Ways and Means of the House of Representatives provided for under clause (iv) of that subparagraph;

(E) Persons appointed to the Commission shall have expertise in national security matters and United States-China relations, in addition to the expertise provided for under subparagraph (B)(i)(I) of that section;

(F) Each appointing authority referred to under subparagraphs (A) through (D) of this paragraph shall—

(i) appoint 3 members to the Commission;

(ii) make the appointments on a staggered term basis, such that—

(I) 1 appointment shall be for a term expiring on December 31, 2003;

(II) 1 appointment shall be for a term expiring on December 31, 2004; and

(III) 1 appointment shall be for a term expiring on December 31, 2005;

(iii) make all subsequent appointments on an approximate 2-year term basis to expire on December 31 of the applicable year; and

(iv) make appointments not later than 30 days after the date on which each new Congress convenes.

(G) Members of the Commission may be reappointed for additional terms of service as members of the Commission; and

(H) Members of the Trade Deficit Review Commission as of the date of the enactment of this Act [enacted Oct. 30, 2000] shall serve as members of the United States-China Economic and Security Review Commission until such time as members are first appointed to the United States-China Economic and Security Review Commission under this paragraph.

(4) Retention of support. The United States-China Economic and Security Review Commission shall retain and make use of such staff, materials, and infrastructure (including leased premises) of the Trade Deficit Review Commission as the United States-China Economic and Security Review Commission determines, in the judgment of the members of the United States-China Economic and Security Review Commission, are required to facilitate the ready commencement of activities of the United States-China Economic and Security Review Commission under subsection (c) or to carry out such activities after the commencement of such activities.

(5) Chairman and vice chairman. The members of the Commission shall select a Chairman and Vice Chairman of the Commission from among the members of the Commission.

(6) Meetings.

(A) Meetings. The Commission shall meet at the call of the Chairman of the Commission.

(B) Quorum. A majority of the members of the Commission shall constitute a quorum for the transaction of business of the Commission.

(7) Voting. Each member of the Commission shall be entitled to one vote, which shall be equal to the vote of every other member of the Commission.

(c) Duties.

(1) Annual report. Not later than June 1 each year [beginning in 2002], the Commission shall submit to Congress a report, in both unclassified and classified form, regarding the national security implications and impact of the bilateral trade and economic relationship between the United States and the People's Republic of China. The report shall include a full analysis, along with conclusions and recommendations for legislative and administrative actions, if any, of the national security implications for the United States of the trade and current balances with the People's Republic of China in goods and services, financial transactions, and technology transfers. The Commission shall also take into account patterns of trade and transfers through third countries to the extent practicable.

(2) Contents of report. Each report under paragraph (1) shall include, at a minimum, a full discussion of the following:

(A) The portion of trade in goods and services with the United States that the People's Republic of China dedicates to military systems or systems of a dual nature that could be used for military purposes.

(B) The acquisition by the People's Republic of China of advanced military or dual-use technologies from the United States by trade (including procurement) and other technology transfers, especially those transfers, if any, that contribute to the proliferation of weapons of mass destruction or their delivery systems, or that undermine international agreements or United States laws with respect to nonproliferation.

(C) Any transfers, other than those identified under subparagraph (B), to the military systems of the People's Republic of China made by United States firms and United States-based multinational corporations.

(D) An analysis of the statements and writing of the People's Republic of China officials and officially-sanctioned writings that bear on the intentions, if any, of the Government of the People's Republic of China regarding the pursuit of military competition with, and leverage over, or cooperation with, the United States and the Asian allies of the United States.

(E) The military actions taken by the Government of the People's Republic of China during the preceding year that bear on the national security of the United States and the regional stability of the Asian allies of the United States.

(F) The effects, if any, on the national security interests of the United States of the use by the People's Republic of China of financial transactions and capital flow and currency manipulations.

(G) Any action taken by the Government of the People's Republic of China in the context of the World Trade Organization that is adverse or favorable to the United States national security interests.

(H) Patterns of trade and investment between the People's Republic of China and its major trading partners, other than the United States, that appear to be substantively different from trade and investment patterns with the United States and whether the differences have any national security implications for the United States.

(I) The extent to which the trade surplus of the People's Republic of China with the United States enhances the military budget of the People's Republic of China.

(J) An overall assessment of the state of the security challenges presented by the People's Republic of China to the United States and whether the security challenges are increasing or decreasing from previous years.

(3) Recommendations of report. Each report under paragraph (1) shall also include recommendations for action by Congress or the President, or both, including specific recommendations for the United States to invoke Article XXI (relating to security exceptions) of the General Agreement on Tariffs and Trade 1994 with respect to the People's Republic of China, as a result of any adverse impact on the national security interests of the United States.

(d) Hearings.

(1) In general. The Commission or, at its direction, any panel or member of the Commission, may for the purpose of carrying out the provisions of this section, hold hearings, sit and act at times and places, take testimony, receive evidence, and administer oaths to the extent that the Commission or any panel or member considers advisable.

(2) Information. The Commission may secure directly from the Department of Defense, the Central Intelligence Agency, and any other Federal department or agency information that the Commission considers necessary to enable the Commission to carry out its duties under this section, except the provision of intelligence information to the Commission shall be made with due regard for the protection from unauthorized disclosure of classified information relating to sensitive intelligence sources and methods or other exceptionally sensitive matters, under procedures approved by the Director of Central Intelligence.

(3) Security. The Office of Senate Security shall—

(A) provide classified storage and meeting and hearing spaces, when necessary, for the Commission; and

(B) assist members and staff of the Commission in obtaining security clearances.

(4) Security clearances. All members of the Commission and appropriate staff shall be sworn and hold appropriate security clearances.

(e) Commission personnel matters.

(1) Compensation of members. Members of the United States-China Economic and Security Review Commission shall be compensated in the same manner provided for the compensation of members of the Trade Deficit Review Commission under section 127(g)(1) and section 127(g)(6) of the Trade Deficit Review Commission Act [19 U.S.C. 2213 note].

(2) Travel expenses. Travel expenses of the United States-China Economic and Security Review Commission shall be allowed in the same manner provided for the allowance of the travel expenses of the Trade Deficit Review Commission under section 127(g)(2) of the Trade Deficit Review Commission Act [19 U.S.C § 2213 note].

(3) Staff. An executive director and other additional personnel for the United States-China Economic and Security Review Commission shall be appointed, compensated, and terminated in the same manner provided for the appointment, compensation, and termination of the executive director and other personnel of the Trade Deficit Review Commission under section 127(g)(3) and section 127(g)(6) of the Trade Deficit Review Commission Act [19 U.S.C. § 2213 note]. The executive director and any personnel who are employees of the United States-China Economic and Security Review Commission shall be employees under section 2105 of title 5, United States Code, for purposes of chapters 63, 81, 83, 84, 85, 87, 89, and 90 of that title [language of 2001 amendment, Sec. 645].

(4) Detail of government employees. Federal Government employees may be detailed to the United States-China Economic and Security Review Commission in the same manner provided for the detail of Federal Government employees to the Trade Deficit Review Commission under section 127(g)(4) of the Trade Deficit Review Commission Act [19 U.S.C. § 2213 note].

(5) Foreign travel for official purposes. Foreign travel for official purposes by members and staff of the Commission may be authorized by either the Chairman or the Vice Chairman of the Commission.

(6) Procurement of temporary and intermittent services. The Chairman of the United States-China Economic and Security Re-

view Commission may procure temporary and intermittent services for the United States-China Economic and Security Review Commission in the same manner provided for the procurement of temporary and intermittent services for the Trade Deficit Review Commission under section 127(g)(5) of the Trade Deficit Review Commission Act [19 U.S.C. § 2213 note].

(f) Authorization of appropriations.

(1) In general. There is authorized to be appropriated to the Commission for fiscal year 2001, and for each fiscal year thereafter, such sums as may be necessary to enable the Commission to carry out its functions under this section.

(2) Availability. Amounts appropriated to the Commission shall remain available until expended.

(g) Federal Advisory Committee Act. The provisions of the Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the Commission.

(h) Effective date. This section shall take effect on the first day of the 107th Congress.

Amendments:

SEC. 645. (a) Section 1238(e)(3) of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (as enacted by Public Law 106–398) is amended by adding at the end the following: "The executive director and any personnel who are employees of the United States-China Economic and Security Review Commission shall be employees under section 2105 of title 5, United States Code, for purposes of chapters 63, 81, 83, 84, 85, 87, 89, and 90 of that title." (b) The amendment made by this section shall take effect on January 3, 2001."

SEC. 648. DEADLINE FOR SUBMISSION OF ANNUAL REPORTS BY UNITED STATES-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION. Section 1238(c)(1) of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (as enacted into law by section I of Public Law 106–398) is amended by striking "March" and inserting "June".

Changes: Enacted into law by Division P of the "Consolidated Appropriations Resolution, 2003" Pub. L. No. 108–7 dated February 20, 2003:

H. J. Res. 2—

DIVISION P—UNITED STATES-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

SECTION 1. SHORT TITLE.—This division may be cited as the "United States-China Economic and Security Review Commission".

SEC. 2. (a) APPROPRIATIONS.—There are appropriated, out of any funds in the Treasury not otherwise appropriated, $1,800,000, to remain available until expended, to the United States-China Economic and Security Review Commission.

(b) NAME CHANGE.—

(1) IN GENERAL.—Section 1238 of the Floyd D. Spence National Defense Authorization Act of 2001 (22 U.S.C. 7002) is amended—as follows:

In each Section and Subsection where it appears, the name is changed to the "U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION"—

(2) REFERENCES.—Any reference in any Federal law, Executive Order, rule, regulation, or delegation of authority, or any document of or relating to the United States-China Security Review Commission shall be deemed to refer to the United States-China Economic and Security Review Commission.

(c) MEMBERSHIP, RESPONSIBILITIES, AND TERMS.—

(1) IN GENERAL.—Section 1238(b)(3) of the Floyd D. Spence National Defense Authorization Act of 2001 (22 U.S.C. 7002) is amended by striking subparagraph (F) and inserting the following:

"(F) each appointing authority referred to under subparagraphs (A) through (D) of this paragraph shall—

"(i) appoint 3 members to the Commission;

"(ii) make the appointments on a staggered term basis, such that—

"(I) 1 appointment shall be for a term expiring on December 31, 2003;

"(II) 1 appointment shall be for a term expiring on December 31, 2004; and

"(III) 1 appointment shall be for a term expiring on December 31, 2005;

"(iii) make all subsequent appointments on an approximate 2-year term basis to expire on December 31 of the applicable year; and

"(iv) make appointments not later than 30 days after the date on which each new Congress convenes;".

SEC. 635. (a) Modification of Responsibilities.—Notwithstanding any provision of section 1238 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (22 U.S.C. 7002), or any other provision of law, the United States-China Economic and Security Review Commission established by subsection (b) of that section shall investigate and report exclusively on each of the following areas:

(1) PROLIFERATION PRACTICES.—The role of the People's Republic of China in the proliferation of weapons of mass destruction and other weapons (including dual use technologies), including actions, the United States might take to encourage the People's Republic of China to cease such practices.

(2) ECONOMIC TRANSFERS.—The qualitative and quantitative nature of the transfer of United States production activities to the People's Republic of China, including the relocation of high technology, manufacturing, and research and development facilities, the impact of such transfers on United States national security, the adequacy of United States export control laws, and the effect of such transfers on United States economic security and employment.

(3) ENERGY.—The effect of the large and growing economy of the People's Republic of China on world energy supplies and the role the United States can play (including joint research and development efforts and technological assistance), in influencing the energy policy of the People's Republic of China.

(4) UNITED STATES CAPITAL MARKETS.—The extent of access to and use of United States capital markets by the People's Republic of China, including whether or not existing disclosure and transparency rules are adequate to identify People's Republic of China companies engaged in harmful activities.

(5) REGIONAL ECONOMIC AND SECURITY IMPACTS.—The triangular economic and security relationship among the United States, Taipei and the People's Republic of China (including the military modernization and force deployments of the People's Republic of China aimed at Taipei), the national budget of the People's Republic of China, and the fiscal strength of the People's Republic of China in relation to internal instability in the People's Republic of China and the likelihood of the externalization of problems arising from such internal instability.

(6) UNITED STATES-CHINA BILATERAL PROGRAMS.—Science and technology programs, the degree of non-compliance by the People's Republic of China with agreements between the United States and the People's Republic of China on prison labor imports and intellectual property rights, and United States enforcement policies with respect to such agreements.

(7) WORLD TRADE ORGANIZATION COMPLIANCE.—The compliance of the People's Republic of China with its accession agreement to the World Trade Organization (WTO).

(8) FREEDOM OF EXPRESSION.—The implications of restrictions on speech and access to information in the People's Republic of China for its relations with the United States in the areas of economic and security policy.

(b) Applicability of Federal Advisory Committee Act.—Subsection (g) of section 1238 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 is amended to read as follows:

(g) Applicability of FACA.—The provisions of the Federal Advisory Committee Act (5 U.S.C. App.) shall apply to the activities of the Commission.

The effective date of these amendments shall take effect on the date of enactment of this Act [November 22, 2005].

Changes: Enacted into law by the Consolidated Appropriations Act, 2008, Pub. L. No. 110–161 dated December 26, 2007:

H.R. 2764—

For necessary expenses of the United States-China Economic and Security Review Commission, $4,000,000, including not more than $4,000 for the purpose of official representation, to remain available until September 30, 2009: *Provided*, That the Commission shall submit a spending plan to the Committees on Appropriations no later than March 1, 2008, which effectively addresses the recommendations of the Government Accountability Office's audit of the Commission (GAO–07–1128): *Provided further*, That the Commission shall provide to the Committees on Appropriations a quarterly accounting of the cumulative balances of any unobligated funds that were received by the Commission during any previous fiscal year: *Provided further*, That for purposes of costs relating to printing and binding, the Commission shall be deemed, effective on the date of its establishment, to be a committee of Congress: *Provided further*, That compensation for the executive director of the Commission may not exceed the rate payable for level II of the Executive Schedule under section 5314 of title 5, United States Code: *Provided further*, That section 1238(c)(1) of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001, is amended by striking "June" and inserting "December": *Provided further*, That travel by members of the Commission and its staff shall be arranged and conducted under the rules and procedures applying to travel by members of the House of Representatives and its staff.

COMMISSION FINANCIAL MANAGEMENT

SEC. 118. (a) REQUIREMENT FOR PERFORMANCE REVIEWS.—The United States-China Economic and Security Review Commission shall comply with chapter 43 of title 5, United States Code, regarding the establishment and regular review of employee performance appraisals.

(b) LIMITATION ON CASH AWARDS.—The United States-China Economic and Security Review Commission shall comply with section 4505a of title 5, United States Code, with respect to limitations on payment of performance-based cash awards.

APPENDIX II
BACKGROUND OF COMMISSIONERS

The Honorable William A. Reinsch, Chairman

Chairman William Reinsch was reappointed to the Commission by Senate Majority Leader Harry Reid for a seventh two-year term expiring December 31, 2013. He was elected as Chairman of the Commission for the 2013 Report cycle effective January 1, 2013, and previously served as Chairman of the Commission for the 2011 Report cycle. Chairman Reinsch served as Under Secretary for Export Administration in the U.S. Department of Commerce. As head of the Bureau of Export Administration, later named the Bureau of Industry and Security, Chairman Reinsch was charged with administering and enforcing the export control policies of the U.S. government, including its antiboycott laws. Major accomplishments during his tenure included refocusing controls regarding economic globalization, most notably on high-performance computers, microprocessors, and encryption, completing the first revisions of the Export Administration regulations in over 40 years. In addition, he revised the interagency process for reviewing applications and permitted electronic filing of applications over the Internet.

During this time, Chairman Reinsch delivered more than 200 speeches and testified 53 times before various committees of the Congress. Before joining the Department of Commerce, Chairman Reinsch was a senior legislative assistant to Senator John Rockefeller and was responsible for the senator's work on trade, international economic policy, foreign affairs, and defense. He also provided staff support for Senator Rockefeller's related efforts on the Finance Committee and the Commerce, Science, and Transportation Committee.

For over a decade, Chairman Reinsch served on the staff of Senator John Heinz as chief legislative assistant, focusing on foreign trade and competitiveness policy issues. During that period, Senator Heinz was either the chairman or the ranking member of the Senate Banking Committee's Subcommittee on International Finance. Senator Heinz was also a member of the International Trade Subcommittee of the Finance Committee. Chairman Reinsch provided support for the senator on both subcommittees. This work included five revisions of the Export Administration Act and work on four major trade bills. Prior to joining Senator Heinz's staff, Chairman Reinsch was a legislative assistant to Representatives Richard Ottinger and Gilbert Gude, acting staff director of the House Environmental Study Conference, and a teacher in Maryland.

Today Chairman Reinsch is president of the National Foreign Trade Council. Founded in 1914, the council is the only business organization dedicated solely to trade policy, export finance, international tax, and human resources issues. The organization represents over 200 companies through its offices in New York City and Washington.

In addition to his legislative and private sector work, Chairman Reinsch served as an adjunct associate professor at the University of Maryland's University College Graduate School of Management and Technology, teaching a course in international trade and trade policy. He is also a member of the boards of the Executive Council on Diplomacy and the Center for International Private Enterprise (CIPE). Chairman Reinsch's publications include "Why China Matters to the Health of the U.S. Economy," published in *Economics and National Security*; "The Role and Effectiveness of U.S. Export Control Policy in the Age of Globalization" and "Export Controls in the Age of Globalization," both published in *The Monitor*. In addition, Chairman Reinsch has published "Should Uncle Sam Control U.S. Technology Exports," published in *Insight* magazine; "Encryption Policy Strikes a Balance," published in the *Journal of Commerce*, and "Building a New Economic Relationship with Japan," published with others in *Beyond the Beltway: Engaging the Public in U.S. Foreign Policy*.

The Honorable Dennis C. Shea, Vice Chairman

Vice Chairman Dennis Shea was reappointed by Senate Republican Leader Mitch McConnell for a third two-year term expiring December 31, 2014. An attorney with 25 years of experience in government and public policy, he is the founder of Shea Public Strategies LLC, a public affairs firm based in Alexandria, Virginia. Before starting the firm, he served as Vice President for Government Affairs—Americas for Pitney Bowes Inc., a Fortune 500 company.

Vice Chairman Shea's government service began in 1988, when he joined the Office of Senate Republican Leader Bob Dole as counsel, subsequently becoming the Senator's deputy chief of staff in the Office of the Senate Majority Leader. In these capacities, he advised Senator Dole and other Republican senators on a broad range of domestic policy issues, was involved in the drafting of numerous pieces of legislation, and was recognized as one of the most influential staffers on Capitol Hill. In 1992, Vice Chairman Shea's service with Senator Dole was interrupted when he ran for Congress in the Seventh District of New York. During the 1996 elections, Vice Chairman Shea continued to help shape the national public policy debate as the director of policy for the Dole for President Campaign. Following the elections, he entered the private sector, providing legislative and public affairs counsel to a wide range of clients while employed at BKSH & Associates and Verner, Liipfert, Bernhard, McPherson, and Hand.

In 2003, Vice Chairman Shea was named the Executive Director of the President's Commission on the United States Postal Service. Many of the Commission's recommendations were subsequently adopted in the landmark 2006 postal reform legislation.

In 2004, Vice Chairman Shea was confirmed as Assistant Secretary for Policy Development and Research at the U.S. Department of Housing and Urban Development. As Assistant Secretary, Vice Chairman Shea led a team responsible for conducting much of the critical analysis necessary to support the Department's mission. In 2005, Vice Chairman Shea left to serve as Senior Advisor to Senator Elizabeth Dole in her capacity as chairman of the National Republican Senatorial Committee.

Vice Chairman Shea received a J.D., an M.A. in History, and a B.A. in Government, from Harvard University. He is admitted to the bar in New York and the District of Columbia. The Vice Chairman currently resides in Alexandria, Virginia, with his wife Elizabeth and daughter Juliette.

Carolyn Bartholomew

Carolyn Bartholomew was reappointed to the Commission by House Democratic Leader Nancy Pelosi for a sixth two-year term expiring on December 31, 2013. She previously served as the Commission's Chairman for the 2007 and 2009 Report cycles and served as Vice Chairman for the 2010, 2008, and 2006 Report cycles.

Commissioner Bartholomew has worked at senior levels in the U.S. Congress, serving as counsel, legislative director, and chief of staff to now House Democratic Leader Nancy Pelosi. She was a professional staff member on the House Permanent Select Committee on Intelligence and also served as a legislative assistant to then U.S. Representative Bill Richardson.

In these positions, Commissioner Bartholomew was integrally involved in developing U.S. policies on international affairs and security matters. She has particular expertise in U.S.-China relations, including issues related to trade, human rights, and the proliferation of weapons of mass destruction. Ms. Bartholomew led efforts in the establishment and funding of global AIDS programs and the promotion of human rights and democratization in countries around the world. She was a member of the first Presidential Delegation to Africa to Investigate the Impact of HIV/AIDS on Children and a member of the Council on Foreign Relations' Congressional Staff Roundtable on Asian Political and Security Issues.

In addition to U.S.-China relations, her areas of expertise include terrorism, trade, proliferation of weapons of mass destruction, human rights, U.S. foreign assistance programs, and international environmental issues. She is the Vice President for Development and Corporate Initiatives for the BlueGreen Alliance and also serves on the board of directors of the Kaiser Aluminum Corporation and the nonprofit organization Asia Catalyst. Commissioner Bartholomew received a Bachelor of Arts degree from the University of Minnesota, a Master of Arts in Anthropology from Duke University, and a Juris Doctorate from Georgetown University Law Center. She is a member of the State Bar of California.

Peter T.R. Brookes

Commissioner Brookes was reappointed to the Commission by House Republican Leader John Boehner for a two-year term expiring December 31, 2013. Commissioner Brookes served in the George W. Bush Administration as the Deputy Assistant Secretary of Defense for Asian and Pacific Affairs. Prior to joining the Bush Administration, Commissioner Brookes was a Professional Staff Member with the Committee on International Relations in the U.S. House of Representatives. Before his service in the Congress, Commissioner Brookes worked in the Central Intelligence Agency, for the State Department at the United Nations, and in the private sector.

Now, Commissioner Brookes is a Senior Fellow at The Heritage Foundation and works to develop and communicate the Foundation's stance on foreign policy and national security affairs through media appearances, research, published articles, congressional testimony, and speaking engagements.

Commissioner Brookes is a decorated military veteran, having served on active duty with the U.S. Navy in Latin America, Asia, and the Middle East. He is a doctoral candidate at Georgetown University and graduate of the U.S. Naval Academy, the Defense Language Institute, the Naval War College, and The Johns Hopkins University.

Robin Cleveland

Commissioner Cleveland was reappointed by Senate Republican Leader Mitch McConnell for a third two-year term expiring December 31, 2014. After three decades of government service, Commissioner Cleveland is now serving as the Executive Director of the Office of Student Life at the Graduate School of Education and Human Development at The George Washington University. Having received her Masters degree in school counseling, Ms. Cleveland also is pursuing her doctorate as a counselor educator. Previously, Commissioner Cleveland worked for U.S. Senator Mitch McConnell in a number of positions in his personal office, on the Senate Select Committee on Intelligence, the Foreign Relations Committee, and the Senate Appropriations Committee. In addition, Commissioner Cleveland served as the Counselor to the President of the World Bank, and as the Associate Director of the Office of Management and Budget in the Executive Office of the President. During her tenure serving President Bush, Commissioner Cleveland co-led the interagency effort to develop and operationalize two Presidential initiatives: the Millennium Challenge Corporation and the President's Emergency Plan for AIDS Relief. These efforts reflect her commitment to link policy, performance, and resource management.

Commissioner Cleveland graduated from Wesleyan University with honors and received her M.A. in Education and Human Development from The George Washington University.

Jeffrey L. Fiedler

Commissioner Fiedler was reappointed to the Commission by House Democratic Leader Nancy Pelosi on December 23, 2011, for a fourth two-year term expiring December 31, 2013. He is assistant to the general president, and director, Special Projects and Initiatives, for the International Union of Operating Engineers. Previously, he was President of Research Associates of America (RAA) and the elected president of the Food and Allied Service Trades Department, AFL–CIO ("FAST"). This constitutional department of the AFL–CIO represented ten unions with a membership of 3.5 million in the United States and Canada. The focus of RAA, like

FAST before it, was organizing and bargaining research for workers and their unions.

He served as a member of the AFL–CIO Executive Council committees on International Affairs, Immigration, Organizing, and Strategic Approaches. He also served on the board of directors of the Consumer Federation of America and is a member of the Council on Foreign Relations. In 1992, Mr. Fiedler co-founded the Laogai Research Foundation (LRF), an organization devoted to studying the forced labor camp system in China. When the foundation's executive director, Harry Wu, was detained in China in 1995, Mr. Fiedler coordinated the campaign to win his release. He no longer serves as director of the LRF.

Mr. Fiedler has testified on behalf of the AFL–CIO before the Senate Foreign Relations Committee and the House International Affairs Committee and its various subcommittees, as well as the Trade Subcommittee of the House Ways and Means Committee concerning China policy. He attended three of the American Assembly conferences on China sponsored by Columbia University and has participated in a Council on Foreign Relations task force and study group on China. He has been interviewed on CBS, NBC, ABC, CNN, and CNBC on China policy, international trade issues, human rights, and child labor.

A Vietnam veteran, he served with the U.S. Army in Hue in 1967–68. He received his B.A. in Political Science from Southern Illinois University. He is married with two adult children and resides in Virginia.

Carte P. Goodwin

Senator Carte P. Goodwin was appointed to the Commission by Senate Majority Leader Harry Reid for a two-year term expiring on December 31, 2013. He is an attorney with the Charleston, West Virginia, law firm of Goodwin & Goodwin, LLP. His practice includes commercial litigation, appellate advocacy, and intellectual property.

In July 2010, West Virginia Governor Joe Manchin III appointed Senator Goodwin to the United States Senate to fill the vacancy caused by the passing of Senator Robert C. Byrd, where he served until a special election was held to fill the remainder of Senator Byrd's unexpired term.

From 2005 to 2009, Senator Goodwin served four years as General Counsel to Governor Manchin, during which time he also chaired the Governor's Advisory Committee on Judicial Nominations. In addition, Senator Goodwin chaired the West Virginia School Building Authority and served as a member of the State Consolidated Public Retirement Board. Following his return to private practice in 2009, Senator Goodwin was appointed to chair the Independent Commission on Judicial Reform, along with former Supreme Court Justice Sandra Day O'Connor, which was tasked with evaluating the need for broad systemic reform to West Virginia's judicial system.

Senator Goodwin also previously worked as a law clerk for the Honorable Robert B. King of the United States Court of Appeals for the Fourth Circuit. A native of Mt. Alto, West Virginia, Senator Goodwin received his Bachelor of Arts degree in Philosophy from

Marietta College in Marietta, Ohio, in 1996 and received his Doctor of Law degree from the Emory University School of Law, graduating Order of the Coif in 1999.

Senator Goodwin currently resides in Charleston, West Virginia, with his wife, Rochelle; son, Wesley Patrick; and daughter, Anna Vail.

Daniel M. Slane

Daniel Slane was reappointed to the Commission by Speaker of the House John Boehner for a third two-year term expiring on December 31, 2013. Commissioner Slane served as the Commission's Chairman for the 2010 Report cycle and as Vice Chairman for the 2011 Report cycle.

Commissioner Slane served for two years on active duty as a U.S. Army Captain in Military Intelligence; in addition, he served for a number of years as a Case Officer with the U.S. Central Intelligence Agency. Commissioner Slane worked in the White House during the Ford Administration.

In 1996, Commissioner Slane became a member of the board of trustees of The Ohio State University and was chairman from 2005 to 2006. The Ohio State University is the nation's largest university, with an annual budget of over $4 billion. He is also the former chairman of University Hospital, a 1,000-bed regional hospital in Columbus, and the former chairman of the James Cancer Hospital, a National Cancer Institute Comprehensive Cancer Center. Commissioner Slane serves on the board of two financial institutions and a number of nonprofit organizations.

Commissioner Slane is the founder and co-owner of the Slane Company, whose principal business includes real estate development, lumber, and furniture. He has extensive international business experience, including operating a business in China. Prior to becoming a member of the Commission, Commissioner Slane manufactured plywood and related wood products at factories in Harbin, Dalian, and Balu (Pizhou), China. In 2007, he sold his interest in that company.

Commissioner Slane received a Bachelor of Science in Business Administration and a Juris Doctorate from The Ohio State University. He holds a master's degree in International Law from the Europa Institute at the University of Amsterdam in The Netherlands. Commissioner Slane is a member of the Ohio Bar and was formerly a partner in the law firm of Grieser, Schafer, Blumenstiel, and Slane.

The Honorable James M. Talent

Senator Jim Talent was appointed by Senate Republican Leader Mitch McConnell for a one-year term expiring December 31, 2013. Commissioner Talent is a national security leader who specializes in issues related to the Department of Defense. He has been active in Missouri and national public policy for over 25 years.

Senator Talent's public service began in 1984, when at the age of 28 he was elected to the Missouri House of Representatives where he served eight years, the last four as the Republican leader in the Missouri House.

In 1992, he was elected to the first of four terms in the U.S. House of Representatives, where he represented Missouri's Second Congressional District. During his eight years in the U.S. House of Representatives, Senator Talent co-authored the historic welfare reform bill, championed national security issues on the House Armed Services Committee, and enacted legislation to help revitalize distressed neighborhoods, both urban and rural. He was the chairman of the House Small Business Committee from 1997–2001, where he worked on regulatory reform issues and on legislation to lower health care costs for small business people and their employees. Under Senator Talent's leadership, the Small Business Committee became one of the most prolific and bipartisan in the House of Representatives, passing numerous bills without a single dissenting vote.

In 2002, Missourians elected Senator Talent to serve in the United States Senate, where he worked with Republicans and Democrats to enact critical legislation for Missouri. He served on the Senate Armed Services, Energy and Natural Resources, and Agriculture committees. Working with Oregon Democrat Ron Wyden, Senator Talent was successful in securing critical funding through construction bonding in the highway bill. He and Senator Dianne Feinstein (D–CA) succeeded in passing the most comprehensive anti-methamphetamine bill ever enacted into law. Senator Talent was a leader on energy issues and was instrumental in the passage of the renewable fuel standard.

After leaving the Senate in 2007, Senator Talent joined The Heritage Foundation as a Distinguished Fellow specializing in military affairs and conservative solutions to poverty. In 2008, he served as Vice Chairman of the Commission on Prevention of Weapons of Mass Destruction Proliferation and Terrorism. In 2010, he served on the independent panel that reviewed the Quadrennial Defense Review of the Department of Defense. He also has been a member of the executive panel advising the Chief of Naval Operations. Senator Talent was the first national figure outside Massachusetts to endorse Governor Mitt Romney for president in 2007 and was Governor Romney's senior policy advisor in both the 2008 and 2012 campaigns for president.

Senator Talent is an attorney. He earned his B.A. from Washington University in St. Louis and his J.D. from the University of Chicago Law School.

The Honorable Katherine C. Tobin, Ph.D.

Dr. Katherine Tobin was appointed to the U.S.-China Economic and Security Review Commission by Senate Majority Leader Harry Reid in December 2012 for a two-year term expiring December 31, 2014. Dr. Tobin has 15 years of experience as a business manager, market researcher, and consultant in corporate America at institutions including the Hewlett-Packard Corporation, IBM, and Catalyst. She also has worked for 15 years as a university faculty member and administrator.

In 2009, Dr. Tobin was appointed by President Obama as Deputy Assistant Secretary for Performance Improvement at the U.S. Department of Education. She focused on strengthening the Department's capacity to work more effectively with its political and educational partners at the national, state, and local levels.

In 2006, Dr. Tobin was appointed by President George W. Bush and served three years as a member of the Board of Governors of the U.S. Postal Service. Dr. Tobin provided strategic vision to the executive team, helped direct and control expenditures, reviewed business practices, conducted long-range planning, and set policies on all postal matters. She also chaired the Board's Audit and Finance Committee at a critical time, when, due to Congress's 2006 legislation, the U.S. Postal Service needed to strengthen its organizational and financial controls to become compliant by 2010 with the Sarbanes-Oxley Act.

During her years at Hewlett-Packard, Dr. Tobin worked in the Corporation's Computer Systems Division and the Systems Technology Division, which were responsible for developing minicomputer systems purchased around the world for business, medical, and scientific usage. Dr. Tobin worked closely with R&D and marketing teams early in the product development life cycle to ensure that customer needs were clearly understood and translated into engineering and market specifications.

Working as a consultant with IBM's senior leaders, Dr. Tobin conducted research on the corporation's values across all its global operations, institutional brand awareness and preference, distribution channels management, and the creation of a new business plan for IBM's Global Financing business.

Dr. Tobin earned a Ph.D. and Master of Arts degree from Stanford University. She earned a Master of Arts degree in Teaching from the University of Massachusetts and a Bachelor of Arts in English from Skidmore College.

Michael R. Wessel

Commissioner Michael R. Wessel, an original member of the U.S.-China Economic and Security Review Commission, was reappointed by House Democratic Leader Nancy Pelosi for a seventh two-year term expiring on December 31, 2014.

Commissioner Wessel served on the staff of former House Democratic Leader Richard Gephardt for more than two decades, leaving his position as general counsel in March 1998. In addition, Commissioner Wessel was Congressman Gephardt's chief policy advisor, strategist, and negotiator. He was responsible for the development, coordination, management, and implementation of the Democratic leader's overall policy and political objectives, with specific responsibility for international trade, finance, economics, labor, and taxation.

During his more than 20 years on Capitol Hill, Commissioner Wessel served in a number of positions. As Congressman Gephardt's principal Ways and Means aide, he developed and implemented numerous tax and trade policy initiatives. He participated in the enactment of every major trade policy initiative from 1978 until his departure in 1998. In the late 1980s, he was the executive director of the House Trade and Competitiveness Task Force, where he was responsible for the Democrats' trade and competitiveness agenda as well as overall coordination of the Omnibus Trade and Competitiveness Act of 1988.

Commissioner Wessel was intimately involved in the development of comprehensive tax reform legislation in the early 1980s and every major tax bill during his tenure. Beginning in 1989, he became the principal advisor to the Democratic leadership on economic policy matters and served as tax policy coordinator to the 1990 budget summit. In 1995, he developed the Ten Percent Tax Plan, a comprehensive tax reform initiative that would enable roughly four out of five taxpayers to pay no more than a 10 percent rate in federal income taxes, the principal Democratic tax reform alternative.

In 1988, he served as national issues director for Congressman Gephardt's presidential campaign. During the 1992 presidential campaign, he assisted the Clinton presidential campaign on a broad range of issues and served as a senior policy advisor to the Clinton Transition Office. In 2004, he was a senior policy advisor to the Gephardt for President Campaign and later co-chaired the Trade Policy Group for the Kerry presidential campaign. In 2008, he was publicly identified as a trade and economic policy advisor to the Obama presidential campaign.

He has coauthored a number of articles with Congressman Gephardt and a book, *An Even Better Place: America in the 21st Century*. Commissioner Wessel served as a member of the U.S. Trade Deficit Review Commission in 1999–2000, a congressionally created commission charged with studying the nature, causes, and consequences of the U.S. merchandise trade and current account deficits.

Today, Commissioner Wessel is President of The Wessel Group Incorporated, a public affairs consulting firm offering expertise in government, politics, and international affairs. He was formerly the Executive Vice President at the Downey McGrath Group, Incorporated. Commissioner Wessel is a member of the board of directors of Goodyear Tire and Rubber. Commissioner Wessel holds a Bachelor of Arts and a Juris Doctorate from The George Washington University. He is a member of the Bars of the District of Columbia and of Pennsylvania and is a member of the Council on Foreign Relations. He and his wife Andrea have four children.

Larry M. Wortzel, Ph.D.

Larry Wortzel was reappointed by Speaker of the House John Boehner for a seventh two-year term expiring on December 31, 2014. Dr. Wortzel has served on the Commission since November 2001, was the Commission's Chairman for the 2006 and 2008 Report cycles, and served as Vice Chairman for the 2009 Report cycle.

A leading authority on China, Asia, national security, and military strategy, Commissioner Wortzel had a distinguished career in the U.S. Armed Forces. Following three years in the Marine Corps, Commissioner Wortzel enlisted in the U.S. Army in 1970. His first assignment with the Army Security Agency took him to Thailand, where he focused on Chinese military communications in Vietnam and Laos. Within three years, he had graduated from the Infantry Officer Candidate School and the Airborne and Ranger schools. After four years as an infantry officer, Commissioner Wortzel shifted to military intelligence. Commissioner Wortzel traveled regularly throughout Asia while serving in the U.S. Pacific Command from 1978 to 1982. The following year, he attended the National University of Singapore, where he studied advanced Chinese and traveled in China and Southeast Asia. He next worked for the Under Secretary of Defense for Policy, developing counterintelligence programs to protect emerging defense technologies from foreign espionage. Also, the Commissioner managed programs to gather foreign intelligence for the Army Intelligence and Security Command.

From 1988 to 1990, Commissioner Wortzel was the Assistant Army Attaché at the U.S. Embassy in Beijing, where he witnessed and reported on the Tiananmen Massacre. After assignments as an army strategist and managing army intelligence officers, he returned to China in 1995 as the army attaché. In December 1997, Commissioner Wortzel became a faculty member of the U.S. Army War College, serving as the Director of the Strategic Studies Institute. He retired from the army as a colonel.

After his military retirement, Commissioner Wortzel served as the director of the Asian Studies Center and vice president for foreign policy at The Heritage Foundation from 1999 to 2006. Commissioner Wortzel's books include *Class in China: Stratification in a Classless Society*; *China's Military Modernization: International Implications*; *The Chinese Armed Forces in the 21st Century*; and *Dictionary of Contemporary Chinese Military History*. His newest book, *The Dragon Extends its Reach: Chinese Military Power Goes Global*, was published by Potomac Books, Inc., in 2013.

A graduate of the Armed Forces Staff College and the U.S. Army War College, Commissioner Wortzel earned his Bachelor of Arts from Columbus College and his Master of Arts and Ph.D. from the University of Hawaii. He and his wife live in Williamsburg, Virginia.

Michael R. Danis, Executive Director

Formerly served as a senior intelligence officer with the Defense Intelligence Agency. Mr. Danis managed the agency's technology transfer division, the U.S. government's sole analytical entity tasked with producing intelligence assessments regarding all aspects of foreign acquisition of U.S.-controlled technology and high-tech corporations. He also established and led a unique team of China technology specialists producing assessments on China's military-industrial complex and the impact of U.S. export-controlled and other foreign technology on Chinese weapons development programs. While serving in the U.S. Air Force, Mr. Danis was twice temporarily assigned to the office of the defense attaché in Beijing.

APPENDIX III

PUBLIC HEARINGS OF THE COMMISSION

Full transcripts and written testimonies are available online at the Commission's website: www.uscc.gov.

February 7, 2013: Public Hearing on "China's New Leadership and Implications for the United States" Washington, DC

Commissioners present: Hon. William A. Reinsch, Chairman (Hearing Co-Chair); Hon. Dennis C. Shea, Vice Chairman (Hearing Co-Chair); Carolyn Bartholomew; Robin Cleveland; Jeffrey L. Fiedler; Hon. Carte P. Goodwin; Daniel M. Slane; Hon. James M. Talent; Hon. Katherine C. Tobin; Michael R. Wessel; Larry M. Wortzel.

Witnesses: Christopher K. Johnson, Center for Strategic and International Studies; Cheng Li, The Brookings Institution; Eswar Prasad, Cornell University; Nicholas Borst, Peterson Institute for International Economics; James Mulvenon, Defense Group, Inc.; Roy D. Kamphausen, National Bureau of Asian Research; Lt. General Wallace 'Chip' Gregson, Jr. (USMC, ret.), Center for the National Interest; David M. Lampton, The Johns Hopkins University, School of Advanced International Studies; Michael Auslin, American Enterprise Institute.

March 7, 2013: Public Hearing on "Corporate Accountability, Access to Credit, and Access to Markets in China's Financial System—The Rules and Their Ramifications for U.S. Investors" Washington, DC

Commissioners present: Hon. William A. Reinsch, Chairman; Hon. Dennis C. Shea, Vice Chairman; Robin Cleveland (Hearing Co-Chair); Jeffrey L. Fiedler; Hon. Carte P. Goodwin (Hearing Co-Chair); Daniel M. Slane; Hon. James M. Talent; Hon. Katherine C. Tobin; Michael R. Wessel; Larry M. Wortzel.

Witnesses: Cynthia M. Fornelli, The Center for Audit Quality; Thomas Quaadman, U.S. Chamber of Commerce; Paul Gillis,* Peking University, Guanghua School of Management; Regina Abrami, Lauder Institute for Management and International Studies; Carl Walter, formerly of JP Morgan China; Lynette H. Ong,* University of Toronto; Sheridan Prasso,* Bloomberg News; John Dearie, Financial Services Forum; Paul T. Saulski, Georgetown University Law Center; Stephen M.H. Simchak, American Insurance Association.

April 4, 2013: Public Hearing on "China's Maritime Disputes in the East and South China Seas" Washington, DC

Commissioners present: Hon. William A. Reinsch, Chairman; Hon. Dennis C. Shea, Vice Chairman; Carolyn Bartholomew; Peter T.R. Brookes (Hearing Co-Chair); Jeffrey L. Fiedler; Hon. Carte P. Goodwin; Daniel M. Slane; Hon. James M. Talent; Hon. Katherine C. Tobin (Hearing Co-Chair); Michael R. Wessel; Larry M. Wortzel.

Witnesses: Rear Admiral Michael McDevitt (USN, Ret.), CNA; Michael D. Swaine, Carnegie Endowment for International Peace; Jessica Chen Weiss, Yale University; Peter Dutton, U.S. Naval War College; Steven W. Lewis, Rice University; Lloyd Thrall, RAND Corporation.

April 25, 2013: Public Hearing on "China's Agricultural Policy and U.S. Access to China's Market" Ames, IA

Commissioners present: Hon. William A. Reinsch, Chairman; Hon. Dennis C. Shea, Vice Chairman; Carolyn Bartholomew; Hon. Carte P. Goodwin; Daniel M. Slane (Hearing Co-Chair); Hon. James M. Talent; Hon. Katherine C. Tobin; Michael R. Wessel (Hearing Co-Chair).

Witnesses: William Northey, Iowa Department of Agriculture and Land Stewardship; Fred Gale, U.S. Department of Agriculture; Dermot J. Hayes, Iowa State University; Kevin Brosch, DTB Associates LLP; William Westman, American Meat Institute; Patty Lovera, Food & Water Watch; Veronica Nigh, American Farm Bureau Federation; Colin A. Carter, University of California–Davis; David Miller, Iowa Farm Bureau; Barbara P. Glenn, CropLife America; Mark D. Lange, National Cotton Council of America; Julius Schaaf, U.S. Grains Council.

May 9, 2013: Public Hearing on "Trends and Implications of Chinese Investment in the United States" Washington, DC

Commissioners present: Hon. William A. Reinsch, Chairman; Hon. Dennis C. Shea, Vice Chairman; Carolyn Bartholomew (Hearing Co-Chair); Robin Cleveland; Jeffrey L. Fiedler; Daniel M. Slane; Hon. James M. Talent; Hon. Katherine C. Tobin; Michael R. Wessel; Larry M. Wortzel (Hearing Co-Chair).

Witnesses: Thilo Hanemann, Rhodium Group; Derek Scissors, The Heritage Foundation; Andrew Szamosszegi, Capital Trade, Inc.; Elizabeth J. Drake, Stewart & Stewart; Mark E. Plotkin, Covington & Burling LLP; Dean G. Popps, formerly of the U.S. Department of Defense.

June 6, 2013: Public Hearing on "China and the Middle East" Washington, DC

Commissioners present: Hon. William A. Reinsch, Chairman; Hon. Dennis C. Shea, Vice Chairman; Carolyn Bartholomew; Peter T.R. Brookes; Robin Cleveland; Jeffrey L. Fiedler (Hearing Co-Chair); Hon. Carte P. Goodwin; Daniel M. Slane; Hon. James M. Talent (Hearing Co-Chair); Hon. Katherine C. Tobin; Michael R. Wessel; Larry M. Wortzel.

Witnesses: Dawn Murphy, Princeton-Harvard China and the World Program; Yitzhak Shichor, The Hebrew University of Jerusalem, and The University of Haifa; Erica S. Downs, The Brookings Institution; Bryant Edwards, Latham and Watkins LLP; Jon B. Alterman, Center for Strategic and International Studies; Joel Wuthnow, CNA; Andrew Erickson, U.S. Naval War College.

June 27, 2013: Public Hearing on "Macau and Hong Kong" Washington, DC

Commissioners present: Hon. William A. Reinsch, Chairman (Hearing Co-Chair); Hon. Dennis C. Shea, Vice Chairman (Hearing Co-Chair); Carolyn Bartholomew; Peter T.R. Brookes; Daniel M. Slane; Hon. James M. Talent; Hon. Katherine C. Tobin; Michael R. Wessel.

Witnesses: Daniel L. Glaser, U.S. Department of the Treasury; A.G. Burnett, Nevada State Gaming Control Board; James H. Freis Jr., Cleary Gottlieb Steen & Hamilton LLP, and formerly of U.S. Treasury Financial Crimes Enforcement Network (FinCEN); I. Nelson Rose, Whittier Law School; Sophie Richardson, Human Rights Watch; Madeline Earp, Freedom House.

July 11, 2013: Roundtable on "U.S.-China Cybersecurity Issues" Washington, DC

Commissioners present: Hon. William A. Reinsch, Chairman; Hon. Dennis C. Shea, Vice Chairman; Michael R. Wessel.

Roundtable participants: Bruce Quinn, Rockwell Automation; Roy D. Kamphausen, National Bureau of Asian Research; James Mulvenon, Defense Group Inc.

* Submitted material for the record.

APPENDIX IIIA

LIST OF WITNESSES TESTIFYING BEFORE THE COMMISSION

2013 Hearings

Full transcripts and written testimonies are available online at the Commission's website: www.uscc.gov.

Alphabetical Listing of Panelists Testifying before the USCC

Panelist Name	Panelist Affiliation	USCC Hearing
Abrami, Regina	Lauder Institute for Management and International Studies	March 7, 2013
Alterman, Jon B.	Center for Strategic and International Studies	June 6, 2013
Auslin, Michael	American Enterprise Institute	February 7, 2013
Borst, Nicholas	Peterson Institute for International Economics	February 7, 2013
Brosch, Kevin	DTB Associates LLP	April 25, 2013
Burnett, A.G.	Nevada State Gaming Control Board	June 27, 2013
Carter, Colin A.	University of California–Davis	April 25, 2013
Dearie, John	Financial Services Forum	March 7, 2013
Downs, Erica S.	The Brookings Institution	June 6, 2013
Drake, Elizabeth J.	Stewart & Stewart	May 9, 2013
Dutton, Peter	U.S. Naval War College	April 4, 2013
Earp, Madeline	Freedom House	June 27, 2013
Edwards, Bryant	Latham and Watkins LLP	June 6, 2013
Erickson, Andrew	U.S. Naval War College	June 6, 2013
Fornelli, Cynthia M.	The Center for Audit Quality	March 7, 2013
Freis Jr., James H.	Cleary Gottlieb Steen & Hamilton LLP	June 27, 2013
Gale, Fred	U.S. Department of Agriculture	April 25, 2013

Alphabetical Listing of Panelists Testifying before the USCC *Continued*

Panelist Name	Panelist Affiliation	USCC Hearing
Gillis, Paul *	Peking University	March 7, 2013
Glaser, Daniel L.	U.S. Department of the Treasury	June 27, 2013
Glenn, Barbara P.	CropLife America	April 25, 2013
Gregson Jr., Wallace 'Chip'	Center for the National Interest	February 7, 2013
Hanemann, Thilo	Rhodium Group	May 9, 2013
Hayes, Dermot J.	Iowa State University	April 25, 2013
Johnson, Christopher K.	Center for Strategic and International Studies	February 7, 2013
Kamphausen, Roy D.	National Bureau of Asian Research	February 7, 2013 July 11, 2013
Lampton, David M.	The Johns Hopkins University, School of Advanced International Studies	February 7, 2013
Lange, Mark D.	National Cotton Council of America	April 25, 2013
Lewis, Steven W.	Rice University	April 4, 2013
Li, Cheng	The Brookings Institution	February 7, 2013
Lovera, Patty	Food & Water Watch	April 25, 2013
McDevitt, Michael	CNA	April 4, 2013
Miller, David	Iowa Farm Bureau	April 25, 2013
Mulvenon, James	Defense Group, Inc.	February 7, 2013 July 11, 2013
Murphy, Dawn	Princeton-Harvard China and the World Program	June 6, 2013
Nigh, Veronica	American Farm Bureau Federation	April 25, 2013
Northey, William	State of Iowa	April 25, 2013
Ong, Lynette H.*	University of Toronto	March 7, 2013
Plotkin, Mark E.	Covington & Burling LLP	May 9, 2013
Popps, Dean G.	Formerly of the U.S. Department of Defense	May 9, 2013
Prasad, Eswar	Cornell University	February 7, 2013
Prasso, Sheridan *	Bloomberg News	March 7, 2013
Quaadman, Thomas	U.S. Chamber of Commerce	March 7, 2013
Quinn, Bruce	Rockwell Automation	July 11, 2013
Richardson, Sophie	Human Rights Watch	June 27, 2013

Alphabetical Listing of Panelists Testifying before the USCC *Continued*

Panelist Name	Panelist Affiliation	USCC Hearing
Rose, I. Nelson	Whittier Law School	June 27, 2013
Saulski, Paul T.	Georgetown University Law Center	March 7, 2013
Schaaf, Julius	U.S. Grains Council	April 25, 2013
Scissors, Derek	The Heritage Foundation	May 9, 2013
Shichor, Yitzhak	The Hebrew University of Jerusalem and The University of Haifa	June 6, 2013
Simchak, Stephen M.H.	American Insurance Association	March 7, 2013
Swaine, Michael D.	Carnegie Endowment for International Peace	April 4, 2013
Szamosszegi, Andrew	Capital Trade, Inc.	May 9, 2013
Thrall, Lloyd	RAND Corporation	April 4, 2013
Walter, Carl	Formerly of JP Morgan China	March 7, 2013
Weiss, Jessica Chen	Yale University	April 4, 2013
Westman, William	American Meat Institute	April 25, 2013
Wuthnow, Joel	CNA	June 6, 2013

*Submitted material for the record.

APPENDIX IV

INTERLOCUTORS' ORGANIZATIONS

Asia Fact-Finding Trip July 2013

TAIWAN, JAPAN, CHINA, AND HONG KONG, JULY 2013

During the visit of a U.S.-China Commission delegation to Taiwan, Japan, China, and Hong Kong in July 2013, the delegation met with representatives of the following organizations:

In Taiwan

Government of Taiwan
- President Ma Ying-jeou
- Ching Chuan Kang Air Base
- Ministry of Defense
- Ministry of Economic Affairs
- National Security Council
- Ministry of Foreign Affairs

Political Enterprise
- Democratic Progressive Party

Private Enterprise
- American Institute in Taiwan

In Japan

U.S. Government
- U.S. Embassy in Tokyo
- U.S. Fleet Activities Yokosuka

Government of Japan
- Ministry of Economy, Trade and Industry
- Japan Coast Guard
- Maritime Self-Defense Force
- Ministry of Defense
- Ministry of Foreign Affairs

Private Citizens
- Retired Maritime Self-Defense Force officer
- Retired Air Self-Defense Force officer
- Retired Japan Coast Guard officer

Research Organizations
- Japan Institute of International Affairs
- National Institute for Defense Studies

In China

U.S. Government
- U.S. Embassy in Beijing
- U.S. Consulate in Shanghai

Government of the People's Republic of China
- China Food and Drug Administration
- Chinese People's Institute of Foreign Affairs
- Shaanxi Province Foreign Affairs Office

Private Enterprise
- Archer Daniels Midland
- U.S. Meat Export Federation
- Yang Ling Qinling Mountains Modern Agriculture Co., Ltd.
- Xi'an Jinpeng Seed Co., Ltd.
- Besun Pork Producer
- Zhongxing Edible Fungi Company
- American Chamber of Commerce Shanghai
- Yum! Brands, Inc.
- U.S. Poultry and Egg Export Council
- Cargill, Inc.
- OSI Group
- Preferred Freezer Services

Research Organizations
- Chinese Academy of Agricultural Sciences
- Northwest Agricultural and Forestry University

In Hong Kong

U.S. Government
- U.S. Consulate in Hong Kong

Nongovernmental Organizations
- Human Rights Watch
- China Human Rights Lawyers' Concern Group
- China Labor Bulletin
- Patriotic Democratic Movements of China
- Human Rights Monitor

Political Enterprise
- Hong Kong Pan-Democrats

Private Citizens
- Retired administration official
- Retired Democratic Party official

Private Enterprise
- Steve Vickers & Associates, Ltd.

APPENDIX V
LIST OF RESEARCH MATERIAL
Contracted and Staff Research Reports Released in 2013

Disclaimer

The reports in this section were prepared at the request of the Commission to support its deliberations. They have been posted to the Commission's website in order to promote greater public understanding of the issues addressed by the Commission in its ongoing assessment of U.S.-China economic relations and their implications for U.S. security, as mandated by P.L. 106–398 and P.L. 108–7. The posting of these reports to the Commission's website does not imply an endorsement by the Commission or any individual Commissioner of the views or conclusions expressed therein.

Contracted Research Reports

Red Cloud Rising: Cloud Computing in China

Prepared for the USCC by James Mulvenon, Leigh Ann Ragland, Joe McReynolds, and Matthew Southerland/ Defense Group, Incorporated

September 2013

http://origin.www.uscc.gov/sites/default/files/Research/Red%20Cloud%20Rising_Cloud%20Computing%20in%20China.pdf

The Rise of China in Technology Standards: New Norms in Old Institutions

Prepared for the USCC by Dan Breznitz and Michael Murphee/ Joint Management Services, LLC

January 2013

http://www.uscc.gov/sites/default/files/Research/RiseofChinainTechnologyStandards.pdf

Staff Research Reports and Backgrounders

China's Third Plenum May Be More Than Just Talk

Written by USCC Economics Team

November 2013

http://origin.www.uscc.gov/sites/default/files/Research/Staff%20Backgrounder_China%E2%80%99s%20Third%20Plenum%20May%20Be%20More%20Than%20Just%20Talk.pdf

November Monthly Trade Bulletin
Written by USCC Economics Team
November 2013
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APPENDIX VI

ACRONYMS AND ABBREVIATIONS

AD	antidumping duty
ADR	American Depository Receipt
AIP	air-independent propulsion
AIT	American Institute in Taiwan
AMSC	American Superconductor
AOR	auxiliary replenishment oiler
ARATS	Association for Relations Across the Taiwan Strait
ASAT	antisatellite
ASBM	antiship ballistic missile
ASEAN	Association of Southeast Asian Nations
BEA	(U.S.) Bureau of Economic Analysis
BIT	bilateral investment treaty
C4ISR	command, control, communications, computers, intelligence, surveillance, and reconnaissance
CAFC	Court of Appeals for the Federal Circuit
CASCF	China-Arab States Cooperation Forum
CCP	Chinese Communist Party
CERT	Computer Emergency Response Team
CFIUS	Committee on Foreign Investment in the United States
CIC	China Investment Corporation
CMC	Central Military Commission
CNPC	China National Petroleum Corporation
CNOOC	China National Offshore Oil Corporation
CSRC	China Securities Regulatory Commission
CVD	countervailing duty
DDG	guided-missile destroyer
DICJ	Macau SAR Gaming Inspection and Coordination Bureau
DOD	Department of Defense
DOJ	Department of Justice
DPP	Democratic Progressive Party (Taiwan)
ECFA	Economic Cooperation Framework Agreement
EEZ	exclusive economic zone
EU	European Union
FDA	(U.S.) Food and Drug Administration
FDI	foreign direct investment
FOCAC	Forum on China-Africa Cooperation
FSIS	Food Safety Inspection Service
FTA	free trade agreement
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product

GPS	Global Positioning System
H–6K	Hongzha-6k
HPSCI	House Permanent Select Committee on Intelligence
ICAO	International Civil Aviation Organization
IMF	International Monetary Fund
IP	(1) intellectual property (2) Internet Protocol
IPO	initial public offering
IT	information technology
ITEC	Interagency Trade Enforcement Center
J–15	Jian-15
JCG	Japan Coast Guard
JL–2	Julang-2
KMT	Kuomintang Party (Taiwan)
LACM	land attack cruise missile
LNG	liquefied natural gas
LPD	amphibious transport dock
MENA	Middle East and North Africa
MFN	Most Favored Nation treatment
MIIT	(China's) Ministry of Industry and Information Technology
MINUSMA	United Nations Multidimensional Integrated Stabilization Mission in Mali
MOFCOM	(China's) Ministry of Commerce
NASA	National Aeronautics and Space Administration
NATO	North Atlantic Treaty Organization
NDRC	(China's) National Development and Reform Commission
nm	nautical mile
NDAA	National Defense Authorization Act
NSA	National Security Agency
NTD	New Taiwan Dollar
PBOC	People's Bank of China
PLA	People's Liberation Army
PTA	preferential trade agreement
PRC	People's Republic of China
PSC	Politburo Standing Committee
R&D	research and development
RIMPAC	Rim of the Pacific
RMB	renminbi
ROC	Republic of China (Taiwan)
S&ED	(U.S.-China) Strategic and Economic Dialogue
SAFE	(China's) State Administration of Foreign Exchange
SAIC	(China's) State Administration for Industry and Commerce
SAR	special administrative region
SASAC	(China's) State-owned Assets Supervision and Administration Commission
SEC	(U.S.) Securities and Exchange Commission
SEF	Straits Exchange Foundation
SLBM	submarine-launched ballistic missile
SME	small- and medium-sized enterprise
SOE	state-owned enterprise
SS	conventional submarine

SSBN	nuclear ballistic missile submarine
SSGN	guided-missile attack submarine
SSN	nuclear attack submarine
T–TIP	Transatlantic Trade and Investment Partnership
TECRO	Taipei Economic and Cultural Representative Office
TIFA	Trade and Investment Framework Agreement
TPP	Trans-Pacific Partnership
UAV	unmanned aerial vehicle
UK	United Kingdom
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
USDA	U.S. Department of Agriculture
USTR	U.S. Trade Representative
VAT	value-added tax
WTO	World Trade Organization

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