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**U.S.-CHINA ECONOMIC AND  
SECURITY REVIEW COMMISSION**

ONE HUNDRED TWELFTH CONGRESS  
FIRST SESSION

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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 (Nov. 12, 2001); as amended by Division P of the "Consolidated Appropriations Resolution, 2003," Pub. L. No. 108-7 (Feb. 20, 2003) (regarding Commission name change, terms of Commissioners, and responsibilities of Commission); as amended by Pub. L. No. 109-108 (H.R. 2862) (Nov. 22, 2005) (regarding responsibilities of Commission and applicability of FACA); as amended by Pub. L. No. 110-161 (Dec. 26, 2007) (regarding changes in annual report due date; submission of financial reports; printing and binding of Congressional reports; employee compensation and performance reviews; and applicability of House rules for travel by members and staff).

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

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

NOVEMBER 9, 2011

The Honorable Daniel Inouye,  
*President Pro Tempore of the U.S. Senate, Washington, DC 20510*  
The Honorable John Boehner,  
*The Honorable Nancy Pelosi,*  
*Speaker of the U.S. House of Representatives, Washington, DC 20510*

DEAR SENATOR INOUYE AND SPEAKER BOEHNER:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the Commission's 2011 Annual Report to the Congress—the ninth 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; it approved the Report unanimously, with all 12 members voting to approve and submit it.

In accordance with our mandate, this Report, which is current as of November 9, 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 eight public hearings, taking testimony from over 65 witnesses from the Congress, 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](http://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 China's cyber operations and military and commercial aerospace modernization. (The Commission is preparing a classified report to Congress on those topics.)**

Commissioners also made an official delegation visit to China, Hong Kong, and Taiwan 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 43 recommendations for Congressional action. Our 10 most important recommendations appear on page 14 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*



Daniel M. Slane  
*Vice Chairman*

Commissioners Approving the 2011 Report



William A. Reinsch, Chairman



Daniel M. Slane, Vice Chairman



Carolyn Bartholomew, Commissioner



Daniel A. Blumenthal, Commissioner



Peter T. R. Brookes, Commissioner



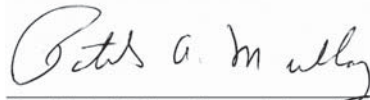
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## **EXECUTIVE SUMMARY**

### **The U.S.-China Trade and Economic Relationship**

China is now the second-largest economy in the world and the world's largest manufacturer. Its market exceeds that of the United States in industries such as automobiles, mobile handsets, and personal computers. Although Chinese leaders acknowledge the need to balance their economy by increasing domestic consumption, China continues to maintain an export-driven economy with policies that subsidize Chinese companies and undervalue the renminbi (RMB). While the RMB rose by roughly 6 percent in nominal terms over the last year, it is still widely believed to be substantially undervalued. For the first eight months of 2011, the U.S. trade deficit with China increased 9 percent over the same period in 2010. The U.S. trade deficit with China is now more than half of the total U.S. trade deficit with the world. In the year to date ending August 2011, the United States exported about \$13.4 billion in advanced technology products to China, but imported over \$81.1 billion in advanced technology products from China, for a deficit of about \$67.7 billion. This is a 17 percent increase in the advanced technology products deficit for the same period over the previous year, ending in August 2010.

The Chinese government's special treatment of state-owned enterprises (SOEs) is of particular concern to U.S. businesses, as it can overcome comparative advantages of competitors, thereby harming American economic interests. China's SOEs are also an issue of contention in government procurement, as China seeks to wall off a large portion of its economy from foreign competition.

In 2010, the amount of foreign direct investment (FDI) flowing into China jumped to \$105.7 billion, up from \$90 billion in 2009. Foreign-invested enterprises were responsible for 55 percent of China's exports and 68 percent of its trade surplus in 2010. While some Chinese sectors are now open to foreign sales, huge swathes of the economy are reserved for Chinese firms. Despite Chinese claims that U.S. inward investment policies are protectionist, for the past two years there has been a more than 100 percent year-on-year growth of Chinese investment in the United States. Chinese investments have focused on manufacturing and technology, with an emphasis on brand acquisition. Some critics of China's foreign direct investment in the United States contend that Beijing's efforts are focused on acquiring and transferring technology to Chinese firms.

In March 2011, China ratified its 12th Five-Year Plan (2011–2015), a government-directed industrial policy that focuses on the development and expansion of seven “strategic emerging industries.” The central and local governments will likely continue to combine targeted investment with preferential tax and procure-

ment policies to ensure that Chinese firms emerge as global leaders, or “national champions,” in these industries within the next five years.

China’s indigenous innovation plans that limit government procurement to Chinese companies and China’s continuing lack of enforcement of intellectual property rights are both problematic. In addition, China maintains policies of forced technology transfer in violation of international trade agreements and requires the creation of joint venture companies as a condition of obtaining access to the Chinese market. While the publication of national indigenous innovation product catalogues that favor procurement of Chinese goods over foreign competitors appears to have slowed, local-level catalogues are still in circulation. China continues to be one of the largest sources of counterfeit and pirated goods in the world. The Chinese government itself estimates that counterfeits constitute between 15 and 20 percent of all products made in China and are equivalent to about 8 percent of China’s gross domestic product (GDP). Chinese goods accounted for 53 percent of seizures of counterfeits at U.S. ports of entry in 2010, and the U.S. International Trade Commission estimates that employment in the United States would increase by up to 2.1 million jobs if China were to adopt an intellectual property system equivalent to that of the United States.

The Chinese Communist Party (CCP) relies on economic growth and strict authoritarian rule to maintain control over a factious and geographically vast nation. Socioeconomic issues have been a large driver of protests in China. The party is particularly concerned about inflation, including a 10 percent increase in food prices over the past year, as well as such catalysts of protests as corruption, pollution, and income inequality. In order to maintain control more effectively, the party has created an extensive police and surveillance network to monitor its citizens and react to any potential threat to stability. In 2010, China invested \$83.5 billion in domestic security, which surpassed China’s published military budget of \$81.2 billion for the same year. In early 2011, the central government responded forcefully to the possibility that the unrest in the Middle East might lead to unrest in China. The Chinese government expanded restrictions on online information and access to communication services, reported government propaganda in domestic news outlets, restricted the freedom of foreign journalists, and arrested dissidents with little or no cause.

### **Conclusions**

#### *The U.S.-China Trade and Economic Relationship’s Current Status and Significant Changes During 2011*

- The U.S.-China trade deficit in 2010 set a record high of \$273 billion. The U.S.-China trade deficit now accounts for more than 50 percent of the total U.S. trade deficit with the world.
- Over the last 12 months, the RMB has appreciated by 6 percent. Economists estimate, however, that it remains substantially undervalued. There is increasing grassroots pressure in China to widen the trading band of the RMB and increase the pace of appreciation.

- The Chinese economy, generally, and Chinese exports, in particular, are moving up the value chain. On a monthly basis, the United States now imports roughly 560 percent more advanced technology products from China than it exports to China. Exports of low-cost, labor-intensive manufactured goods as a share of China's total exports decreased from 37 percent in 2000 to 14 percent in 2010.
- China's foreign currency reserves are skyrocketing. A major contributor to this phenomenon is China's continued policy of maintaining closed capital accounts. China's foreign currency reserves currently exceed \$3 trillion, three times higher than the next largest holder of foreign currency reserves, Japan.
- Commensurate with growth in foreign currency reserves, China's domestic money supply is ballooning out of control. Between 2000 and 2010, China's money supply grew by 434 percent. China's money supply is now ten times greater than the U.S. money supply, despite the fact that China's GDP is only one-third as large.
- Such rapid growth in China's domestic money has created strong inflationary pressure. This has helped create a real estate bubble, which resulted in price increases of more than 100 percent in some cities within a handful of years. In September, China's consumer price index topped 6.1 percent across the board and higher in rural areas.
- China has grown more assertive and creative in using WTO procedures to alleviate, eliminate, and avoid certain restrictions in the Accession Protocol. At the same time, the WTO has ruled that China's existing system of state monopoly over imports of cultural products is inconsistent with WTO obligations. China has not yet complied fully with the WTO ruling, and the United States has the right to initiate further proceedings to compel China to do so.

*Chinese State-owned Enterprises and U.S.-China Bilateral Investment*

- China's privatization reforms during the past two decades appear in some cases to have been reversed, with a renewed use of industrial policies aimed at creating SOEs that dominate important portions of the economy, especially in the industrial sectors, reserved for the state's control.
- The Chinese government promotes the state-owned sector with a variety of industrial policy tools, including a wide range of direct and indirect subsidies, preferential access to capital, forced technology transfer from foreign firms, and domestic procurement requirements, all intended to favor SOEs over foreign competitors.
- The value and scope of U.S.-China bilateral investment flows have expanded significantly in the past ten years. However, U.S. direct investment in China is more than 12 times greater than Chinese direct investment in the United States. Official U.S. statistics show that U.S. cumulative FDI in China was

\$60.5 billion in 2010. The Chinese Ministry of Commerce estimated that in 2010, cumulative Chinese FDI in the United States was \$4.9 billion.

- The Chinese government guides FDI into those sectors it wishes to see grow and develop with the help of foreign technology and capital. Foreign investors are frequently forced into joint ventures or other technology-sharing arrangements, such as setting up research and development facilities, in exchange for access to China's market. Meanwhile, large swathes of the Chinese economy are closed to foreign investors. China's investment policies are part of the government's plan to promote the development of key industries in China through access to foreign technology and capital.
- Chinese FDI in the United States is a relatively recent phenomenon and remains very small compared to the U.S. investment in China, but there is great potential for growth. China has stated a desire to diversify its holdings of foreign exchange, estimated at \$3.2 trillion in mid-2011, the majority of which is invested in dollar-denominated debt securities. As with other statistics, there are discrepancies between official U.S. and Chinese statistics on bilateral investment.
- 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 investigates the national security implications of mergers and acquisitions by foreign investors of U.S. assets.
- In areas where there are no national security considerations, Chinese FDI has the potential to create jobs and economic growth.
- China has recently introduced a national security investment review mechanism similar to the Committee on Foreign Investment in the United States, although there are concerns among foreign companies that the Chinese government may use the mechanism to derail investment by foreigners in those companies and sectors it wants to remain under government control.

#### *Indigenous Innovation and Intellectual Property Rights*

- China's indigenous innovation policy is an outgrowth of the government's broad industrial policy and has been openly developed and documented through public plans and pronouncements, particularly the *National Medium- and Long-Term Plan for the Development of Science and Technology (2006–2020)*. The indigenous innovation policy seeks to nurture certain high-wage, high value-added industries designated by the government. Chinese firms are to be favored over foreign firms or China-based foreign affiliates in government procurement contracts. State-owned enterprises and municipal and provincial governments are also to show favoritism to Chinese domestic industries and businesses.

- Chinese officials, including President Hu, have pledged to modify China's indigenous innovation policy in response to protests from U.S. business leaders and top officials. Those promises have not been implemented at the local and provincial levels, however. China has a history of making promises and delivering little, particularly when doing as little as possible benefits the Chinese economy, as has been the case with China's promises to bring its intellectual property protections up to international standards and to cease requiring technology transfers from foreign firms.
- Foreign-invested enterprises seeking to be considered for government procurement contracts or public works projects are expected to file for patents and copyrights within China in order to qualify for preferential treatment in government contracting. Foreign affiliates risk the unintended transfer of their technology to Chinese firms if they do so, because of the nature of the Chinese intellectual property system and the lax enforcement of intellectual property laws and regulations in China.
- Although China agreed in 2001 to stop explicitly requiring foreign companies to surrender their technology to China in return for market access and investment opportunities, the government in Beijing still employs several tactics to coerce foreign firms to share trade secrets with Chinese competitors. China's industrial policy in general and its indigenous innovation policy in particular seek to circumvent accepted intellectual property protections and to extort technology from U.S. companies.
- In addition, the long effort by the central government to foster indigenous innovation is a message that will likely outlive any product catalogues. Restricting market access to domestic firms and requiring technology transfer as a cost for foreigners attempting to do business in China demonstrated the government's view that Chinese companies and governments are better off substituting domestic goods for imports.

*China's 12th Five-Year Plan and Technology Development and Transfers to China*

- One of the main objectives of the 12th Five-Year Plan is to redirect China's economy to one more focused on domestic consumption and less on exports and investment. The plan assumes that China's growth would therefore be more balanced and sustainable. The plan also emphasizes higher value-added production and increased government support for domestic high-tech industries.
- There is cause for skepticism about China's prospects for carrying out the rebalancing goals of the 12th Five-Year Plan. The Chinese government had similar goals in previous plans, but their implementation was sidelined in favor of pursuing higher export and investment growth.

- Increasing household consumption, a major goal of the 12th Five-Year Plan, and the subsequent emergence of a more assertive consumer class, may be in direct contradiction to the Chinese government's policy of keeping economic power firmly in the hands of the state and may compromise lending to many vested interests, including SOEs and the export sector.
- The 12th Five-Year Plan also advocates a move up the manufacturing value chain with the explicit mention of seven strategic emerging industries: New-generation information technology, high-end equipment manufacturing, advanced materials, alternative-fuel cars, energy conservation and environmental protection, alternative energy, and biotechnology. These industries, which will receive targeted government support, have the potential to be a source of economic growth and advanced innovation.
- Analysts and foreign business leaders fear that the emphasis on industrial upgrading will lead to the introduction of new government subsidies, which in turn will disadvantage foreign competitors.
- As part of its indigenous innovation policy, China incentivizes foreign companies to transfer technology in exchange for market access.
- Chinese government requirements that foreign corporations transfer technology to Chinese joint venture partners in exchange for market access violate written WTO prohibitions on forced technology transfers. The new requirements for technology transfer from foreign partners are often made in implicit rather than explicit terms, which may make challenging them in the WTO dispute procedure more difficult.

#### *China's Internal Dilemmas*

- The primary objective of the CCP is to remain in power. All other goals are intended to serve that end. As a consequence, the party has dedicated enormous resources to repress dissent before it becomes a destabilizing element and threatens the party's control.
- Despite the efforts of the party and the government to minimize dissent, citizen protest has been on the rise. Protests are sometimes brutally suppressed. The government will arrest and detain as a precautionary measure those it considers a threat to its control. The party and the government employ the news media to propagandize and mislead the public.
- The party is well aware of the dangers to its continuing authority posed by public rejection of a government that is unresponsive to the people. The party therefore reacts to citizen ire by attempting appeasement. This may take the form of authorizing the news media to highlight official abuses, particularly those committed by local officials. Still, corruption in all levels of government remains a problem for Beijing.



- Inflation has historically caused problems for the government in China. The rural poor and migrant workers are particularly disadvantaged by higher prices because they are so often reflected disproportionately in food and energy, which consume a larger portion of family expenses in rural areas. The government has responded to rising inflation with price controls and some curbs on bank lending. These tools are inadequate in the long run. China's policy of keeping the RMB undervalued in order to gain an export advantage removes a powerful anti-inflation tool from the central bank.
- Income and wealth inequality is a growing problem in China. One cause is the *hukou* system of residential registration, which was intended to limit the migration of the rural poor to the cities. This has created a large migrant population in China, moving from city to city to seek work in factories but unable to access healthcare and education services without the proper *hukou* designation for that area. This situation perpetuates poverty among the disadvantaged. Local officials favor it, because it limits their responsibility toward the migrant workers. A smaller group, known as the "ant tribe," consists of college graduates from second-tier schools in rural areas who also lack the *hukou* to live in urban areas but who nevertheless seek but are unable to find the jobs that they have trained for. This restive and disappointed population is a potential source of unrest.
- China's middle class has been considered by some to be a potential force for political reform. But the opposite is likely. As long as the party can deliver strong economic growth, particularly in urban areas, the middle class is likely to remain a force for stability.
- China's central government has reacted strongly to perceived challenges to its authority. It detains and imprisons dissidents. It censors the news and punishes journalists for infractions of its unwritten and arbitrary rules. China also attempts to control and censor the Internet and has had more success than most other authoritarian regimes in suppressing the flow of information among the public.

### **China's Activities Directly Affecting U.S. Security Interests**

China continues to demonstrate progress in its military modernization efforts. Of note, the People's Liberation Army (PLA) is acquiring specific means to counter U.S. military capabilities and exploit U.S. weaknesses. Since January 2011, China has conducted a flight test of its next-generation fighter aircraft, continued development of its antiship ballistic missile, and conducted a sea trial of its first aircraft carrier. These developments, when operational, will allow China to better project force throughout the region, including the far reaches of the South China Sea.

The PLA's military strategy is designed to provide the army with the means to defeat a technologically superior opponent, such as the U.S. military. As such, it focuses on controlling China's periphery, especially the western Pacific Ocean, degrading an opponent's technological advantages, and striking first in order to gain sur-

prise over an enemy in the event of a conflict. The Commission prefers to use the term “area control” for China’s regional strategy, because the terms “antiaccess” or “area denial” foster a U.S.-centric view that downplays the PLA’s ability to easily conduct operations against regional states. While U.S. bases in East Asia are vulnerable to PLA air and missile attacks, Japanese, Philippine, and Vietnamese bases are just as vulnerable, if not more so.

Tensions continued in 2011 between China and other claimants in the South China Sea territorial disputes as well as with Japan over territory in the East China Sea. Despite intermittent statements of cooperation, Chinese assertiveness in the South China Sea indicates that China is unlikely to concede its sovereignty claims. An implication of China’s growing assertiveness, especially its harassment and intimidation of foreign vessels, is the growing risk of escalation due to miscommunication and miscalculation. As chances of confrontation grow, so could the consequences for the United States, especially with regard to the Philippines, with which the United States holds a mutual defense treaty.

In 2011, as in previous years, the U.S. government, foreign governments, defense contractors, commercial entities, and various nongovernmental organizations experienced a substantial volume of actual and attempted network intrusions that appear to originate in China. Of concern to U.S. military operations, China has identified the U.S. military’s reliance on information systems as a significant vulnerability and seeks to use Chinese cyber capabilities to achieve strategic objectives and significantly degrade U.S. forces’ ability to operate.

The Commission’s *2011 Annual Report to Congress* investigates China’s advancing space program. China is now among the top few space powers in the world. China’s leadership views all space activities through the prism of comprehensive national power, using civil space activities to promote its legitimacy in the eyes of its people, to produce spin-off benefits for other industries, and for military-related activities. For example, China appears to be making great strides toward fielding regional reconnaissance-strike capabilities. China has also continued to develop its antisatellite capabilities, following up on its January 2007 demonstration that used a ballistic missile to destroy an obsolete Chinese weather satellite, creating thousands of pieces of space debris. As a result, in April 2011, astronauts evacuated the International Space Station out of concern of a possible collision with this debris. In addition, authoritative Chinese military writings advocate attacks on space-to-ground communications links and ground-based satellite control facilities in the event of a conflict. Such facilities may be vulnerable: in recent years, two U.S. government satellites have experienced interference apparently consistent with the cyber exploitation of their control facility.

## **Conclusions**

### *Military and Security Year in Review*

- Over the past year, China has demonstrated progress in modernizing the PLA. Recent developments confirm that the PLA seeks to improve its capacity to project force throughout the region.



- Continued improvements in China's civil aviation capabilities, as first noted in the Commission's 2010 Annual Report, enhance Chinese military aviation capabilities because of the close integration of China's commercial and military aviation sectors.
- In an effort to calm regional fears, China attempts to broadcast a benign image of its growing military capabilities. Official statements from Beijing over the past year describe China as a status quo power and downplay its military modernization efforts.
- In 2011, China continued a pattern of provocation in disputed areas of the South China Sea. China's policy in the region appears driven by a desire to intimidate rather than cooperate. Many of China's activities in the region may constitute violations of the *United Nations Convention on the Law of the Sea* and the *Declaration on the Conduct of Parties in the South China Sea*. While China sometimes demonstrates a willingness to cooperate with other claimants to disputed waters in the South China Sea, it is unlikely that China will concede any of its claims.
- China's government or military appeared to sponsor numerous computer network intrusions throughout 2011. Additional evidence also surfaced over the past year that the Chinese military engages in computer network attacks. These developments are consistent with the PLA's known missions and organizational features, as noted by the Commission's *2009 Annual Report to Congress* and contracted research study *Capability of the People's Republic of China to Conduct Cyber Warfare and Computer Network Exploitation*.
- China's military strategy envisions the use of computer network exploitation and attack against adversaries, including the United States. These efforts are likely to focus on operational systems, such as command, control, communications, computers, intelligence, surveillance, and reconnaissance assets. This could critically disrupt the U.S. military's ability to deploy and operate during a military contingency. Chinese cyber attacks against strategic targets, such as critical infrastructure, are also possible.

*China's "Area Control Military Strategy"*

- The PLA's military strategy is best described as an Area Control Strategy. At its core, this strategy seeks to provide guidance to the PLA on how to defeat a technologically superior opponent.
- In order to defeat a superior opponent, the Area Control Strategy emphasizes degrading an opponent's technological advantages; striking first in a conflict; and establishing military control over China's periphery, especially the maritime region off of China's eastern coast.

- Many of the PLA's force modernization efforts reflect China's Area Control Strategy. As a result, the PLA is acquiring capabilities that allow it to conduct surprise attacks aimed at degrading a superior military's advantages and preventing an opponent from effectively operating along China's periphery.
- Many of the PLA's evolving capabilities appear aimed at directly countering U.S. military capabilities or to exploit potential weaknesses in U.S. military operations. In addition, as the PLA expands its force projection capabilities, China's Area Control Strategy and supporting means will increasingly impact regional states. Finally, the heavy focus on offensive operations inherent in the PLA's Area Control Strategy could serve to undermine stability in the region.

*The Implications of China's Civil and Military Space Activities*

- China is one of the top space powers in the world today. The nation's capabilities, which are state of the art in some areas, follow from decades of substantial investment and high prioritization by China's top leaders. The prestige of space exploration and the national security benefits of space systems serve as primary motivators for Chinese decisionmakers.
- China views all space activities in the context of "comprehensive national power." This concept includes many dimensions, but military aspects are fundamental. The PLA's primacy in all of China's space programs, including nominally civil activities, illustrates this emphasis.
- China's civil space programs have made impressive achievements over the past several decades. If Chinese projections hold, these programs are poised for continued accomplishments over the next ten to 15 years, such as the development of a space laboratory and eventually a space station. As part of an active lunar exploration program, China may attempt to land a man on the moon by the mid-2020s.
- China seeks new opportunities to sell satellites as well as satellite and launch services in international commercial space markets. Chinese firms' prospects for greater success in this field remain uncertain over the near term. However, China's international space-related diplomatic initiatives and their firms' ability to offer flexible terms on sales to developing countries may provide additional opportunities.
- In the military sphere, China appears to seek "space supremacy." The PLA aims to implement this policy through two tracks. First, they increasingly utilize space for the purposes of force enhancement. The best example is China's integration of space-based sensors and guided weapons. Second, they seek the capabilities to deny an adversary the use of space in the event of a conflict. To this end, China has numerous, active, counterspace weapons programs with demonstrated capabilities. China's military space and counterspace activities are part of a larger strategy for area control.

### **China's Foreign Policy**

Despite Beijing's attempts to emphasize its peaceful rise, China continues to support countries that undermine international security. In particular, China's support for North Korea and Iran undermines international efforts to compel these countries to discontinue agendas and programs that destabilize their regions and undercut U.S. interests. As China's global interests expand in a complex international environment, Beijing has experienced a growing number of domestic actors, such as SOEs, interested in determining China's foreign policies. The plethora of new and emerging voices in China's foreign policy-making process makes it more challenging for foreign countries to interact effectively with China. In addition, the pluralization of China's foreign policy actors increases the chance of miscalculations when determining its foreign policies.

In a positive development, economic and diplomatic ties across the Taiwan Strait continue to improve; however, military relations between China and Taiwan lack progress. China maintains some 1,200 short-range ballistic missiles opposite Taiwan. U.S.-Taiwan relations were dominated this year by the question of whether the United States would approve Taiwan's separate requests for additional arms sales. Taiwan has requested three different sales: new F-16C/D fighter jets; upgrades for its current fleet of F-16A/B fighter jets; and diesel-electric submarines. In August 2011 the United States notified Congress of the sale of F-16A/B upgrades but not new F-16C/D fighter jets nor diesel-electric submarines. Reacting against the sale of any new military equipment, China has indicated that it may suspend some military-to-military engagements with the United States.

Some developments in Hong Kong over the past year suggest that Beijing's influence in the region's affairs is growing. During 2011, Beijing increased its focus on Hong Kong's economy, especially its role as a vehicle for the internationalization of China's currency. Mainland involvement in Hong Kong's political affairs was an issue of contention among Hong Kong policymakers and citizens throughout 2011. While Hong Kong citizens and press largely continue to enjoy freedom of expression and assembly, at times these rights were challenged by Hong Kong authorities, who were often perceived to be acting out of deference to Beijing.

### **Conclusions**

#### *An Overview of China's Relations with North Korea and Iran*

- China has continued over the past year to support North Korea despite North Korea's destabilizing actions. Diplomatically, China shields North Korea from pressure in international fora. China also continues to trade with and invest in North Korea, providing it with an economic lifeline in the face of growing international ostracism. Beijing's continued support for Pyongyang is primarily driven by its fear of a collapse of the North Korean regime and the consequences this would have for China's economic, social, and security interests, as well as the fear of the loss of a buffer state on its border.

- Despite U.S. efforts to sanction Iran for its support of international terrorism and pursuit of weapons of mass destruction, China remains a large investor in Iran's petroleum industry and a major provider of refined oil products. China may also be supplying Iran with advanced conventional weapons, such as cruise missiles. China's investments in Iran's petroleum industry, and its continued provision of gasoline and advanced conventional weapons, may be at odds with U.S. laws.
- Continued Chinese support for North Korea and Iran demonstrates China's willingness to place its national interests ahead of regional stability by providing economic and diplomatic support to countries that undermine international security.

#### *Actors in China's Foreign Policy*

- As China expands and diversifies its overseas activities, it encounters an increasingly complex environment requiring the input and advice from knowledgeable subject matter experts. As a result, China's foreign policy-making process is changing to accommodate input from actors who previously had little or no say.
- Actors with increasing influence on China's foreign policies include the PLA, large state-owned enterprises, and academics and think tanks. In addition, while still minor compared to other actors, public opinion, expressed primarily online, appears to have a modicum of influence on some Chinese foreign policies.
- The CCP remains firmly in control of China's foreign policies, especially for issues deemed critical, such as China's policies toward the United States, North Korea, and Taiwan. This is despite the increased difficulty Beijing may have in coordinating a coherent policy among a growing number of actors.
- The growing complexity of China's foreign policy-making process has mixed implications for the United States. On the one hand, Washington may find it more difficult to interact with priority counterparts in Beijing as the number of actors in the policy process expands. On the other hand, the plethora of Chinese actors may provide U.S. foreign policymakers with opportunities to understand or influence Beijing.

#### *Taiwan*

- In 2011, Taiwan and China have continued to strengthen their economic and diplomatic relations by focusing on implementing previous agreements rather than signing new agreements.
- A major factor leading to the slower pace of reduced tensions across the Taiwan Strait is Taiwan's upcoming presidential and legislative elections. Seeking to prevent improving cross-Strait ties from being used against the incumbent Kuomintang Party, both Taiwan and China have moved away from pressing for rapid negotiations and developments as in previous years.

- The cross-Strait military balance continues increasingly to favor China, making it less likely that a peaceful resolution to the Taiwan issue will occur. Despite attempts to improve its capacity to defend the island against a potential attack from the mainland, Taiwan continues publicly to call for additional U.S. arms sales to augment its defense needs.

#### *Hong Kong*

- Hong Kong plays a central role in China's policy goal of internationalizing its currency. In 2011, China introduced substantial new measures supporting Hong Kong's status as China's primary platform for RMB offshoring.
- Mainland involvement in Hong Kong's political affairs was evident in 2011, prompting citizen discontent and conflict within Hong Kong's democratic groups.
- Hong Kong continued to have a vibrant protest culture in 2011, with record amounts of participants in some annual protests. However, there were reports that police sometimes challenged Hong Kong citizens' rights during protests, especially when protests targeted mainland China.
- Hong Kong's mass media reported increased interference in their activities by Hong Kong authorities in 2011. Public perception of self-censorship in Hong Kong's press peaked in 2011, and public opinion of press credibility fell to its lowest level in eight years.

#### **China's Public Diplomacy Initiatives Regarding Foreign and National Security Policy**

The CCP treats the control of propaganda/public diplomacy messages to foreign audiences as a fundamental tool of statecraft. China is highly critical of what it calls the "western media's ideological assault on the rest of the world" and sees itself as engaged in a "global war for public opinion." In pursuit of a larger voice in international affairs, Chinese media officials have significantly increased resources for state-controlled foreign language news outlets. In addition, Chinese propaganda organs are actively engaged in influencing foreign officials and media. This is particularly concerning given the possibility that the People's Republic of China's official messages may not always reflect actual Chinese foreign policy goals.

#### ***Conclusions***

- The Chinese government places a high priority on the management of information as a tool of policy, to include the messages that it promotes to international audiences regarding its goals in foreign and national security policy. The central leadership of the Chinese Communist Party selects official foreign policy messages intended to support state policy goals. These messages are then disseminated through diplomatic channels, state-controlled media, advertising, and "track two" exchanges.

- The Chinese government’s official narratives stress China’s desire for mutually beneficial “peaceful development” and for a “harmonious” international environment that will allow China to focus attention and resources on its economic and social development. China’s statements on its defense policies emphasize that they are entirely defensive in nature and that China will never pose a threat to any of its neighbors.
- There are notable differences between the optimistic character of China’s official messages on national security policy, which stress prospects for international cooperation, and the nature of its domestic discourse, which portrays the United States as a dangerous and predatory “hegemon” of the international system.
- The Chinese government frequently discusses important policy issues in terms of China’s “core interests,” accompanied by an insistence that other countries accept the PRC’s non-negotiable positions on these issues. However, conflicting statements from different parts of the Chinese government leave it unclear as to exactly which issues fall into the category of a “core interest.” In order to prevent misunderstandings with the United States and other countries that could have serious diplomatic consequences, Beijing should clarify which issues it sees as truly representing a “core interest.”
- The emergence of a more outspoken field of PRC foreign policy actors has produced messages that are sometimes at variance with official government narratives. This is particularly true of nationalist voices within the Chinese military.
- The Chinese government makes extensive use of front organizations. Congress and the American public often are not aware that nominally private civic organizations in China that purport to have educational, cultural, or professional purposes are frequently controlled by military, intelligence, or Communist Party organs. These front organizations are used to advance PRC state interests while disguising the guiding role of the government.

### **THE COMMISSION’S KEY RECOMMENDATIONS**

The Commission believes that ten of its 43 recommendations to Congress are of particular significance. These are presented below in the order in which they appear in the Report. The complete list of 43 recommendations appears at the Report’s conclusion on page 355.

The Commission recommends that:

- Congress, through legislation, require the president to assign the National Security Council to conduct an agency-wide comprehensive review of the U.S. economic and security policies toward China to determine the need for changes to address the increasingly complicated and serious challenges posed by



China to U.S. international and domestic interests. Such a review should be examined and debated as appropriate by Congressional committees.

- Congress urge the administration to employ all necessary remedies authorized by WTO rules to counter the anticompetitive and trade-distorting effects of the Chinese government's extensive subsidies for Chinese companies operating in China and abroad.
- Congress direct the U.S. Department of Commerce to report annually on Chinese investment in the United States including, among other things, data on investment in the United States by Chinese SOEs and other state-affiliated entities.
- Congress direct the U.S. Securities and Exchange Commission to revise its protocols for reviewing filings by foreign entities listed on or seeking to be listed on the U.S. stock exchanges. The Securities and Exchange Commission should develop country-specific data to address unique country risks to assure that U.S. investors have sufficient information to make investment decisions. The commission should focus, in particular, on state-owned and -affiliated companies, and subsidies and pricing mechanisms that may have material bearing on the investment.
- Congress assess the reauthorization of Super 301 to assist in the identification of the policies and practices that China pursues that create the greatest impediment to U.S. exports entering the Chinese market and the most important policies or practices that unfairly or unjustifiably harm U.S. producers and workers in the U.S. market. Priority should be given to addressing such practices by the United States Trade Representative under such legislation.
- Congress direct the U.S. Government Accountability Office to undertake an evaluation of investments and operations of U.S. firms in the Chinese market and identify what federally supported R&D is being utilized in such facilities and the extent to which, and on what terms, such R&D has been shared with Chinese actors in the last ten years.
- Congress assess the adequacy of U.S. Department of Defense capabilities to conduct major operations in a degraded command, control, communications, computer, intelligence, surveillance, and reconnaissance environment for an extended period of time.
- Congress assess the adequacy and regularity of U.S. military exercises and training activities that simulate the destruction, denial, degradation, or manipulation of U.S. space assets. In addition, Congress should periodically evaluate whether the U.S. Department of Defense is taking sufficient measures to diversify its traditionally space-oriented capabilities, such as in navigation, communications, intelligence, surveillance, and reconnaissance.

- Congress investigate whether U.S. sanctions have been imposed on all Chinese firms that have violated the sanction laws by investing in Iran's petroleum industry or providing Iran with refined petroleum products or advanced conventional weapons.
- Congress urge the administration to sell Taiwan the additional fighter aircraft it needs to recapitalize its aging and retiring fleet.



## INTRODUCTION

This is the Commission's tenth year examining U.S.-China relations. During this time the United States has welcomed China's peaceful rise with the belief that by engaging China it would be encouraged to open up to the United States and the world, both economically and diplomatically, that it would expand freedom and human rights, and that it would become a responsible global stakeholder. For the last ten years the Commission has documented Chinese export subsidies; weapons proliferation; cyber attacks; non-compliance with World Trade Organization (WTO) obligations; forced technology transfers; military modernization; resource acquisition strategies; expansion of Chinese foreign policy interests; the Chinese military threat to Taiwan; espionage; and information control, among other issues. While China has taken some steps to engage the international community, by and large the Communist Party of China (CCP) has continued to steer policy in its own narrow self-interest at home and abroad, often without regard for international rules and norms. As a result, worldwide concern about China is growing as more people see the implications of the rise of a powerful authoritarian state.

In 2011, China assumed a more assertive role on the global stage. China's new posture was reflected in an aggressive trade agenda, a push for a larger role in international institutions, and provocative moves in the South and East China Seas. These actions were both a reflection and a consequence of China's growing economic prominence and resource needs, as well as China's view that the United States is in decline while China is ascendant. Chinese policies have had an impact on the United States, ranging from a negative effect on the U.S. economy to increased pressure from some parts of the international community for the United States to ensure the security of the global commons.

Last year, the Commission highlighted China's backsliding from market reforms in favor of an increased role of the state in the economy. In contrast to the general trend of economic liberalization over the last three decades, last year's pattern of increased state dominance continued in 2011. China subsidizes its state-owned enterprises to the detriment of both private Chinese firms and international competitors. Nevertheless, Chinese leaders acknowledge the economy must be moved away from its investment-led, export-driven growth model toward one more dependent on domestic consumption.

Even when China makes a commitment to economic reform, the government reverts to its historical pattern of inadequate implementation. President Hu Jintao and other Chinese officials responded to western pressure in January 2011, promising to ease a policy of discriminating against foreign companies in government

procurement decisions; however, real change remains elusive, particularly among the provincial and local governments.

In March 2011, China approved its 12th Five-Year Plan (2011–2015), which calls for the transformation of the Chinese economy into a high-technology and innovation-oriented juggernaut. The plan identifies seven strategic emerging industries in which the Chinese hope to become world leaders. While the desire to move up the manufacturing value chain is a common goal among nations, the web of Chinese industrial policies used to achieve this objective has often had a detrimental impact on U.S. interests and is often inconsistent with China's obligations under the WTO. Practices such as forced technology transfer and the creation of joint venture companies as a condition to obtaining access to the Chinese market; the adoption of unique, Chinese-specific standards for high-tech equipment; and extensive intellectual property rights violations are among the faulty policies designed to help China achieve its goal of becoming a high-tech leader.

China's military modernization, combined with the unclear nature of Beijing's views of what constitutes an attack and the People's Liberation Army's military doctrine that emphasizes striking first in a conflict, increases the possibility for inadvertent conflict in the region. China's massive military modernization includes the sea test of its first aircraft carrier, the introduction of a fifth-generation stealth fighter, and the further development of already sophisticated cyber warfare and counterspace capabilities. Designed to defeat a technologically superior opponent, China's military strategy emphasizes striking first and controlling the nation's periphery in the event of a conflict. While the exact pace and scale of China's military modernization effort and the intentions behind it remain opaque to the outside world, it is clear that China is acquiring specific means intended to counter U.S. military capabilities and exploit U.S. weaknesses.

While China has taken an externally assertive posture, it faces many internal challenges. The CCP relies on economic growth, combined with strict authoritarian rule, to maintain control over a factious and geographically vast nation. Sharp increases in consumer prices, a pivotal factor in the early days of the student protests in Tiananmen Square in 1989, are once again a problem for the Chinese economy. While the party is particularly concerned about inflation, it also struggles to respond to other causes of protest such as corruption, pollution, and income inequality. The CCP faces the dilemma that the very authoritarian measures it uses to assert control of the Chinese people result in abuse, corruption, and policies that increase popular dissatisfaction. In turn, China's domestic instability may be fueling its external assertiveness if Chinese leaders bend to or encourage nationalist sentiment.

Secretary of State Hillary Rodham Clinton observed that China represents one of the most challenging and consequential bilateral relationships the United States has had to manage. While promoting messages of reassurance to the international community, China focuses on pursuing its own narrow interests. Despite the threatening and unpredictable conduct of North Korea, the CCP appears to have calculated that its interests are better served by the support of the regime than by its removal. Likewise, China's

relationship with Iran undermines international efforts to curtail Iran's pursuit of weapons of mass destruction and support of international terrorism.

Despite the improvement in economic and diplomatic relations across the Taiwan Strait, China deploys some 1,200 short-range ballistic missiles against the island. In response to the U.S. sale to Taiwan of a new \$5.8 billion package of upgrades to its aging fleet of F-16 fighter jets, China indicated that it may suspend a series of military-to-military engagements. To the consternation of its neighbors, China asserts its expansive territorial claims in the South and East China Seas. China is increasingly capable of pursuing its own interests at the expense of regional, perhaps even global, stability.

China's opaque intentions complicate our understanding and response to its rise as a world power. China's stated desire to maintain stable and peaceful international relationships conflicts with such actions as harassing vessels operating in international waters off the Chinese coast, aggressively pressing unrecognized territorial claims in the East and South China Seas, and supporting North Korea in the aftermath of unprovoked acts of aggression against South Korea. In fact, the People's Republic of China's official messages may be a cover for China's actual foreign policy goals. In addition, internal power struggles among Chinese foreign policy-makers make it difficult to understand the decision-making process in China, increasing the chance of miscalculating China's foreign policy.

The next few years will illustrate how China wishes to embrace the international order and the manner in which it will use its increasing power. China is faced with a choice. It can either join the community of nations in the existing international order based on the rule of law, or it can aggressively assert its own interests without regard for the concerns of other states and face growing opposition from the global community. The latter is not in anyone's interest. By welcoming China into the WTO and other international bodies, the U.S. government has demonstrated that it wants the Chinese government to be a responsible international stakeholder; however, until China more fully complies with international norms, the United States must be more forceful in asserting its own national interests. Insisting on reciprocity in our economic relationship and respect for international laws and norms in our geostrategic relationship is a start. This would not only benefit U.S. citizens but also demonstrate to the world that the United States is still the standard-bearer for stability and rule of law. We are in a global competition with China, and U.S. policies should flow from this premise. The United States should insist on reciprocity and mutual benefit as guiding principles of the U.S.-China relationship. It is clear that China will pursue its own narrow goals unless international pressure is brought to bear to modify any objectionable behavior.

While effectively responding to China is not an easy task, the Commission's 2011 Report is an outline that we believe will be helpful to Congress in addressing China's rise. The Commission recommends that Congress, through legislation, require the president to assign the National Security Council to conduct an agency-

wide comprehensive review of U.S. economic and security policies toward China to determine the need for changes to address the increasingly complicated and serious challenges posed by China to U.S. international and domestic interests. Such a review should be examined and debated as appropriate by Congressional committees.

**CHAPTER 1**  
**THE U.S.–CHINA TRADE  
AND ECONOMIC RELATIONSHIP**  
**SECTION 1: THE U.S.–CHINA TRADE AND  
ECONOMIC RELATIONSHIP’S CURRENT STATUS  
AND SIGNIFICANT CHANGES DURING 2011**

**Introduction**

In the ten years since China joined the World Trade Organization (WTO), China has maintained a steep growth trajectory, outpacing both Germany and Japan to become the second largest economy in the world. China’s gross domestic product (GDP) has grown from \$1.32 trillion in 2001 to a projected \$5.87 trillion in 2011. This represents an increase of more than 400 percent. In certain industries, such as automobiles, mobile handsets, and personal computers, China’s market already exceeds that of America’s. Concurrently, China has lifted 400 million of its citizens out of poverty and has experienced the largest rural-to-urban migration in history.<sup>1</sup>

At the same time, the concerns that originally surrounded China’s accession to the WTO—that China’s blend of capitalism and state-directed economic control conflict with the organization’s free market principles—have proven to be prophetic. Although China did not meet all of the traditional requirements for accession, the WTO took a calculated gamble that China could effectuate the reforms necessary to conform to those requirements within a reasonable period of time. The U.S.-China Economic and Security Review Commission was established by the United States Congress in part to monitor the outcome of that gamble. Ten years later, China’s state-directed financial system and industrial policy continue to contribute to trade imbalances, asset bubbles, misallocation of capital, and dangerous inflationary pressures. Meanwhile, China’s legal reforms are in jeopardy from a bureaucratic backlash.<sup>2</sup> China’s adherence to WTO commitments remains spotty despite the decade that the country’s rulers were given to adjust. These circumstances create an uneven playing field for China’s trading partners and threaten to deprive other WTO signatories of the benefit of their bargain.

Each of these issues will be analyzed in detail in this section, beginning with an examination of U.S.-China trading relations, followed by U.S.-China financial relations and, finally, an evaluation of China’s role in the WTO. The fact that a decade has now passed since China’s controversial admission to the WTO means that

China is now relieved of its burden of facing an annual review by the WTO of China's compliance. This section will examine the implications of this change.

### U.S.-China Trading Relations

For the first eight months of 2011, China's goods exports to the United States were \$255.4 billion, while U.S. goods exports to China were \$66.1 billion, yielding a U.S. deficit of \$189.3 billion. This represents an increase of 9 percent over the same period in 2010 (\$119.4 billion). During this period China exported four dollars' worth of goods to the United States for each dollar in imports China accepted from the United States. In 2010, the United States shipped just 7 percent of its total exports of goods to China; China shipped 23 percent of its total goods exports to the United States. In the ten years since China joined the WTO, the U.S. trade deficit with China has grown by 330 percent (see table 1, below).

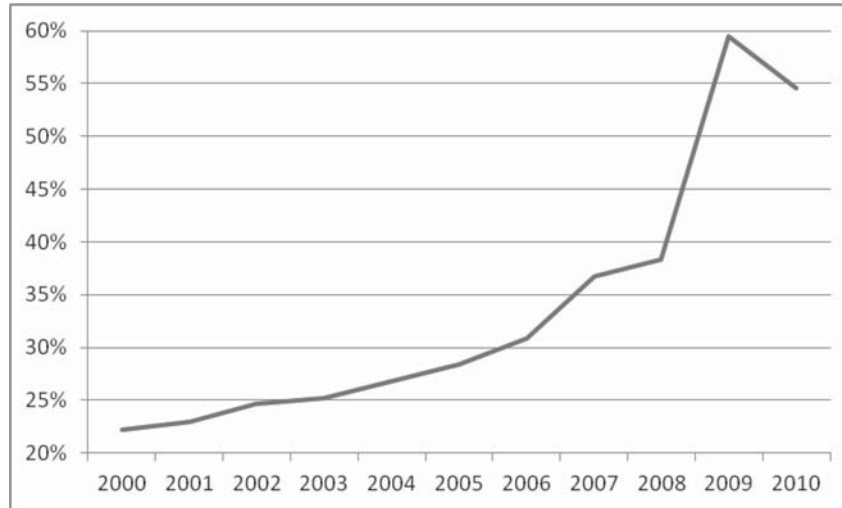
**Table 1: U.S.-China Trade in Goods (\$ billions), 2000–2011 YTD**

	00	01	02	03	04	05	06	07	08	09	10	11 (YTD)
U.S. Exports	16	19	22	28	34	41	55	65	69	69	91 <sup>3</sup>	66
U.S. Imports	100	102	125	152	196	243	287	321	337	296	364	255
Balance	-83	-83	-103	-124	-162	-201	-232	-256	-268	-226	-273	-189

Source: U.S. Census Bureau, *U.S. Trade in Goods and Services* (Washington, DC: U.S. Department of Commerce, August 15, 2011).

At first glance, this trade deficit may appear to be explained by a broader trend of American dependence on imports, but this is not the case. In the first eight months of 2011, Chinese goods accounted for 20 percent of U.S. imports, while U.S. goods accounted for only 5 percent of Chinese imports.<sup>4</sup> China's portion of America's trade deficit has increased considerably. While the overall U.S. trade deficit with the world has grown from \$376.7 billion in 2000 to \$500 billion in 2010, China's share of this deficit has nearly tripled during the period, from 22 percent in 2000 to 60 percent in 2009 and 55 percent in 2010 (see figure 1, below).

**Figure 1: China's Share of the U.S. Global Trade Deficit (by percentage), 2000–2010**



Source: U.S. Bureau of the Census, *U.S. Trade in Goods and Services* (Washington, DC: U.S. Department of Commerce, August 15, 2011).

These data suggest that the growth in the U.S. global trade deficit reflects growth in the U.S. trade deficit with China and that other emerging economies are being replaced by China as a final supplier of finished exports to the United States. Indeed, numerous international trade scholars have asserted a causal link between increases in China's trade surplus with the United States and decreases in the bilateral balance of trade of other nations of South and South East Asia with the United States.<sup>5</sup>

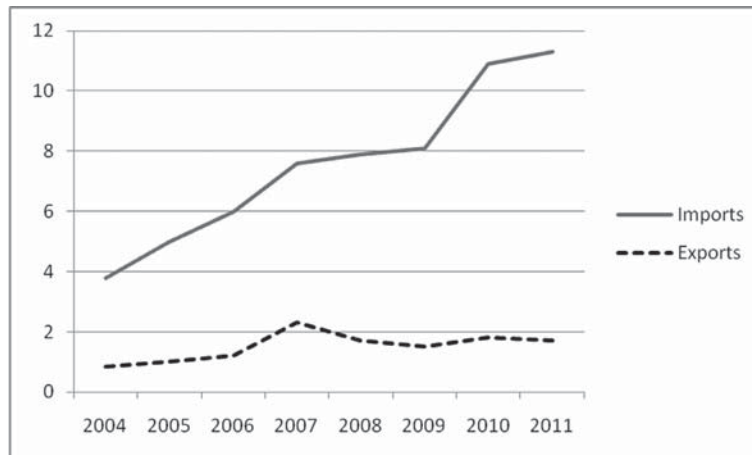
The more significant trend, however, is not the magnitude of the U.S. trade deficit with China but the composition of goods. Over the last ten years, Chinese manufacturing has undergone a dramatic restructuring away from labor-intensive goods toward investment-intensive goods. Production is driven increasingly less by low-cost labor and increasingly more by low-cost capital, which is used to build next-generation manufacturing facilities and to produce advanced technology products for export. This can be seen most clearly by examining Chinese exports of labor-intensive products, such as clothing and footwear, as a percentage of total exports. In 2000, exports of labor-intensive products constituted 37 percent of all Chinese exports. By 2010, this percentage fell by more than half had fallen to just 14 percent (see table 2, below).

**Table 2: Chinese Labor-intensive Exports (as a percentage of total exports), 2000–2010**

	2000	2005	2010
Apparel and clothing	24	10	9
Footwear	7	3	2
Furniture	3	2	2
Travel goods	3	1	1
<b>Total</b>	<b>37</b>	<b>16</b>	<b>14</b>

Source: Manufacturers Alliance, “U.S. and Chinese Trade Imbalances in Manufactures Surge” (Maple Grove, MN: Manufacturers Alliance Economic Report, ER-728, August 2011).

This shift has serious implications for the U.S. economy. As China joined the WTO, the United States had already lost production of low-value-added, low-wage-producing commodities such as umbrellas and coffee cups. But America’s export strength lay in such complex capital goods as aircraft, electrical machinery, generators, and medical and scientific equipment. China’s exports to the United States are increasingly from its capital-intensive industries, particularly advanced technology products. From 2004 to 2011, U.S. imports of Chinese advanced technology products grew by 16.5 percent on an annualized basis, while U.S. exports of those products to China grew by only 11 percent.<sup>6</sup> In August 2011, U.S. exports of advanced technology products to China stood at \$1.9 billion, while Chinese exports of advanced technology products to the United States reached \$10.9 billion, setting a record one-month deficit of more than \$9 billion. On a monthly basis, the United States now imports more than 560 percent more advanced technology products from China than it exports to that country (see figure 2, below).<sup>7</sup>

**Figure 2: U.S. Exports to and Imports from China of Advanced Technology Products in the Month of June (\$ billion), 2004–2011**

Source: U.S. Bureau of the Census, *U.S. Trade in Goods and Services* (Washington, DC: U.S. Department of Commerce, August 15, 2011).

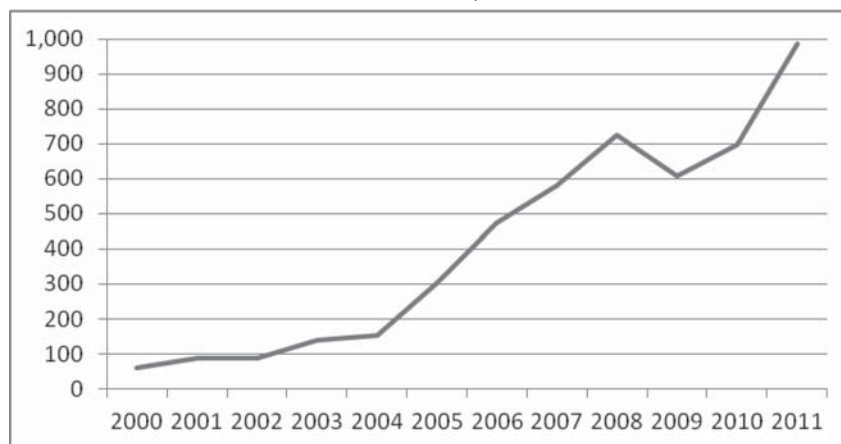


The weakness in U.S. exports of advanced technology products to China is explained in part by barriers to market access experienced by U.S. companies attempting to sell into the Chinese market.<sup>8</sup> According to a recent survey conducted by the American Chamber of Commerce in China, 71 percent of American businesses operating in China believe that foreign businesses are subject to more onerous licensing procedures than Chinese businesses.<sup>9</sup> Additionally, twice as many respondents report that Chinese licensing strictures have grown more onerous over the last year than those who believe that licensing requirements have eased. Finally, four times as many respondents report that they have been harmed by national treatment as those who report that they were aided. Encountering market access barriers, however, is not unique to American business. A similar 2011 study by the European Chamber of Commerce in China found that inconsistencies in the procurement process employed by the Chinese central government resulted in a lost opportunity for European businesses that is equal in size to the entire economy of South Korea, or one trillion dollars.<sup>10</sup>

Import barriers are part of China's policy of switching from imports to domestically produced goods. In particular, part of China's "indigenous innovation" policy protects domestically produced goods by discriminating against imports in the government procurement process, particularly at the provincial and local levels of government.<sup>11</sup> (For a more complete discussion of the indigenous innovation policy, please see chap. 1, sec. 3, of this Report.)

By contrast, the monthly U.S. trade surplus in scrap and waste reached a record high of \$1.1 billion in August 2011. The annual U.S. trade surplus in scrap and waste grew from \$715 million in 2000 to \$8.4 billion in 2010, representing an increase of 1,187 percent, or 28 percent per year on an annualized basis (see figure 3, below). Unfortunately, however, the gains to the U.S. economy from this trend are limited, as the value-added component of scrap and waste is almost nothing.

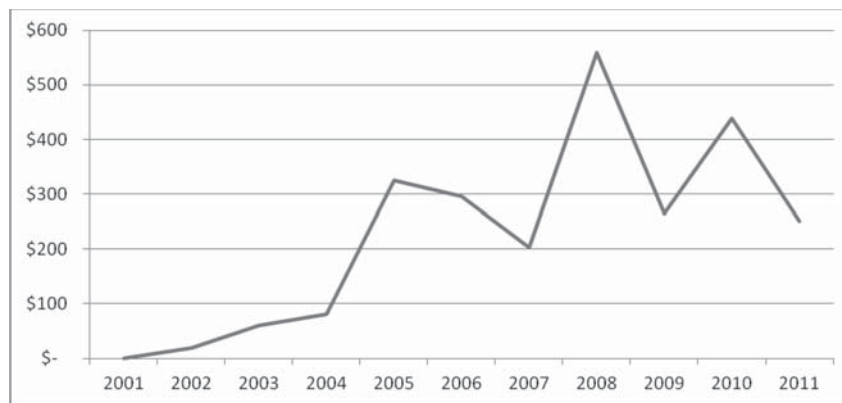
**Figure 3: U.S. Trade Surplus in Scrap and Waste with China in the Month of June (\$ million), 2000–2011**



Source: U.S. Bureau of the Census, *U.S. Trade in Goods and Services* (Washington, DC: U.S. Department of Commerce, August 15, 2011).

Similarly, the U.S. trade surplus in agricultural products with China has experienced dramatic growth (see figure 4, below). This trend has been fueled by higher grain prices in the Chinese market, greater demand for animal feed from Chinese farmers, and a series of water shortages that have left China more or less dependent on foreign sources of food. The inflationary antecedents to these trends are discussed in greater depth below.

**Figure 4: July U.S. Surplus of Trade in Agricultural Products with China (\$ million), 2001-2011**



Source: U.S. Bureau of the Census, *U.S. Trade in Goods and Services* (Washington, DC: U.S. Department of Commerce, August 15, 2011).

### U.S.-China Financial Relations

U.S.-China financial relations are largely determined by two bedrock monetary policies of the Chinese government: a closed capital account and a closely managed exchange rate. Since 1994, the Chinese government has used a variety of methods to insulate the value of its currency from market forces that would otherwise have caused the renminbi (RMB) to appreciate against the dollar. In various policy statements and in its 12th Five-Year Plan (2011–2015), the Chinese Communist Party has once again identified gradual liberalization of the capital account as one of its priorities.<sup>12</sup>

Consequently, movement toward a more market-based currency has been slow and halting.<sup>13</sup> Chinese merchants who export to foreign parties are still left with little choice other than to relinquish their foreign currency earnings to the state-owned banks in exchange for renminbi. Thus, when China runs a trade surplus, the supply of RMB in circulation grows.<sup>14</sup> To counteract the inflation that would naturally spring from a rapidly expanding money supply, the Chinese government issues special bonds in an attempt to attract investors and thereby soak up the extra money.<sup>15</sup> Thus, the government is left holding both foreign currency and RMB, and the Chinese public is left holding sterilization bonds denominated in RMB. The Chinese government must then reinvest the foreign currency if it is to avoid losing value to inflation. The Chinese government could pursue any investment strategy, but in order to satisfy

the second of its two primary monetary policies, namely, a managed exchange rate, it chooses to invest its foreign currency in bonds, primarily U.S. Treasury bonds.

This activity helps maintain the price of dollars relative to the RMB.<sup>16</sup> To avoid a black market in foreign currency, the government requires that most Chinese businesses and citizens exchange their dollars at a bank, the large majority of which are state owned. Each day the central bank declares the price at which the state-owned banks will exchange dollars for RMB. Finally, in order to keep this maneuver affordable, the government must maintain an abnormally low domestic rate of interest. For if the prevailing interest rate at Chinese banks were to increase, then the government would be forced to increase the interest rate on sterilization bonds in order to maintain their attractiveness in the market, which would significantly increase the cost associated with the exchange rate policy. These conditions create a perfect setting for inflation, as the following data will illustrate.

In June 2011, China's foreign exchange reserves surged on strong trade surpluses to \$3.2 trillion, up nearly one trillion from \$2.4 trillion in June 2010, or roughly 30 percent year-on-year growth.<sup>17</sup> China's foreign exchange reserves are now roughly three times greater than that of Japan, which has the second-highest foreign exchange reserves in the world. Roughly two-thirds of China's foreign exchange reserves are generally thought to be denominated in U.S. dollars, although the exact makeup of the reserves is unknown, because the Chinese government considers it to be a state secret.

Somewhat better known is the volume of China's foreign exchange reserves that are made up of U.S. Treasury securities. As of July 2011, the official estimate by the U.S. Treasury Department stood at \$1.2 trillion, up slightly from the same period one year before.<sup>18</sup> The real amount is considerably higher, since the \$1.2 trillion does not take into account any purchases made on the secondary market nor does it factor in purchases made by intermediaries or made through tax havens, such as the Cayman Islands. (For a more thorough examination of this issue, see the Commission's *2010 Annual Report to Congress*, chap. 1, sec. 2, "The Implications and Repercussions of China's Holdings of U.S. Debt.")

China's decision to purchase U.S. government securities is not born out of any diplomatic beneficence but, rather, the economic self-interest of China, seeking to fix the exchange rate of the RMB to the dollar. In 2011, China's resolve was tested when a major rating agency reduced the credit rating of U.S. Treasury bonds. As the party with the largest holdings of U.S. government debt, China stands to lose the most from any drop in value of U.S. Treasury securities.

Beijing remained silent during the summer debt ceiling impasse in Washington.<sup>19</sup> However, following Standard & Poor's downgrading of U.S. Treasury bonds, Guo Shuqing, the chairman of the China Construction Bank and former head of the State Administration of Foreign Exchange, opined that "[h]olding U.S. Treasuries contains certain risks, but at a time when the global economy is volatile and the euro zone is in deep difficulties, U.S. Treasuries, among all the not-so-ideal products, remain as the best product in

terms of safety and returns.”<sup>20</sup> Mr. Guo’s comment reflects the fact that China is committed to the outsized ownership of U.S. Treasuries by its choice of methodology in controlling the price of the RMB. In addition, as U.S. interest rates have declined, the market value of China’s Treasury holdings has increased. Standard & Poor’s downgrade of U.S. Treasuries did not affect this trend.

As a result of growth in foreign exchange reserves, China’s domestic money supply has skyrocketed, which has added to inflationary pressures. In May and June 2011, China’s M2 money supply, which includes checking, savings, and money market accounts, grew by more than 15 percent.<sup>21</sup> From 2000 to 2010, aggregate M2 growth amounted to 434 percent, totaling more than \$10 trillion in U.S. dollars.<sup>22</sup> By way of comparison, from 1996 to 2008, the U.S. money supply grew at an average annual rate of 3.5 percent and currently stands at \$1.005 trillion.<sup>23</sup> Considering that the U.S. gross domestic product (GDP) is still roughly three times greater than the Chinese GDP, this means that the Chinese money supply has grown to be roughly 30 times greater than the U.S. money supply when normalized to scale (see figure 5, below). Figure 5 depicts the growth over time of U.S. and Chinese M1 money supplies, which is equivalent to M2 minus savings deposits and time deposits.

**Figure 5: Chinese M1 Money Supply by Year (100 Million RMB) 2004–2010**



Source: Economics Junkie, November 18, 2010. <http://www.economicjunkie.com/inflation-money-supply-in-china/>.

Derek Scissors, an expert in the Chinese economy at The Heritage Foundation, characterized growth in the Chinese money supply in the following terms: “There are occasional, loud claims in China that the current bout of inflation was caused by quantitative easing in the United States. This is like blaming your brother-in-law’s binge eating for your weight gain. China’s 2008 stimulus package led to a 30-percent increase in the money supply in 2009. The

PRC's (People's Republic of China) monetary base is bigger than America's, even though its economy is less than half the size. Chinese inflation is home-made, and the recipe is simple."<sup>24</sup>

Citing the danger that such money growth can pose, the Chinese government has pronounced the curtailment of inflation as one of its top economic priorities. But because the Chinese government relies upon issuing debt in order to carry out its managed exchange rate policy, it has limited options. Raising interest rates would require the government to pay higher interest on the sterilization bonds. Consequently, the only inflation-fighting weapon fully available to the government is raising the reserve requirement for banks in order to remove money from circulation, which it has done several times over the last year.<sup>25</sup> Beijing also initiated a campaign to rein in off balance sheet lending, a hallmark practice of Chinese banks.<sup>26</sup>

In June 2011, Chinese Premier Wen Jiabao published an op-ed in the *Financial Times* claiming that these measures had succeeded in taming inflation.<sup>27</sup> Despite Premier Wen's assurances, inflation continued to rise. In September 2011, China's consumer price index hovered at 6.1 percent.<sup>28</sup> Food prices, the single largest driver of inflation, were up 13.4 percent. In the same period, housing prices went up 5.9 percent year on year, indicating the formation of a real estate bubble.

Not all of this inflationary activity is attributable to growth in money supply. Other factors play a role as well. For example, as rural-to-urban migration tapers off, manufacturers are finding it more difficult to keep their factories staffed. As labor shortages mounted, wages were increased in order to attract workers.<sup>29</sup> Consequently, households can afford to spend more on meat and grain, which drives up the price of agricultural commodities. China is also facing growing shortages of water, which further exacerbates inflation in farm goods. For a country that is increasingly reliant upon hydroelectric power, water shortages place upward pressure on the price of electricity.<sup>30</sup> This, in turn, drives up the cost of production in secondary industries.

Until recently, the greatest inflationary threat facing the Chinese government was rapid increases in the price of fixed assets, particularly real estate. In response to popular discontent, the Chinese government placed a priority on taming real estate prices, with some success.<sup>31</sup> According to data released in mid-August, prices for newly built homes stayed level or decreased in 31 out of China's top 70 cities, including Shanghai, Beijing, Shenzhen, and Guangzhou.<sup>32</sup> At the same time, the liabilities of China's property developers increased by 43 percent year on year, and the Guggenheim China Real Estate Fund, a popular exchange traded fund that tracks the performance of the Chinese property development industry, fell 28 percent from a year-long high of \$30.37 per share in November 2010 to \$21.96 in October 2011.<sup>33</sup>

China's response to its inflation problem has drawn criticism because it failed to deal with China's capital controls as a cause of inflation. Economist Nigel Chalk of the International Monetary Fund likened China's Pyrrhic victory over property prices and subsequent surge in the consumer price index to an economic game of *Whack-a-Mole*.<sup>34</sup> Benjamin Simfendorfer, former chief China econo-

mist at the Royal Bank of Scotland, predicted that China's consumer price index will remain between 5 percent and 10 percent for the next decade.<sup>35</sup> And Nouriel Roubini, professor of economics at New York University, decried China's dependence on fixed asset investment as the principal driver of China's GDP growth and a factor in its inflation.<sup>36</sup> All noted that the Chinese government is merely treating the symptom, rather than the cause, of the inflation problem. Until the Chinese government fully liberalizes its capital account, and ceases manipulating its currency, China's trade surpluses will continue to inflate the supply of RMB in circulation. Until the Chinese government eliminates its reliance on sterilization bonds, Chinese savers will prefer the volatile real estate market as an investment vehicle over the negative real returns from bank deposits and bonds. Finally, until the Chinese government fully subjects the RMB to the dictates of market forces, the consumption share of China's GDP will remain stunted at around 35 percent—half the rate in the United States, according to many commentators.<sup>37</sup>

On the positive side, the Chinese government allowed the RMB to rise by roughly 6 percent in nominal terms over the last year, from 6.775 RMB per dollar on July 16, 2010, to 6.370 RMB per dollar on October 17, 2011.<sup>38</sup> This is the second-fastest rate of appreciation since the Chinese government eliminated its hard peg to the dollar in 2005. Nonetheless, the US Treasury Department reports that the RMB remains “substantially undervalued.”<sup>39</sup> There is also nascent acknowledgement by Chinese academics that Beijing's intervention in the foreign exchange market has a measurable effect on the balance of trade, at least in certain sectors. For example, in a scholarly article published in the Chinese journal *Advances in Informational Sciences and Service Sciences*, researchers from Huazhang Agricultural University found that every 1 percent increase in the exchange rate between the RMB and the U.S. dollar leads to a 0.498 percent decrease in Chinese exports of citrus fruits.<sup>40</sup> Moreover, there is growing support among the engineers of China's monetary policy to expanding the range of the daily trading band beyond the current 0.5 percent, potentially accelerating the rate of appreciation.<sup>41</sup>

Meanwhile, the Chinese government is increasing its efforts to reduce its reliance on the dollar and nudge international debt markets toward the RMB.<sup>42</sup> Last year, McDonald's became the first major multinational to issue an RMB-denominated corporate bond in Hong Kong, referred to by the financial community as *dim sum bonds*, which brought in RMB 200 million at a 3 percent yield.<sup>43</sup> Caterpillar followed with a much larger issue of RMB 1 billion at 2 percent.<sup>44</sup> In March 2011, Unilever paid an even lower yield of 1.15 percent in an issuance of RMB 300 million.<sup>45</sup> Morgan Stanley issued its own RMB 500 million round at 1.625 percent (see table 3, below).<sup>46</sup> Finally, the Chinese Ministry of Finance issued RMB 20 billion of sovereign debt, the largest RMB-denominated bond in history.<sup>47</sup>



**Table 3: RMB Bond Issuances by Multinational Companies, 2010-2011**

	<b>Issuer</b>	<b>Round</b>	<b>Yield</b>
Aug-10	McDonald's	¥ 0.2 bn	3.000%
Nov-10	Caterpillar	¥ 1.0 bn	2.000%
Mar-11	Unilever	¥ 0.3 bn	1.150%
May-11	Morgan Stanley	¥ 0.5 bn	1.625%
May-11	Volkswagen	¥ 1.5 bn	2.000%
Total		¥ 3.5 bn	

Source: Fiona Law et al., "Caterpillar Yuan Bond Issue Draws Strong Demand," *Wall Street Journal*, November 24, 2010. <http://online.wsj.com/article/SB10001424052748703572404575634532182318468.html>.

¥ = yuan or renminbi

The low yields reflect the lack of alternatives available to Chinese retail investors. Some Chinese commentators have dismissed such corporate bond sales as publicity stunts by multinationals designed to appease the Chinese government. One financial analyst described McDonald's RMB bond as a "McGesture."<sup>48</sup> Others believe that these issuances are neither about fundraising nor politics but, rather, a method of benefitting from the appreciation of the RMB.<sup>49</sup>

Still, others point out that the fledgling RMB debt market, despite having been in existence for only one year, has already achieved greater liquidity than the well-established debt markets of the Philippines, Indonesia, and Malaysia, with daily trading volume in excess of \$2 billion.<sup>50</sup> To put these numbers into perspective, during the first two quarters of 2011, the U.S. corporate bond market saw \$630 billion of new issuances (RMB 4 trillion), and the average daily trading volume was \$17.3 billion.<sup>51</sup> Thus, the United States maintains an overwhelming lead in the issuance of new corporate bonds but only a modest lead in daily trading volume (see table 4, below).

**Table 4: US and Chinese Corporate Bond Market Activity (\$ billion) 2011 Q1-Q2**

	<b>New Issuances</b>	<b>Daily Trading Volume</b>
US	\$ 630.90	\$ 17.30
China	\$ 0.50	\$ 2.00

Source: Securities Industry and Financial Markets Association (New York, NY).

Meanwhile, a greater share of China's foreign trade is settled in RMB. In the first four months of 2011, cross-border, RMB-denominated trade exceeded the total amount of RMB-denominated trade conducted in all of 2010, 500 billion.<sup>52</sup> Put in relative terms, RMB-denominated trade in the first quarter of 2011 represented 7 percent of China's overall foreign trade.<sup>53</sup> However, according to Yin Jianfeng, a financial researcher with the Chinese Academy of Social Sciences, as of the close of 2010, 80 percent of RMB-denominated trade concerned foreign companies importing into China.<sup>54</sup>

Whereas using RMB to settle export trade helps to alleviate China's problems with foreign exchange, exchange rates, and inflation, using RMB to settle import trade actually aggravates those problems.<sup>55</sup> For example, if IBM uses RMB to settle import trade, it implies that at some time prior to the import transaction, IBM used dollars to buy RMB. It also implies that following the import transaction, the Chinese economy is left with more U.S. dollars and more RMB than before. The increased volume of RMB leads to further inflationary pressure for China, and the increased volume of U.S. dollars has the same effect as purchasing Treasury securities: It artificially decreases the supply of dollars in circulation in the United States, creates greater dollar scarcity, and promotes a low exchange rate with the RMB.

China has also made significant progress toward opening the door to RMB-denominated foreign direct investment (FDI).<sup>56</sup> Chinese policymakers are concerned about the magnitude of RMB deposits in Hong Kong, which stood at RMB 548 billion as of May 2011.<sup>57</sup> In relative terms, this represents 5 percent of the total volume of all RMB in circulation. Liberalizing RMB-denominated FDI on the mainland raises the prospect that some significant percentage of this money would be repatriated into the mainland, where it might go into speculative investments in real estate, thereby creating a bigger bubble.

### China's Role in the WTO

The United States has brought three new, China-related disputes to the WTO since the date of the Commission's last Report. On December 22, 2010, the United States requested consultations with China over its subsidies for domestic manufacturers of wind power equipment (DS419). The European Union (EU) and Japan joined the consultations in January. The case has not yet advanced to the hearing stage. In the second pending case initiated this year, the United States on September 20 requested consultations with China regarding its imposition of antidumping duties on chickens imported from the United States. In addition, on October 6, 2011, the U.S. Trade Representative submitted information to the WTO identifying nearly 200 subsidies that China, in contravention of WTO rules, failed to notify to the WTO.<sup>58</sup>

Three previous WTO cases involving U.S.-China trade are both open and active. The *Raw Materials* case, which resulted in a decision favorable to the United States, is under appeal as of August 31, 2011. The *Flat-rolled Electrical Steel* case and the *Electronic Payments* case have both advanced to formal dispute settlement, though no decision has been reached (see table 5, below).

**Table 5: Open and Active WTO Cases Between the United States and China**

Date Brought	Number	Title	Status
15-Sep-10	DS413	Electronic Payments	Panel established
15-Sep-10	DS414	Flat-rolled Electrical Steel	Panel established
23-Jun-09	DS394	Raw Materials	Under Appeal

Source: World Trade Organization Dispute Settlement Gateway. [www.wto.org](http://www.wto.org).



The United States has brought a total of seven cases against China at the WTO concerning subsidies or grants. Of the seven, four were settled through consultation, two were decided in favor of the United States, and one remains undecided (see table 6, below).

**Table 6: WTO Subsidies Cases Brought by the United States Against China**

Date Brought	Dispute	Short Title	Resolution	Date Resolved
18-Mar-04	DS309	Integrated Circuits	Settled	6-Oct-05
30-Mar-06	DS340	Auto Parts	Holding for US sustained on appeal	15-Dec-08
2-Feb-07	DS358	Taxes	Settled	19-Dec-07
10-Apr-07	DS362	Intellectual Property Rights	Held for US	26-Jan-09
3-Mar-08	DS373	Financial Services	Settled	4-Dec-08
19-Dec-08	DS387	Grants and Loans	No resolution	N/A
22-Dec-10	DS419	Wind Power	Settled	N/A

Source: World Trade Organization Dispute Settlement Gateway. [www.wto.org](http://www.wto.org).

### China's WTO Probationary Period Ends This Year

During the negotiations leading up to China's accession, the United States and the European Union expressed concern about potential negative consequences that might befall the WTO due to China's sheer size and lack of a market-based economy.<sup>59</sup> Thus, they insisted on a series of China-specific admission requirements. The centerpiece of this "WTO-Plus" admission package was the Transitional Review Mechanism, which required China to submit to an annual review for the first eight years of its membership in the organization as well as a final review in the tenth year.<sup>60</sup> The Transitional Review Mechanism is in addition to, rather than in lieu of, the normal review procedure, known as the Trade Policy Review Mechanism, which all WTO members must undergo every few years in perpetuity.<sup>61</sup>

On paper, the temporary Transitional Review Mechanism appeared to be more stringent than the Trade Policy Review Mechanism. However, the procedural aspects of the Transitional Review Mechanism rendered it a paper tiger.<sup>62</sup> Reports produced by the Transitional Review Mechanism require the unanimous consensus of all members involved, including China.<sup>63</sup> This puts China in the position of acting as judge in its own trial. According to trade scholars such as William Steinberg, the result consistently has been "light and generally unspecific criticism."<sup>64</sup>

Nevertheless, the Transitional Review Mechanism has provided the United States with a somewhat useful tool for fact-finding and casting attention on controversies within the U.S.-China trade relationship. This is the tenth year of China's membership in the WTO and, therefore, the final year of the Transitional Review Mechanism. The consequences of this are twofold. First, the tools available to the United States to carry out fact-finding related to China's compliance with WTO obligations will now be limited to the

Trade Policy Review Mechanism and the various review channels of individual subsidiary bodies.<sup>65</sup> Second, China's membership in the WTO has reached a point of chronological maturity at which China was expected to be in full compliance with its WTO obligations.

When China initially acceded to the WTO, it accepted the China-specific rules contained in the protocol of accession, avoided litigation within the WTO, and was quick to comply with all demands of the WTO's dispute resolution process. Trade law scholars such as Henry Gao of Singapore Management University have characterized the first several years of China's membership in the WTO as a *rule taker*.<sup>66</sup> But after ten years of observing and learning the subtleties of WTO procedural law, Beijing's behavior has transformed into a *rule shaper*. Beijing has become much more aggressive about bringing claims against trading partners, appealing decisions that are rendered against its favor, and pushing the envelope of noncompliance. Additionally, China has grown very savvy about using the dispute settlement process and bilateral free trade agreements to undermine the effectiveness of China-specific rules.

According to a recent study by international trade law scholars at the University of Hong Kong, of the five WTO cases filed by China between September 2008 and March 2011, four of them were designed to use the dispute settlement process to change or undo rules contained in China's Accession Protocol.<sup>67</sup> These cases purposely turn on vague terminology found in the Accession Protocol. China has exploited this weakness by using a creative interpretation to render entire provisions inapplicable.

Since 2002, China has concluded nine free trade agreements and commenced negotiations for five more.<sup>68</sup> In all 14, a precondition to negotiation has been agreement by the other party to grant China market economy status. These preconditions are targeted toward eliminating certain restrictions placed upon China during accession to the WTO. In particular, when antidumping proceedings are instituted against China, the instituting party is allowed to draw price comparisons from third-party countries, in lieu of China, in order to show dumping behavior by Chinese companies.<sup>69</sup> Similarly, for purposes of identifying illegal subsidies and calculating countervailing measures, the instituting party may act with reference to prices and conditions prevailing in third-party countries in lieu of China.<sup>70</sup> Chinese trade officials view these provisions as a substantial drag on China's freedom of action within the international trading system. Under the terms of the Accession Protocol, however, China's nonmarket-economy status is set to expire in 2016, at which time these provisions will cease to have effect.<sup>71</sup> It must be noted that the expiration in 2016 of China's status as a nonmarket economy under the Accession Protocol does not negate applicable U.S. domestic law, which will continue to have effect beyond 2016.

If enough WTO members accord market economy status prematurely to China, it will diminish support for Washington's position that China has a long way to go to merit market economy status. China has more bargaining power in bilateral negotiations with smaller nations than it does in multilateral negotiations at the WTO. It appears that by pushing for concessions from a series

of bilateral negotiations under the auspices of free trade agreements, China hopes gradually to undermine the Washington consensus, strong-arm its way into market economy status, and shake free of restrictive terms and obligations in its accession agreement.

Moreover, China is not willing to comply fully with the decisions of the WTO dispute settlement process and prioritizes the preservation of its own political system above fidelity to WTO commitments. This can be seen most clearly by examining a recent case study of China's failed compliance with WTO commitments.

### **Stonewalling the WTO: A Case Study in China's Intransigence**

On April 10, 2007, the United States brought a complaint at the WTO alleging that China's state monopoly on imports of cultural products (such as movies, music, and magazines) was inconsistent with China's WTO obligation to permit, within three years of accession, all persons and enterprises, both foreign and domestic, to import and export all goods throughout the territory of China, except for a specific list of products reserved for monopoly by state-owned enterprises (SOEs).<sup>72</sup> The cultural products at issue were not included in the list of exceptions negotiated by China and agreed to by the WTO. Thus, the United States claimed that the continued SOE monopoly over importing cultural products constitutes a violation of China's obligations. China attempted to defend itself by invoking Article XX(a) of the General Agreement on Tariffs and Trade, which allows members to adopt or enforce measures "necessary to protect public morals." China claimed that censorship of imported cultural products is critical to protecting public morals and that only SOEs could be relied upon to carry out censorship, therefore SOE monopoly on importation of cultural products should be allowed under the General Agreement on Tariffs and Trade.

The United States responded to this defense by proposing an alternative arrangement, which was to allow all persons and entities to import cultural products but require them to submit to China's Central Propaganda Department for censorship of each individual import. China rejected this proposal on the grounds of cost. Under the status quo, SOEs practice self-censorship, which leaves the workload of the Central Propaganda Department quite limited. Under the U.S. proposal, the Central Propaganda Department's workload would increase dramatically, thus requiring a significant expansion of payroll. On August 12, 2009, the dispute panel issued a ruling rejecting China's defense, finding that the U.S. proposal constituted a reasonable alternative to the status quo and mandating China to modify its policies accordingly. China appealed, and the appellate body upheld the ruling. China then announced its intention to comply with the ruling but requested a reasonable period of time to do so. In July 2010, the United States and China reached an agreement to set a deadline of March 19, 2011, for implementation.

**Stonewalling the WTO: A Case Study in China's  
Intransigence—Continued**

On March 19, 2011, the State Council of China published amendments to the *Regulations on the Management of Publications* and the *Regulations on the Management of Audiovisual Products*.<sup>73</sup> The effect of the amendments was to eliminate the requirement that importers be SOEs and, instead, create a process whereby any individual or entity, private or public, foreign or domestic, can apply to the Central Propaganda Department for a license to import cultural products. Because the government still retains unbridled discretion over which applications will be approved and which will be denied, in practical terms the amendments were empty and meaningless. The new process could just as well be used to grant licenses only to SOEs. Indeed, there is no record of any non-SOE receiving a license under the new rule. For this reason, scholars of international trade have opined that the March 2011 amendments fell far short of what would be required to constitute full compliance with the ruling in this case or the protocol commitment on which it was predicated.<sup>74</sup> Procedurally, the United States has the right to initiate further WTO proceedings to compel compliance or issue sanctions.

The full importance of this development becomes clearer in light of two elements. First, the issue in this case was not whether China should be allowed to practice censorship. The issue was whether China's self-professed censorship imperative is sufficient grounds to justify a state monopoly on importation of cultural products. Contrary to China's public insistence, the real reasons why China rejected the U.S. proposal have nothing to do with cost. First, China wishes to protect its domestic filmmaking industry. Second, adopting the U.S. proposal would set in motion a process that would destroy the effectiveness of China's censorship regime.<sup>75</sup> The reasoning behind this claim bears brief explanation.

The Central Propaganda Department relies upon SOEs to practice self-censorship. The department frequently sends notifications to the SOEs advising them which topics are politically sensitive, which news stories to delete, etc. Those notifications are actually considered state secrets, and publication can lead to severe punishment.<sup>76</sup> If the notifications were available to the public, it would undermine the censorship regime by creating a demand for the forbidden fruit. Additionally, by limiting the circulation of the notifications to SOEs and party members, the Central Propaganda Department retains maximum flexibility in what is considered off limits. If the U.S. proposal were adopted, then each time the Central Propaganda Department would reject a particular import, the private party applying to import that product would have actual knowledge of the fact that the product is being censored. Given the high degree of interaction between importers and the outside world, there would be no effective way to contain the spread of this knowledge. Moreover, private importers, particularly foreign importers, would demand some degree of predictability, which would necessarily come at the expense of the flexibility of the Central Propaganda Department.

**Stonewalling the WTO: A Case Study in China's  
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In sum, if the Central Propaganda Department were required to liaise with private parties, as the U.S. proposal called for, the genie would be let out of the bottle, and the subversion of the censorship regime would only be a matter of time.<sup>77</sup> For this reason, the WTO's decision in the *Publications* case, and China's failure to honor the decision, is critically important. It suggests that in cases of conflict between internal political preferences and international trade commitments, China will choose the former over the latter.

**Implications for the United States**

The U.S. trade deficit with China has ballooned to account for more than half of the total U.S. trade deficit with the world and creates a drag on future growth of the U.S. economy. This problem has many causes, among which are barriers to U.S. exports and continued undervaluation of the RMB. The result is lost U.S. jobs.<sup>78</sup> While the exact number of U.S. jobs lost to China trade is hotly disputed—economist C. Fred Bergsten has estimated 600,000 jobs on the low end, while the Economic Policy Institute has estimated 2.4 million jobs on the high end—many parties agree that the costs are staggering.<sup>79</sup>

Although the RMB has appreciated by roughly 6 percent over the course of the last year, there is widespread agreement among economists that it remains deeply undervalued. As a result, U.S. exports to China remain subject to a de facto tariff, Chinese exports to the United States remain artificially discounted, and Chinese household consumption remains suppressed. This contributes to a persistent pattern of massive and dangerous trade distortions, unnatural pools of capital, and dangerous inflationary pressures that threaten the stability of the global economy.

Gone are the days when Beijing was content to be the low-end factory of the world. The central planners behind China's economy are intent on moving up the value chain into the realm of advanced technology products, high-end research and development, and next-generation production. This ambition will come at the expense of America's high-technology industries.

Similarly, it no longer seems inconceivable that the RMB could mount a challenge to the dollar, perhaps within the next five to ten years. Chinese financial authorities are laying the groundwork for these ambitions via a series of bilateral arrangements with foreign companies and financial centers. While dollar-denominated financial markets retain a substantial advantage over their RMB-denominated counterparts in terms of new issuances, the RMB markets have made remarkable progress in less than one year to achieve 11 percent of the daily trading volume of dollar-denominated markets. Still, of the \$4 trillion that is traded each day in international currency markets, trade in RMB accounts for only 0.3 percent. The dollar is one side of 85 percent of all currency trades.<sup>80</sup>



Finally, the Chinese government is growing increasingly assertive in international fora such as the WTO. The United States and the European Union went to considerable lengths to design and negotiate a system of checks and balances that would permit China to accede to the WTO without jeopardizing the smooth functioning of the organization or endangering the position of existing members in the international trading system. From start to finish, that negotiation process took 15 years. In less than ten years, China has learned the nuances of WTO law and has begun to use it systematically to undo the finely wrought balance that U.S. and EU negotiators designed. At the same time, China has shown that it will subordinate its international commitments to its domestic political preferences and deny to its trading partners the benefit of their bargain.

### **Conclusions**

- The U.S.-China trade deficit in 2010 set a record high of \$273 billion. The U.S.-China trade deficit now accounts for more than 50 percent of the total U.S. trade deficit with the world.
- Over the last 12 months, the RMB has appreciated by 6 percent. Economists estimate, however, that it remains substantially undervalued. There is increasing grassroots pressure in China to widen the trading band of the RMB and increase the pace of appreciation.
- The Chinese economy, generally, and Chinese exports, in particular, are moving up the value chain. On a monthly basis, the United States now imports roughly 560 percent more advanced technology products from China than it exports to China. Exports of low-cost, labor-intensive manufactured goods as a share of China's total exports decreased from 37 percent in 2000 to 14 percent in 2010.
- China's foreign currency reserves are skyrocketing. A major contributor to this phenomenon is China's continued policy of maintaining closed capital accounts. China's foreign currency reserves currently exceed \$3 trillion, three times higher than the next largest holder of foreign currency reserves, Japan.
- Commensurate with growth in foreign currency reserves, China's domestic money supply is ballooning out of control. Between 2000 and 2010, China's money supply grew by 434 percent. China's money supply is now ten times greater than the U.S. money supply, despite the fact that China's GDP is only one-third as large.
- Such rapid growth in China's domestic money has created strong inflationary pressure. This has helped create a real estate bubble, which resulted in price increases of more than 100 percent in some cities within a handful of years. In September, China's consumer price index topped 6.1 percent across the board and higher in rural areas.
- China has grown more assertive and creative in using WTO procedures to alleviate, eliminate, and avoid certain restrictions in the Accession Protocol. At the same time, the WTO has ruled

that China's existing system of state monopoly over imports of cultural products is inconsistent with WTO obligations. China has not yet complied fully with the WTO ruling, and the United States has the right to initiate further proceedings to compel China to do so.



## **SECTION 2: CHINESE STATE-OWNED ENTERPRISES AND U.S.-CHINA BILATERAL INVESTMENT**

### **Introduction**

The state's influence over China's economy takes many forms and covers a whole spectrum of companies from fully state owned to those that are nonstate but maintain close ties to the government. China's state-owned and state-controlled companies and industries are generally the largest ones in China and are operated and managed by the central government of the People's Republic. They are an instrument of state power as well as the centerpiece of China's industrial policy. They receive massive government subsidies and are protected from foreign competition. In addition, there are more than 100,000 smaller companies that are owned or operated by provincial and local governments. These companies also receive many benefits from their government ownership.

Because China's regulatory systems are opaque, it can be difficult to trace the real ownership of any enterprise in China. Though the number of state-owned companies has declined following years of reform and privatization, they continue to dominate major sectors of the economy, and in many sectors they have become stronger. There are also millions of firms whose ownership is unclear. These include enterprises where the state holds some, though not all, assets; joint venture arrangements involving state-owned enterprises (SOEs), private and semiprivate companies and foreign entities; and companies that, while nominally private, are still subject to the influence of the state because they are in the sectors the government has deemed strategically important.

During the 2011 hearing cycle, the Commission undertook a thorough examination of China's industrial policies, particularly the government's control of China's economy. In addition, this section examines the bilateral investment flows between the United States and China, where a new pattern is emerging. Flush with export profits and foreign exchange reserves, China is starting to flex its investor muscles. Though the cumulative Chinese investment in the United States remains very small, recent trends indicate a potential for great growth. This section will examine this and other issues and will conclude with the implications for the United States of the continued dominance of the Chinese economy by the state and of the growth in bilateral investment.

### **Chinese State-owned Enterprises**

In its 2004 Report to Congress, the Commission noted that:

*China was not a market-based economy at the time of its accession to the WTO [World Trade Organization] nor is it*

*now. Because the structures of the WTO rely on the functioning of market-based economies, China's accession required a unique agreement allowing China's early entry in exchange for firm commitments to implement a broad range of legal and regulatory reforms as well as tariff reductions. China also agreed to special safeguard mechanisms that other WTO members could utilize to protect domestic industries significantly injured by surges of imports from China's nonmarket economy. Assuring that China implements its WTO commitments is a large and important task for the U.S. government.*<sup>81</sup>

Ten years after joining the WTO, China has taken significant steps toward economic liberalization in order to meet the many obligations it assumed upon accession to the 153-member organization. But the process has reversed in the past five years. Rather than continue along a path of market reforms, Beijing has indicated that it has no intention of giving up direct command over large portions of the economy or of relinquishing its ownership of key industrial, financial, and high-technology sectors. China's approach is particularly apparent in the government's retention of control over a large number of SOEs and other state-favored actors and its strengthening of them through subsidies and other policies to create dominant domestic and global competitors.

The consolidation and concentration of power in a group of 121 very large SOEs represents a reversal of a trend toward reducing government control of the economy and greater market openness that had been the hallmark of China's economic policy since the 1978 reforms of Deng Xiaoping.\* Though this shift has been gathering strength for half a decade, it has accelerated as a consequence of China's large-scale stimulus in 2008–2009, which directed massive loans from the state-owned banks to many state-owned companies. In 2009 alone, of the 9.59 trillion renminbi (RMB) (\$1.4 trillion) in bank loans, 85 percent were granted to SOEs.<sup>82</sup> Meanwhile, China's less-favored private sector is struggling to compete. The trend has given rise to a catch-phrase among Chinese entrepreneurs: "The state advances, the private [sector] retreats."<sup>83</sup>

In its annual review of China's compliance with its obligations, the WTO reported in 2010 that SOEs have been "benefitting disproportionately from the [g]overnment's recent measures to boost the economy, particularly the economic stimulus. At the same time, domestic private enterprises are finding it more difficult to access credits from banks."<sup>84</sup>

The government also gives SOEs a variety of subsidies and favorable access to credit. The June 2010 *China Quarterly Update* from the World Bank shows SOEs crowding out private enterprises, following the introduction of the economic stimulus, which was heavily weighted toward the construction and infrastructure sectors already dominated by SOEs.<sup>85</sup> By some estimates, local governments established 8,000 state-owned investment companies in 2009 alone

\*A list of major companies owned by the central government appears in Addendum I: SASAC [State-owned Assets Supervision and Administration Commission] Companies, Large State-owned Banks, and Insurance Companies (2011).

to take advantage of central government financing for business and industrial deals.<sup>86</sup> The World Bank also noted that a decline of the role of the SOEs in the Chinese economy earlier in the decade has reversed in recent years.<sup>87</sup> Two experts on China's industrial policy, Victor Shih of Northwestern University and Yasheng Huang of the Massachusetts Institute of Technology, have also noted that some of the reforms introduced in the past two decades to promote China's private sector are now being undone by the shift of government support to the state-owned sector.<sup>88</sup>

### ***Overview of the Chinese State-owned Sector***

The Chinese government continues to eliminate or consolidate the least profitable SOEs.<sup>89</sup> As a result, the current group of operating SOEs is composed primarily of very large and comparatively more profitable SOEs than in the past.<sup>90</sup> The number of Chinese SOEs, at both the central and provincial levels, has decreased significantly since 2000 as part of a policy to “grasp the big, let go of the small.”\* The overall effect has been to reduce the number of companies under government control while strengthening the remainder in order to produce global competitors to European-, American-, and Japanese-based multinationals.<sup>91</sup> This goal is part of an effort to create “national champions.” The WTO noted in its 2010 *Trade Policy Review of China* that:

*‘guided’ by the State Council’s Opinions issued in December 2006, SOEs have been retreating from some of the more competitive industries, but remain concentrated in other industries with a state monopoly. . . . The associated monopoly position gives these SOEs competition advantage over private enterprises. Profits of SOEs continued to rise (they increased by 9.8 [percent] in 2009).*<sup>92</sup>

The largest 121 nonfinancial companies owned by the central government<sup>93</sup> are supervised by the government equivalent of a holding company, the State-owned Assets Supervision and Administration Commission (SASAC), which reports to the State Council.† These, however, typically each have dozens of subsidiaries, “including nearly all the Chinese companies most people are familiar with,” according to testimony before the Commission by economist Derek Scissors of The Heritage Foundation.<sup>94</sup> There are an additional 114,500 SOEs owned by provincial and municipal governments, according to World Bank estimates.<sup>95</sup> Meanwhile, truly private firms number in the millions, though they are comparatively very small in size. There are also millions of firms whose ownership is unclear.<sup>96</sup>

\*The “grasp the big, let go of the small” policy, adopted by the Communist Party Congress in 1997, remains the guiding principle for SOE restructuring. These reforms included efforts to corporatize SOEs and to downsize the state sector. The “grasp the big” component indicated that policymakers should focus on maintaining state control over the largest and most important SOEs, which were typically controlled by the central government. “Let go of the small” meant that the central government should relinquish control over smaller SOEs through a variety of means (e.g., giving local governments authority to restructure the firms, privatizing them, or shutting them down). See Barry Naughton, *The Chinese Economy: Transitions and Growth* (Cambridge, MA: MIT Press, 2007), pp. 301–302.

†The State Council of the People's Republic of China is the chief administrative authority of the People's Republic of China. It is chaired by the premier and includes the heads of each governmental department and agency. For more information, see *People's Daily Online*, “The State Council.” <http://english.peopledaily.com.cn/data/organs/statecouncil.shtml>.

### How Big Is China's State Sector?

The opaque nature of ownership makes estimating the SOEs' share of China's gross domestic product (GDP) difficult. There is no definitive published value for SOEs. A 2011 study prepared for the Commission has noted that:

*The Chinese government publishes several statistical measures which can be used to assess the size of state-owned enterprises relative to other forms of ownership according to various dimensions. In many cases, the measures of SOE activity consider only wholly-owned SOEs. That is, these SOE measures do not treat entities in which the state ownership share is less than 100 percent, but greater than 50 percent, as being state-owned. Further, the official estimates often do not track ultimate ownership, thereby ignoring enterprises that are not registered as SOEs or state controlled enterprises even when indirect state ownership is present.*<sup>97</sup>

In other words, in official statistics, the SOE category includes only wholly state-funded firms. This definition excludes shareholding cooperative enterprises, joint-operation enterprises, limited liability corporations, or shareholding corporations whose majority shares are owned by the government, public organizations, or the SOEs themselves.<sup>98</sup> A more encompassing category is "state-owned and state-holding enterprises." This category includes state-owned enterprises plus those firms whose majority shares belong to the government or other SOE.<sup>99</sup> This latter category, also referred to as state-controlled enterprises, can also include firms in which the state- or SOE-owned share is less than 50 percent, as long as the state or SOE has a controlling influence over management and operations.<sup>100</sup>

A 2009 study by the Organization for Economic Cooperation and Development (OECD), using data from 2006, estimated the SOE share of China's gross domestic product (GDP) to be 29.7 percent, implying that the nonstate sector is about 70 percent of the economy.<sup>101</sup> However, this does not mean that the private sector accounts for the remaining 70 percent of China's economy (see box on China's private sector). In his testimony before the Commission, Dr. Scissors suggested that the state sector accounts for 30 to 40 percent of China's economy.<sup>102</sup>

A study prepared for the Commission in 2011, which used various economic measures to estimate the true economic footprint of the Chinese state has concluded that the state's share of the economy exceeds 50 percent:

**How Big Is China's State Sector?—Continued**

*The observable SOE sector under reasonable assumptions accounts for nearly 40 percent of China's economy. Given additional information on the prevalence of SOE ownership in China's capital markets, anecdotal and observed data on the prevalence of SOE ownership among [limited liability corporations] and other ownership categories, the likely SOE role in round-tripped FDI [foreign direct investment], it is reasonable to conclude that by 2009, nearly half of China's economic output could be attributable to either SOEs, [state-holding enterprises], and other types of enterprises controlled by the SOEs. If the output of urban collective enterprises and the government-run proportion of [township and village enterprises] are considered, the broadly defined state sector likely surpasses 50 percent.*<sup>103</sup>

The national or central SOEs can be further categorized. The first major grouping is the SASAC companies, which consist of the companies that provide public goods such as defense, communication, transportation, and utilities; the firms that specialize in natural resources such as oil, minerals, and metals; and the enterprises that concentrate on construction, trade, and other industrial products. The SASAC companies are the largest among these three groupings of national SOEs, despite the fact that the total number of the SASAC companies has fallen significantly over the past few years—from 196 in 2003 (when the SASAC was established) to 121 in 2010—as a result of mergers and acquisitions among themselves intended to enlarge and strengthen several flagship companies. The total assets of the SASAC companies, however, increased from 3 trillion RMB (about \$360 billion) in 2003 to 20 trillion RMB (about \$2.9 trillion) in 2010.<sup>104</sup> (According to the National Bureau of Statistics of China, in 2003 and 2010, China's GDP was \$1.64 trillion and \$5.88 trillion, respectively.)

The second grouping includes the companies that specialize in banking, finance (securities), and insurance under the administration of the China Banking Regulatory Commission (CBRC),<sup>105</sup> the China Securities Regulatory Commission (CSRC), and the China Insurance Regulatory Commission (CIRC),<sup>106</sup> respectively.

The third grouping consists primarily of companies specializing in broadcast media, publications, culture, and entertainment. These are administrated by the various agencies under the State Council and national mass organizations such as the All-China Federation of Trade Unions, which is itself controlled by the Chinese Communist Party (CCP).<sup>107</sup>

Most of these large companies are horizontally integrated and engaged in business activities that include more than one industry. Many of them are concentrated in the industries that are largely controlled by the state, but not exclusively.<sup>108</sup> For example, the SASAC reported in 2010 that about 74 percent of the SASAC-run companies are engaged in the real estate business.

In 2010, of 42 mainland Chinese companies listed in the Fortune Global 500, all but three were state owned.<sup>109</sup> By revenues, three Chinese state-owned companies ranked among the top ten in the

Fortune Global 500, compared to just two American companies.<sup>110</sup> China's own list of the 500 biggest Chinese companies showed that among the top 100 firms traded on the stock exchange, the government controlled the majority of the stock in 75.<sup>111</sup>

### **Chinese SOEs and Government Procurement**

The U.S. government has taken the position that China's SOEs as well as provincial and local government agencies should be considered as part of the Chinese government when procurement decisions are being made. China has responded by insisting that central, provincial, and local SOEs, and provincial and local government agencies should not be considered as part of the government under the WTO's Agreement on Government Procurement (GPA). This would allow China to limit foreign companies' access to the lucrative procurement market. A country's accession to the GPA is subject to negotiation between the applicant and GPA members. China's refusal, so far, to include SOEs has been one of the impediments to China's accession to the 40-member GPA, despite China's promise in 2001 that it would sign the GPA "as soon as possible."

By refusing to consider China's state-owned sector as part of the government, China seeks to wall off a large portion of its economy from the GPA rules that members have agreed to abide by. These rules generally ensure foreign companies equitable access to central and local government procurement for goods and services. By seeking to exclude foreign firms from government and SOE contracts, China puts U.S. manufacturers and service providers at a disadvantage.

China's latest offer to join the GPA was issued in July 2010. While the latest offer made certain improvements, there remained significant shortcomings. For example, while the new offer expanded the coverage of central government entities, it still would not cover provincial or local government agencies or SOEs.<sup>112</sup> In 2009, the Chinese government estimated that its procurement market surpassed \$100 billion, but this is a significant understatement of its true size. For example, the Chinese Ministry of Finance's limited definition of government procurement spending does not include most government infrastructure projects, and procurement by SOEs is not included, even when SOEs perform government functions.<sup>113</sup> Factoring in all of these considerations, the European Union Chamber of Commerce in China estimates the size of China's government procurement market at \$1 trillion.<sup>114</sup>



**Chinese SOEs and Government Procurement—Continued**

The issue of Chinese SOE procurement is further complicated by the fact that projects undertaken by SOEs fall under the China Bidding Law rather than China's government procurement law, notes Gilbert Van Kerckhove, chairman of the Public Procurement Working Group of the European Chamber of Commerce. The China Bidding Law covers construction projects in China, including surveying and prospecting, design, engineering, and supervision of such projects, as well as procurement of major equipment and materials related to the construction of such projects—in other words, all projects, massive in scope and value, that are of significant interest to foreign companies.<sup>115</sup>

Membership in the WTO Agreement on Government Procurement is voluntary; a country can be a WTO member without ever acceding to the agreement. Until China signs the agreement, it is not a WTO violation for China to discriminate against foreign goods or services in its government procurement nor for other WTO members to discriminate against Chinese goods and services in their government purchases.

The Chinese state-owned sector derives important advantages from its government affiliations. China's largest banks are state owned and are required by the central government to make loans to state-owned companies at below market interest rates and, in some cases, to forgive those loans. Dr. Scissors testified at the Commission's March 30, 2011, hearing that every aspect of the financial system is dominated by the state:

*All large financial institutions are state-owned, the People's Bank assigns loan quotas every year, and, within these quotas, lending is directed according to state priorities. Interest rates are also controlled, and last year real borrowing costs were barely above zero. Conveniently, then, loan quotas and bank practices strongly inhibit nonstate borrowing. Securities markets are also dominated by the state. As an illustration, the volume of government bond issuance utterly dwarfs corporate bonds and is growing relentlessly, crowding out private firms.<sup>116</sup>*

According to a 2011 study by the Beijing think tank Unirule Institute of Economics, the profits of state-owned industrial companies had increased nearly fourfold between 2001 and 2009, but their average return on equity was less than 8.2 percent, versus 12.9 percent for larger, nonstate industrial enterprises.<sup>117</sup> As more evidence that SOEs enjoy special advantages over private sector companies, Unirule found that the average annual interest rates charged to SOEs were 1.6 percent from 2001 to 2008, while those charged to private companies during the same period were 5.4 percent.<sup>118</sup> During that period, according to the report, subsidies to SOEs amounted to 6 trillion RMB—more than the profits generated by the companies. A 2009 study on Chinese subsidies prepared for the Commission likewise concluded that state-owned com-



panies are less profitable, after adjusting for the cost of subsidies.<sup>119</sup>

Low interest loans, debt forgiveness, and access to credit are among the methods the government uses to subsidize its business sector.<sup>120</sup> Some of the other subsidies, frequently administered through the provincial and municipal governments, include regulatory barriers to competitor entry, special treatment from regulatory compliance monitors,<sup>121</sup> tax breaks,<sup>122</sup> preference in land allocation,<sup>123</sup> bankruptcy alternatives,<sup>124</sup> and de facto debt forgiveness.<sup>125</sup>

### ***State Control vs. Private Control***

The extent of the state's control of the Chinese economy is difficult to quantify. In addition to the companies held directly by the central government or local government (see above), there are a variety of enterprises whose ownership is unclear. A common mistake is to assume that any entity that is not an SOE belongs to the private sector.<sup>126</sup> In reality, the nonstate sector includes firms with other forms of ownership, including purely private ownership by domestic and foreign actors and mixed ownership entities in which SOEs are part owners and/or controlling owners.<sup>127</sup> There is also a category of companies that, though claiming to be private, are subject to state influence. Such companies are often in new markets with no established SOE leaders and enjoy favorable government policies that support their development while posing obstacles to foreign competition. Examples include Chinese telecoms giant Huawei and such automotive companies as battery maker BYD and vehicle manufacturers Geely and Chery.<sup>128</sup>

#### **A Private Sector with Chinese Characteristics**

China's National Bureau of Statistics defines private enterprises as "economic units invested or controlled (by holding the majority of the shares) by natural persons who hire laborers for profit-making activities."<sup>129</sup> Included in this category are private limited liability corporations, private share-holding corporations, private partnership enterprises, and private sole investment enterprises. Estimating the contribution of the private sector to China's economy is hampered by the same data problems affecting the state-controlled sector. The difficulty stems, too, from the fact that much of China's private sector is informal and exists in the gray area of mom-and-pop shops and subcontracting factories with ambiguous legal standing.

Some estimates are available, however. According to a 2011 China Europe International Business School study, China has 8.4 million private enterprises, accounting for 74 percent of the country's total number of firms.<sup>130</sup> A 2011 study on the Chinese state-owned sector prepared for the Commission had several estimates of the size of China's private sector (from 20 percent to 38.5 percent of the economy), based on various alternative indicators, including gross output value and fixed-asset investment.<sup>131</sup>

### **A Private Sector with Chinese Characteristics—*Continued***

Regardless of the total number of private enterprises, the state-owned or -controlled sector still dwarfs the private sector in size, with the average listed private company generating only about 25 percent of the total net profit of an average listed state-owned firm.<sup>132</sup> The rest of the economy is characterized by mixed and joint ownership arrangements and involves Chinese state-owned and private firms, as well as foreign enterprises. Even the firms that appear to be fully private, however, still are frequently subject to state interference.

In the mid-2000s, after more than 30 years of opening up the economy to private enterprise, the Chinese government reversed the policy, and the state began to reassert its economic control. In December 2006, the SASAC and China's State Council jointly announced the "Guiding Opinion on Promoting the Adjustment of State-Owned Capital and the Reorganization of State-Owned Enterprises." The guiding opinion identifies seven "strategic industries" in which the state must maintain "absolute control through dominant state-owned enterprises" and five "heavyweight" industries in which the state will remain heavily involved (see the box below).<sup>133</sup>

#### **Industries that the Chinese Government Has Identified as "Strategic" and "Heavyweight"**

##### **Strategic Industries:**

- 1) Armaments
- 2) Power Generation and Distribution
- 3) Oil and Petrochemicals
- 4) Telecommunications
- 5) Coal
- 6) Civil Aviation
- 7) Shipping

##### **Heavyweight Industries:**

- 1) Machinery
- 2) Automobiles
- 3) Information Technology
- 4) Construction
- 5) Iron, Steel, and Nonferrous Metals

This list "omits state dominance in banking, insurance, and the rest of finance, media, tobacco, and railways," which had long been owned by the government in China.<sup>134</sup>

Although the state's share of the economy has fallen since the start of the reforms, the government has kept these key industries for SOEs. The turn away from privatization was codified in 2011 by Wu Bangguo, chairman and CCP secretary of the Standing Committee of the National People's Congress, when he listed privatization with other intolerable developments:

*We have made a solemn declaration that we will not employ a system of multiple parties holding office in rotation; diversify our guiding thought; separate executive, legislative and judicial powers; use a bicameral or federal system; or carry out privatization [emphasis added].*<sup>135</sup>

Foreign companies are not allowed to participate in the markets reserved for strategic industries and are heavily regulated in those designated for the heavyweight industries. "The requirement that the state predominate in so many sectors is meant to sharply confine competition, so that SOEs operate within markets but they op-

erate primarily within state-controlled markets,” said Dr. Scissors at a Commission hearing. “This regulatory protection is the most powerful subsidy many SOEs receive.”<sup>136</sup>

Under the “grasp the big, let go of the small” policy, scores of state companies have listed their shares on foreign stock exchanges, while the Chinese government has kept about 70 percent to 80 percent of the equity in its own hands (see Addendum I for a list of the central Chinese SOEs). Many foreign observers “often mistook these sales of minority stakes to be privatization,” because they assumed that the listing covered the entire ownership of the company. But the ultimate control remained in the hands of the state.<sup>137</sup> In addition, many companies in China whose stocks are traded on China’s exchanges are also SOEs in which the government keeps a majority stake. By offering only a limited portion of ownership of an SOE on domestic exchanges, the Chinese government is able to raise capital and still maintain control of the firm. As Dr. Scissors testified before the Commission:

*Neither specification of share-holders nor sale of stock by itself does anything to alter state control. The large majority of firms listed on domestic stock markets are specifically designated as state-owned. The sale of small minority stakes on foreign exchanges could be construed as recasting mainstays such as CNPC [China National Petroleum Corporation] (through its list vehicle PetroChina), China Mobile, and Chinalco as nonstate entities of some form. However, they are still centrally directed SOEs, as explicitly indicated by the Chinese government.*<sup>138</sup>

Moreover, the biggest private companies often get their financing from state banks and coordinate their investments with the government.<sup>139</sup>

Some analysts now believe that many of the early Chinese market liberalization reforms are being reversed. Zhiwu Chen of Yale University said during a presentation at The Brookings Institution that SOEs are crowding out private firms from various industries.<sup>140</sup> “The problem is that the reforms of the first 20 years, from 1978 to the end of the ’90s, actually did not touch on the power of the government,” said Yao Yang, a Peking University professor who heads the China Center for Economic Research. “So after the other reforms were finished, you actually find the government is expanding, because there is no check and balance on its power.”<sup>141</sup>

#### **Political Power of the State-owned Company Sector**

While provincial chiefs, cabinet ministers, and military leaders constitute the bulk of the Chinese Communist Party, SOEs are an increasingly significant cultivating ground for party leadership. There are currently 17 prominent political leaders who have held management positions in large SOEs, and 27 prominent business leaders currently serve on the 17th CCP Central Committee or the Central Commission of Discipline Inspection.<sup>142</sup>

### Political Power of the State-owned Company Sector—*Continued*

The most recent manifestation of this trend came with the announcement, in March 2011, that China Petroleum and Chemical Corporation (Sinopec) Chairman Su Shulin was set to become the next governor of Fujian Province. The *Financial Times* noted that “China’s oil companies have been a breeding ground for state leaders, including current security chief Zhou Yongkang, formerly at CNPC. It is not uncommon for the heads of major Chinese state-owned companies to move in and out of government, and the role of energy companies underscores the role that China’s state-owned oil companies play in national security.”<sup>143</sup>

According to Cheng Li, senior fellow at The Brookings Institution, while the proportion of China’s large enterprises in the national leadership is still relatively small, the rise of state entrepreneurs may broaden the “channel of political recruitment” in China and become a new source of the CCP leadership.<sup>144</sup>

### U.S. Investment in China

Over the past three decades, China has been the largest recipient among developing countries of FDI,\* with a cumulative \$854 billion (stock)† by 2008. In just 2010 alone, the amount of FDI flowing into China jumped to \$105.7 billion, up from \$90 billion in 2009.<sup>145</sup> “In the modern history of economic development, no other country has ever benefitted, and continues to benefit, from FDI as much as China,” notes a study by Yuqing Xing of the National Graduate Institute for Policy Studies in Tokyo.<sup>146</sup> The study estimates that “foreign-invested firms have been the major contributor to [China’s] drastic export expansion” and have accounted for 40 percent of China’s GDP since 1978.<sup>147</sup> “It is the technologies, product designs, brand names and distribution networks of multinational enterprises that have removed hurdles to made-in-China products, helped these products enter the world market, and strengthened the competitiveness of Chinese exports,” notes Dr. Xing’s study.<sup>148</sup>

\* 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>.

† 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 [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). [http://www.unctad.org/en/docs/wir2010meth\\_en.pdf](http://www.unctad.org/en/docs/wir2010meth_en.pdf).

The largest FDI to mainland China flows through or from Hong Kong, with \$67.5 billion in 2010, according to official Chinese statistics. This represents more than half of the total FDI inflows in 2010. The Ministry of Commerce of the People's Republic of China reported that in 2010 the United States came in fifth among nations investing directly in China, with \$4.1 billion, which represents only 3.8 percent of total inflows.<sup>149</sup> In recent years, tax haven economies such as the Virgin Islands and the Cayman Islands have become more and more prominent as sources of FDI into China, although they are not believed to be the source of the actual investment. The large proportion of FDI flowing into China from Hong Kong and other tax havens can be attributed to round-tripping, the practice of taking money out of China and then "investing" it back as new investment in order to qualify for special tax breaks and other incentives reserved for foreign investment.<sup>150</sup>

**Table 1: U.S. FDI to China, 2000–2010**  
(U.S. \$ million)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Flow</b>	1,817	1,912	875	1,273	4,499	1,955	4,226	5,243	15,971	-7,853	\$9,565
<b>Stock</b>	11,140	12,081	10,570	11,261	17,616	19,016	26,459	29,710	52,521	49,403	60,452

Source: U.S. Bureau of Economic Analysis, *U.S. Direct Investment Abroad: Balance of Payments and Direct Investment Position Data* (various years) (Washington, DC: U.S. Department of Commerce).

Official U.S. statistics show that U.S. cumulative FDI in China was \$60.5 billion in 2010 (stock), a 22 percent increase from 2009 (see table 1, above).<sup>151</sup> This represents only 1.7 percent of the total U.S. FDI abroad. Of the U.S. FDI in China, the bulk was in manufacturing, with 48.8 percent in 2010 (for a complete breakdown of U.S. FDI in China by Industry, see Addendum II). As with other statistics, the official U.S. and Chinese figures on U.S. investment in China do not match; the situation is similar for official statistics on Chinese FDI in the United States (see below). According to the U.S. Commerce Department's Bureau of Economic Analysis, U.S. majority-owned nonbank affiliates in China employed 774,000 workers in China in 2008 (latest figures available).<sup>152</sup> A significant number of people are also employed by joint ventures formed by U.S. companies with Chinese partners, though those figures are difficult to track.

The relative amount that Americans contributed to the Chinese pool of direct investment is not immediately clear from the raw statistics. The United States was an early investor in China, so its investment, still registered as book value, has had more time to appreciate in value. In addition, U.S. companies often reinvest profits in productive capacity in China, which does not show up in the statistics as FDI. The comparatively small size of U.S. investment flows to China can also be explained, in part, by the routing of investment by unnamed investors to China through Hong Kong and various tax havens (e.g., the British Virgin Islands, the Cayman Islands, etc.). These nations consistently appear among the top ten investors in China, but they are not the original source of the funds.

Some of the reinvestment of the profits of U.S.-based multinational companies in China is likely done to avoid paying U.S.

corporate income taxes, which come due when a U.S.-based multinational corporation repatriates the profits to the United States. U.S. companies invested abroad face a 35 percent tax rate, one of the world's highest, should they decide to repatriate profits to America. Keeping the money abroad allows a U.S.-based company to avoid the higher U.S. corporate rates. If these funds are reinvested in plant and equipment in China, they face lower rates and, often, additional tax breaks that the Chinese government offers to encourage foreign investment in China. Foreign investment in technology in particular receives special benefits. Such benefits include exemptions from taxes if qualified foreign technology is transferred to China, and a 150 percent tax deduction for foreigners making qualified research and development expenditures in China.<sup>153</sup>

#### **Chinese Government Tax Incentives for Foreign Investment in China**

Prior to 2008, profits of foreign investors in China were taxed at a 15 percent rate, while domestic investors faced a statutory income tax rate of 33 percent.<sup>154</sup> This disparity was eliminated with the implementation of China's 2008 Enterprise Income Tax Law, which saw tax rates unified at 25 percent in 2008. However, existing foreign investors were "grandfathered" in and will continue to receive preferential tax rates until 2012.<sup>155</sup> Many other incentives remain:

- Income from cultivating basic crops and agricultural products (including grain, vegetables, and natural Chinese medicines), animal husbandry, and certain fishery operations is exempt from the Enterprise Income Tax. Income from planting flowers, tea, other beverage crops and spice crops, seawater fish farming, and fresh water fish farming enjoys a 50 percent reduction in the Enterprise Income Tax rate.
- Preferential tax treatment for income earned by enterprises from transfers of technology is extended to foreign-invested enterprises. Specifically, the first 5 million RMB of income earned in a taxable year from transferring ownership of technology is exempted from the Enterprise Income Tax, and any excess amount is allowed to be taxed at one-half the normal 25 percent rate. The preferential tax rate of 15 percent applicable to eligible "high and new technology" enterprises is retained, but only if they receive priority support from the state and possess substantial or key ownership of core proprietary intellectual property rights.
- Enterprises are entitled to an extra income tax deduction of up to 100 percent of the current year's wages paid to disabled employees or other employees whom the state encourages enterprises to hire.



**Chinese Government Tax Incentives for Foreign Investment in China—Continued**

- Additional preferential tax treatment is granted to venture capital enterprises investing in medium- and small-sized high-technology enterprises (a deduction of 70 percent of the total investment is allowed against an enterprise's annual taxable income in the year after its initial two-year holding period) and to enterprises that utilize resources in an environmentally friendly and health-conscious way.

The pre-2008 system providing a host of preferential tax rates for qualified foreign-invested enterprises located in special zones and regions is abolished, with limited exceptions. One special dispensation is that enterprises located in more remote areas where the state has encouraged development (the Western Development Region) seemingly will continue to enjoy concessionary tax rates.<sup>156</sup>

According to the U.S. Trade Representative's (USTR) *2010 Report to Congress on China's WTO Compliance*, certain aspects of China's taxation system have raised national treatment concerns. China has used its taxation system to discriminate against imports in certain sectors (although the issue of discriminatory value-added tax (VAT) rates applied to imports of integrated circuits was resolved in 2004, others, like VAT policies to benefit domestic Chinese producers of fertilizer, remain).<sup>157</sup> U.S. industries continue to express concerns over the unfair operation of China's VAT system, which includes irregular VAT rebates for Chinese producers in favored sectors.

Foreign-invested enterprises (both joint ventures and wholly owned subsidiaries) were responsible for 55 percent of China's exports and 68 percent of its trade surplus in 2010.<sup>158</sup> Bureau of Economic Analysis estimates show that U.S. investment in China was responsible for 0.6 percentage points of the 9.6 percent increase in Chinese GDP in 2008.<sup>159</sup> Commission witness K.C. Fung estimated that in 2009, the rate of return on U.S. FDI abroad to all destinations was 9.7 percent, while the rate of return on investment for U.S. multinationals in China was 13.5 percent.<sup>160</sup>

***China's Investment Regime for Foreign Firms***

U.S. trade officials and business associations have long urged China to liberalize its investment restrictions, but Chinese officials have resisted. While some Chinese industries have become open to foreign investment and sales, huge swathes of the economy, such as construction and telecommunications, are reserved for Chinese firms, both state owned and private. Various government interventions, like "indigenous innovation" policies and catalogues guiding government and state-owned company procurement officers to domestically produced goods and services are used to discriminate against foreign competitors (for more on indigenous innovation, see chap. 1, sec. 3, of this Report). The American Chamber of Commerce in China's *2011 Business Climate Survey* complained of "regulatory obstacles that give local firms a competitive advantage."<sup>161</sup>



Addressing complaints about China's backtracking on promises to make its economy friendlier to foreign companies, Gary Locke, then U.S. Department of Commerce secretary and currently U.S. ambassador to China, said that U.S. firms are frequently shut out of the Chinese market or forced to share technologies to gain access.<sup>162</sup> Ambassador Locke said the "fundamental problem boils down to the distance between the promises of China's government and action."<sup>163</sup>

Over the last several years, the Chinese government has created new policies and government bodies to guide foreign investment and safeguard the domestic economy and national security in the face of FDI inflows:

*The 2011 Catalogue Guiding Foreign Investment in Industry:* The draft *2011 Catalogue Guiding Foreign Investment in Industry* identifies sectors and industries of the Chinese economy in which foreign investment is encouraged, restricted, or prohibited.<sup>164</sup> An update of the catalogue published in 2007, the *2011 Catalogue* is focused on encouraging foreign investment in industries related to China's goal of developing cutting-edge industries with higher-value-added ones, including sophisticated manufacturing, new technologies, and clean energy.<sup>165</sup> Book, newspaper publishing, audiovisual products, and "Internet culture businesses" (excluding music) are among those that will remain off-limits to foreign investment.<sup>166</sup> The U.S. Chamber of Commerce and the American Chamber of Commerce in China called China's use of catalogues to guide foreign investment "at odds with the ... principles of open and market-based economies."<sup>167</sup>

*National Security Review Process:* The State Council promulgated the *Notice of the General Office of the State Council on Establishment of a Security Review System for the Merger and Acquisition of Domestic Enterprises by Foreign Investors* (Notice) in February 2011. The following month, China's Ministry of Commerce issued interim provisions for implementing the notice.<sup>168</sup> The new foreign-investment security review regime sets up an interministerial panel under the State Council. The National Development and Reform Commission and the Ministry of Commerce are assigned lead roles in coordinating the ministries and agencies that would review proposed transactions.<sup>169</sup> Transactions in the following sectors or areas could be subject to review if they lead to foreign investors obtaining "actual control" of a domestic enterprise: military and military support enterprises; enterprises near key and/or sensitive military facilities; other entities associated with national defense and security; and domestic enterprises in sectors that "relate to national security," which are listed as "important" agriculture products, energy and resources, infrastructure, and transportation services, as well as key technologies and major equipment manufacturing industries.<sup>170</sup> A final rule published in August 2011 by China's Ministry of Commerce clarified certain aspects of the security review system but still utilized a broad definition of national security and provided little guidance in assessing whether a transaction could be subject to a review.<sup>171</sup>

The United States and China currently are negotiating a bilateral investment treaty with the goal of expanding investment opportunities. Supporters of the treaty hope it will improve the in-

vestment climate for U.S. firms in China by strengthening legal protections and dispute resolution procedures and by obtaining a commitment from the Chinese government to treat U.S. investors the same as Chinese investors. However, some U.S. groups have expressed reservations concerning a U.S.-China bilateral investment treaty, arguing that it will encourage U.S. firms to relocate to China.<sup>172</sup> Some also have raised questions about the treatment of the trade, investment, and competition issues posed by state capitalism. (For more information on the debate surrounding the U.S.-China bilateral investment treaty, see the report on “Evaluating a Potential U.S.-China Bilateral Investment Treaty,” prepared for the Commission by the Economist Intelligence Unit.<sup>173</sup>)

### **Chinese Investment in the United States**

Chinese investment in the United States deviates from the patterns in other countries where China concentrates more heavily on securing natural resources. In the United States, Chinese investments have focused on manufacturing and technology and are also notable for their emphasis on brand acquisition.<sup>174</sup> China does not have to spend decades building up brand names, because it can acquire existing well-known brands through government-funded firms. For example, Geely Automotive, one of China’s biggest automotive companies, acquired Ford Motor’s Volvo unit in 2010 in a \$1.8 billion deal.<sup>175</sup> A deal in 2009 involved Beijing Automotive Industry Holding Co, China’s fifth-biggest automaker, acquiring the rights to three vehicle platforms from General Motor’s Saab unit.<sup>176</sup> As in the natural resource sector (attempted acquisitions of Unocal and Rio Tinto are good examples), concerns over the involvement of the Chinese government can lead to failed transactions: In February 2011, the Committee on Foreign Investment in the United States (CFIUS) ruled that Huawei Technologies would have to divest its investment in 3Leaf Systems because of national security concerns about Huawei’s ties to the Chinese government and military and the security implications of integrating their equipment into critical U.S. telecommunications infrastructure.<sup>177</sup>

Chinese government policies encouraging outward foreign direct investment are far more recent than those encouraging foreign investment in China. In its Tenth Five-Year Plan (2001–2005), the Chinese government in 2001 officially adopted a policy encouraging Chinese companies to invest abroad.<sup>178</sup> This “going out” policy has started to show results, although outward investment still pales in comparison to inward investment. According to the latest available Chinese government statistics, outward investment in 2010 amounted to \$68.8 billion (an increase of 21.7 percent year on year), with the total accumulation at that time at \$317.2 billion.<sup>179</sup> Chinese companies have made major acquisitions of mining and other natural resource companies in Australia, Canada, South America, and Africa, while Chinese brands like Haier (home appliances), Huawei (telecommunications), and Lenovo (personal computers) are seeking to tap global markets, in part through direct investment abroad.<sup>180</sup>

**Table 2: China's Foreign Direct Investment in the United States, 2003–2010  
(U.S. \$ million)**

	2003	2004	2005	2006	2007	2008	2009	2010
<b>Flow</b>	65.05	119.93	231.82	198.34	195.73	462.03	908.74	1308.29
<b>Stock</b>	502.32	665.20	822.68	1,237.87	1,880.53	2,389.90	3,338.42	4,873.99

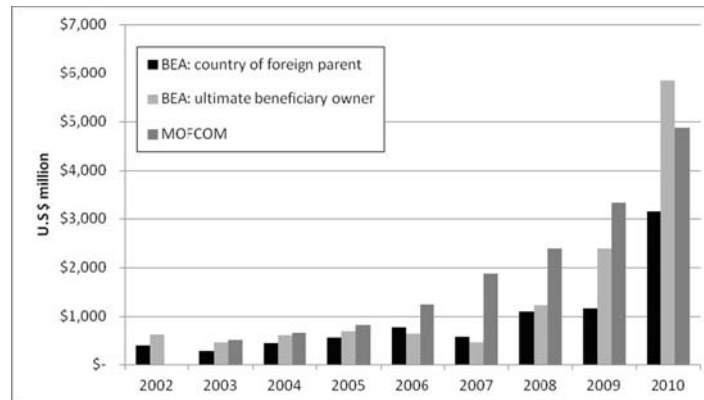
Source: Ministry of Commerce of the People's Republic of China, *2010 Statistical Bulletin of China's Outward Foreign Direct Investment* (Beijing, China: 2011).

Chinese overall nonbond investment has been very limited in the United States to date. China's Ministry of Commerce estimated that in 2010, cumulative Chinese FDI in the United States was \$4.9 billion (see table 2, above). According to the U.S. Bureau of Economic Analysis, the cumulative level of Chinese FDI in the United States through the end of 2010 was \$3.2 billion on a historical-cost (or book value) basis. According to the bureau, in 2009, China ranked as the 34th largest source of cumulative FDI in the United States. By comparison, China's investments in U.S. Treasury securities were an estimated \$1.2 trillion by July 2011, making China the biggest foreign holder.<sup>181</sup>

Several analysts note that China often uses offshore locations (such as Hong Kong or tax havens) to invest in other countries. China also uses London exchanges to buy U.S. Treasuries, in which case the investment is registered as being from the United Kingdom. The Bureau of Economic Analysis also reports cumulative FDI data according to the country of ultimate beneficial owner, which puts Chinese FDI in the United States through 2010 at \$5.9 billion (see figure 1, below).\*

\*The Bureau of Economic Analysis tracks geographic distribution of FDI in two forms: country of direct foreign parent, which attributes each investment to the direct parent company, and country of ultimate beneficiary owner, which tracks the investment to the country of the ultimate owner. The latter method generally is considered more accurate, as a large share of FDI transactions today are conducted through special-purpose vehicles in third countries. In this case, the \$5.9 billion figure represents the Chinese FDI in the United States in 2010 on the ultimate beneficiary owner basis. On the country of foreign parent basis, the cumulative Chinese FDI in the United States was \$3.2 billion by the end of 2010. For further information, see Daniel H. Rosen and Thilo Hanemann, *An American Open Door? Maximizing the Benefits of Chinese Foreign Direct Investment* (New York, NY: Asia Society Special Report, May 2011), pp. 81–88. For data, see U.S. Bureau of Economic Analysis, "Historical-Cost Foreign Direct Investment Position in the United States and Income Without Current-Cost Adjustment, by Country of Foreign-Parent-Group Member and of the Ultimate Beneficial Owner, 2002–2010" (Washington, DC: U.S. Department of Commerce). <http://www.bea.gov/international/di1fdibal.htm>.

**Figure 1: Chinese FDI Stock in the United States, 2002–2010**  
(U.S. \$ million; various official measures)



Source: U.S. Bureau of Economic Analysis; and Ministry of Commerce of the People's Republic of China [MOFCOM], *2010 Statistical Bulletin of China's Outward Foreign Direct Investment* (Beijing, China: 2011).

Despite China's substantial purchases of U.S. Treasury securities, China's role as a direct investor in the United States remains marginal. China's FDI stock of \$5.9 billion in 2010 (using the ultimate beneficiary owner figures) accounted for a mere 0.25 percent of total foreign investment in the United States (it is also lower than investment stock of other developing countries such as Brazil and India).<sup>182</sup>

There are indications that outward foreign direct investment from China is on the increase. Stock of Chinese FDI in the United States grew from \$1.2 billion in 2008 to \$5.9 billion (on the ultimate beneficial owner basis) in 2010, an increase of almost 400 percent.<sup>183</sup>

### Chinese Foreign Exchange Reserves

Over the last several decades, China has accumulated an enormous stockpile of foreign exchange reserves, around \$3.2 trillion by September 2011. To date, the vast majority of these reserves, managed by the State Administration for Foreign Exchange, has been invested in U.S. Treasury securities. However, China has shown interest in diversifying its reserves by moving some of its foreign exchange out of U.S. debt securities and into higher-yield investments.

### **Chinese Foreign Exchange Reserves—Continued**

China's official holdings of U.S. Treasury securities amounted to around \$1.2 trillion by July 2011<sup>184</sup> and far eclipse China's cumulative global outward FDI, which was around \$317.2 billion in 2010 (the latest figures available). For the purpose of comparison, Chinese holdings of U.S. Treasury securities at the time were \$1.1 trillion. China's official holdings of U.S. Treasuries are likely underreported, because China purchases many of its U.S. bonds through third parties, and those securities are registered to the location of purchase rather than the eventual owner.

To manage and diversify China's foreign exchange reserves beyond the traditional investment in U.S. Treasuries, in 2007 the Chinese government established the China Investment Corporation (CIC).<sup>185</sup> Although CIC endured some criticism over its performance after investing all of its initial \$200 billion (some of which resulted in paper losses during the global financial crisis), Chinese Vice Premier Li Keqiang endorsed CIC's role in diversifying China's foreign exchange reserves.<sup>186</sup> According to the latest financial reports available, CIC had total assets of \$332 billion at the end of 2009 and is one of the biggest sovereign wealth funds in the world.

In addition to China's FDI in the United States and its holdings in U.S. Treasury securities, China (as of June 2010) held \$127 billion in U.S. equities, up from \$3 billion in June 2005. It also held \$360 billion in U.S. agency securities, principally those of Fannie Mae and Freddie Mac.<sup>187</sup>

### ***The Role of SOEs in China's Outward FDI***

SOEs in the energy, raw materials, and metals sectors have been major participants in the "going-out" strategy.<sup>188</sup> In other sectors, non-SOEs, such as Haier and Lenovo, have also been active in the international mergers and acquisitions market.<sup>189</sup> Dr. Scissors of The Heritage Foundation says that SOE involvement in the "going-out" strategy is "utterly dominant," noting that four state entities "alone account for half of all Chinese investment" (see table 3, below).<sup>190</sup>

**Table 3: Top Global Investments by Chinese SOEs<sup>191</sup>**

<b>Entity</b>	<b>Global Investment (U.S. \$ billion)</b>
CNPC	\$34.48
Sinopec	32.21
China Investment Corporation (CIC)	25.67
Chinalco (Aluminum Corporation of China)	20.62
<b>Subtotal</b>	<b>112.98</b>
<b>Chinese total FDI since 2005</b>	<b>\$215.9</b>

According to China's Ministry of Commerce, in 2009, SOEs provided about \$38.2 billion (67.6 percent) of China's cumulative FDI

abroad.<sup>192</sup> This is attributable to the head start SOEs had in getting approval to invest abroad in the past and the dominance of SOEs in natural resource acquisition deals.<sup>193</sup> These natural resource investors, however, are less involved in China's U.S. investment. Daniel Rosen and Thilo Hanemann of the Rhodium Group concluded in their research that between 2003 and 2010, 74 percent of the number of investment deals originated from private firms (which the authors define as having 80 percent or greater nongovernment ownership).<sup>194</sup> However, in terms of total deal value, the picture is reversed: SOEs account for 65 percent of the total.<sup>195</sup>

### ***National Security Issues Related to Chinese Investment in the United States***

The close ties between the Chinese government and Chinese corporations are relevant to Chinese companies' attempts to provide critical infrastructure to the U.S. government or to acquire U.S. firms that either perform work for the U.S. government or defense contractors that have intellectual property that would pose a national security risk if obtained by a foreign government. "The real concern—and it has to be case by case—is that many of these companies are so closely intertwined with the government of China that it is hard to see where the company stops and the country begins, and vice versa," Democratic Senator Jack Reed (D-RI) has noted.<sup>196</sup> Investigating the national security implications of mergers and acquisitions falls to CFIUS. Among other issues, CFIUS considers two elements when evaluating whether an investment warrants an investigation: (1) whether there is state control of the acquiring foreign company, and (2) whether the transaction could affect U.S. national security.<sup>197</sup>

For China, the question of state control can be particularly complicated, because the government's role is not always straightforward or disclosed. Despite economic reforms and moves toward privatization, much of the Chinese economy remains under the ownership or control of various parts of the Chinese government. In addition to outright ownership or direct control, the government or the Communist Party can also exert control by deciding the composition of corporate boards and the corporation's management team.<sup>198</sup> To some analysts, these questions are beside the point: Mr. Rosen told the Commission at its March 30 hearing that all Chinese companies were under the influence of Chinese government "to a greater extent than firms are here."<sup>199</sup>

In fact, the United States is relatively open to FDI, although some high-profile Chinese acquisition attempts have raised objections that have led to some investments being blocked or dropped. Most notable were the proposed investments by China National Offshore Oil Corporation (CNOOC) and two deals by Huawei (a bid for 3COM and for 3Leaf).

Despite some failures, recent investments, especially greenfield investments (new ventures), have been made without significant opposition. In many cases, such deals have benefitted from state and local government investment incentives.<sup>200</sup> For example, Tianjin Pipe is currently building a \$1 billion steel pipe mill near Corpus Christi, Texas, benefitting from a variety of state and local



incentives, including employment-based incentives, tax abatement, job training, and infrastructure.<sup>201</sup> A Suntech Power solar panel assembly plant was approved to operate in Arizona, which was attractive to the company because of the state's tax incentives to encourage renewables manufacturing in the state.<sup>202</sup> Late last year, state-owned China Huaneng Group Corp. agreed to buy a 50 percent stake in Massachusetts-based electric utility InterGen for \$1.2 billion in cash. CNOOC came back to the United States in recent months as well, with joint venture investments in Chesapeake Energy Corp. shale projects.<sup>203</sup>

In response to CFIUS blocking some high-profile deals by Chinese firms, Chinese officials have called U.S. investment policies "protectionist." In his testimony before the Commission, Mr. Rosen criticized what he views as a U.S. loss of control over the narrative concerning American openness to Chinese investment:

*Two years in a row of more than 100 percent year-on-year growth in Chinese investment, large Chinese investments across 16 U.S. industries, the story ought to be, 'my God, the United States is open to Chinese investment; we don't screw around with this the way some other countries do.' Instead, the narrative in China and here is why is the United States refusing to open up to Chinese investors, and what are we going to do to guarantee our friends in Beijing that we're going to play fair? It's just absurd, I think, that we've allowed the narrative to be lost in the way we have.*<sup>204</sup>

### **Implications for the United States**

During the 2008 financial crisis, China's leaders reaffirmed their approach to economic management in which private capitalism plays only a supporting role.<sup>205</sup> "The socialist system's advantages," Prime Minister Wen Jiabao said in a March 2010 address, "enable us to make decisions efficiently, organize effectively, and concentrate resources to accomplish large undertakings."<sup>206</sup>

This approach by one of America's largest trading partners carries negative consequences for U.S. economic interests. Subsidies in China can easily overcome the actual and comparative advantages of their trading partners. A country following free market principles can lose companies, product lines, and entire industries if its private sector economy is forced to compete with a foreign government that can sustain continued financial losses. That is why the WTO discourages and, in some cases, prohibits subsidies to exporting industries. Moreover, notification of subsidies is required under the WTO rules, but since its WTO accession in 2001, China has done so only once, in 2006, and the list was judged by China's trade partners to be incomplete. In 2011, the Office of the U.S. Trade Representative submitted a notification to the WTO identifying nearly 200 Chinese subsidy programs, which China failed to notify.<sup>207</sup>

An assessment of Chinese subsidies prepared for the Commission concluded that "eliminating Chinese subsidies would increase U.S. output, exports, worker earnings and economic welfare." The study further noted that "the stagnant level of equipment stock of U.S.



manufacturers, rising U.S. capital expenditures in China and the rapid expansion of imports from China suggest that Chinese subsidies have been diverting equipment investments from the United States to China, or otherwise limiting U.S. manufacturing investments ... reversing this pattern would have a beneficial effect on U.S. manufacturers that compete with Chinese firms, and on the overall U.S. economy.”<sup>208</sup>

SOEs have distinct advantages when competing internationally and within their home market. In addition to several varieties of subsidies that SOEs enjoy, Chinese companies benefit from government regulations that aid them to the detriment of foreign competition. Dr. Scissors testified on March 30 that “in most sectors, there is no market of 1.3 billion. Instead, there is what is left after the SOEs are handed the bulk. This applies, of course, to American companies looking to serve the Chinese market.”<sup>209</sup>

The competitive challenge that SOEs pose for U.S. companies may soon intensify. The U.S.-China Business Council’s 2010 report on company priorities named competition with SOEs as one of the top three concerns for its members in China.<sup>210</sup> The Obama Administration has also raised the issue of the effect on fair competition of Chinese government support provided to its state-owned enterprises. At the May 2011 Strategic and Economic Dialogue talks in Washington, the U.S. Treasury Department noted that:

*China and the United States discussed the principle of equivalent treatment for state-owned, controlled, or invested enterprises (SOEs), private enterprises, and foreign enterprises with respect to access to credit, tax treatment, regulatory applicability, and access to factors of production. The two countries also discussed the desirability of ensuring that SOEs seek a commercial rate of return and steadily increase their dividend payout.*<sup>211</sup>

However, there were no formal commitments on the part of the Chinese government to stop or decrease subsidies to the state-owned or -controlled sector.

On the investment side, opinions vary on the net benefits of U.S. investment in China and Chinese investment in the United States. Many U.S. analysts contend that greater Chinese FDI in the United States, especially in greenfield projects that manufacture products or provide services in the United States, will create new jobs for U.S. workers.<sup>212</sup> At a discussion hosted by the Woodrow Wilson Center, Daniel Rosen and Derek Scissors agreed that Chinese FDI is a positive for the U.S. economy but differed sharply in their opinions about the appropriate U.S. policy response to these investment inflows. While Mr. Rosen discouraged strengthening policy impediments to Chinese FDI and lauded traditional U.S. economic openness, Dr. Scissors characterized U.S. market access as a powerful bargaining chip for encouraging reform within Chinese economic policy.<sup>213</sup>

Some critics of China’s current FDI policies and practices contend that they are largely focused on acquiring and transferring technology and know-how to Chinese firms favored by the Chinese government for development but do little to help the U.S. economy. The U.S. Chamber of Commerce said China’s “investment protec-

tionism” serves as the “lynchpin” of its efforts to wring technology and other concessions from U.S. firms “in exchange for access [to] the Chinese market.”<sup>214</sup> (For more information on technology transfers, see chap. 1, sec. 4, of this Report.)

Lack of transparency about Chinese firms’ connections to the central government, through financial support or decision-making, is another major problem. Many U.S. policymakers are troubled by the possibility that Chinese SOEs’ efforts to acquire U.S. company assets could be part of the Chinese central government’s strategy to develop global Chinese firms that may one day threaten the economic viability of U.S. firms.<sup>215</sup>

### Conclusions

- China’s privatization reforms during the past two decades appear in some cases to have been reversed, with a renewed use of industrial policies aimed at creating SOEs that dominate important portions of the economy, especially in the industrial sectors, reserved for the state’s control.
- The Chinese government promotes the state-owned sector with a variety of industrial policy tools, including a wide range of direct and indirect subsidies, preferential access to capital, forced technology transfer from foreign firms, and domestic procurement requirements, all intended to favor SOEs over foreign competitors.
- The value and scope of U.S.-China bilateral investment flows have expanded significantly in the past ten years. However, U.S. direct investment in China is more than 12 times greater than Chinese direct investment in the United States. Official U.S. statistics show that U.S. cumulative FDI in China was \$60.5 billion in 2010. The Chinese Ministry of Commerce estimated that in 2010, cumulative Chinese FDI in the United States was \$4.9 billion.
- The Chinese government guides FDI into those sectors it wishes to see grow and develop with the help of foreign technology and capital. Foreign investors are frequently forced into joint ventures or other technology-sharing arrangements, such as setting up research and development facilities, in exchange for access to China’s market. Meanwhile, large swathes of the Chinese economy are closed to foreign investors. China’s investment policies are part of the government’s plan to promote the development of key industries in China through access to foreign technology and capital.
- Chinese FDI in the United States is a relatively recent phenomenon and remains very small compared to the U.S. investment in China, but there is great potential for growth. China has stated a desire to diversify its holdings of foreign exchange, estimated at \$3.2 trillion in mid-2011, the majority of which is invested in dollar-denominated debt securities. As with other statistics, there are discrepancies between official U.S. and Chinese statistics on bilateral investment.
- 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 investigates the national security implications of mergers and acquisitions by foreign investors of U.S. assets.

- In areas where there are no national security considerations, Chinese FDI has the potential to create jobs and economic growth.
- China has recently introduced a national security investment review mechanism similar to the Committee on Foreign Investment in the United States, although there are concerns among foreign companies that the Chinese government may use the mechanism to derail investment by foreigners in those companies and sectors it wants to remain under government control.

**Addendum I: SASAC Companies, Large State-owned Banks, and Insurance Companies (2011)**<sup>216</sup>

	<b>Company name</b>	<b>Abbreviation</b>
1	China National Nuclear Corporation	CNNC
2	China Nuclear Engineering & Construction Corporation	CNECC
3	China Aerospace Science & Technology Corporation	CASC
4	China Aerospace Science & Industry Corporation	CASIC
5	Aviation Industry Corporation of China	AVIC
6	China State Shipbuilding Corporation	CSSC
7	China Shipbuilding Industry Corporation	CSIC
8	China North Industries Group Corporation	CNIGC
9	China South Industries Group Corporation	CSGC
10	China Electronics Technology Group Corporation	CETC
11	China National Petroleum Corporation	CNPC
12	China Petrochemical Corporation	Sinopec
13	China National Offshore Oil Corporation	CNOOC
14	State Grid Corporation of China	SGCC
15	China Southern Power Grid Company, Limited	CSG
16	China Huaneng Group	CHNG
17	China Datang Corporation	CDT
18	China Huadian Corporation	CHD
19	China Guodian Corporation	CGDC
20	China Power Investment Corporation	CPI
21	China Three Gorges (Project) Corporation	CTGPC
22	Shenhua Group Corporation Limited	Shenhua
23	China Telecommunications Corporation	China Telecom
24	China United Network Communications Group Company	China Unicom
25	China Mobile Group	China Mobile
26	China Electronics Corporation	CEC
27	China FAW Group Corporation	FAW
28	Dongfeng Motor Corporation	DFMC
29	China First Heavy Industries	CFHI
30	China National Erzhong Group Corporation	Erzhong

**Addendum I: SASAC Companies, Large State-owned Banks, and Insurance Companies (2011)—Continued**

	<b>Company name</b>	<b>Abbreviation</b>
31	Harbin Electric Corporation	HPEC
32	Dongfang Electric Corporation	DEC
33	Anshan Iron and Steel Group Corporation	Ansteel
34	Baosteel Group Corporation	Baosteel
35	Wuhan Iron and Steel (Group) Corporation	WISCO
36	Aluminum Corporation of China	Chalco
37	China Ocean Shipping (Group) Company	COSCO
38	China Shipping Group	China Shipping
39	China National Aviation Holding Company	AirChina
40	China Eastern Aviation Holding Company	China Eastern
41	China Southern Air Holding Company	China Southern
42	Sinochem Group	Sinochem
43	COFCO Corporation	COFCO
44	China Minmetals Corporation	Minmetals
45	China General Technology (Group) Holding, Limited	Genertec
46	China State Construction Engineering Corp.	CSCEC
47	China Grain Reserves Corporation	Sinograin
48	State Development & Investment Corporation	SDIC
49	China Merchants Group	CMHK
50	China Resources (Holdings) Company, Limited	CRC
51	The China Travel Service (HK) Group Corporation	HKCTS
52	State Nuclear Power Technology Corporation	SNPTC
53	Commercial Aircraft Corporation of China, Limited	COMAC
54	China Energy Conservation Investment Corporation	CECIC
55	China Gaoxin Investment Group Corporation	Gaoxin Group
56	China International Engineering Consulting Corporation	CIECC
57	Zhongnan Commercial (Group) Company, Limited	Zhongnan
58	China Huafu Trade & Development Group Corporation	HFJT
59	China Chengtong Group	CCT

**Addendum I: SASAC Companies, Large State-owned Banks, and Insurance Companies (2011)—Continued**

	<b>Company name</b>	<b>Abbreviation</b>
60	China Huaxing Group	Huaxing
61	China National Coal Group Corporation	ChinaCoal
62	China Coal Technology & Engineering Group Corporation	CCTEG
63	China National Machinery Industry Corporation	SINOMACH
64	China Academy of Machinery Science & Technology	CAM
65	Sinosteel Corporation	Sinosteel
66	China Metallurgical Group Corporation	MCC
67	China Iron & Steel Research Institute Group	CISRI
68	China National Chemical Corporation	ChemChina
69	China National Chemical Engineering Group Corp.	CNCEC
70	Sinolight Corporation	Sinolight
71	China National Arts & Crafts (Group) Corporation	CNACGC
72	China National Salt Industry Corporation	CNSIC
73	China Hengtian Group Company, Limited	CHTGC
74	China National Materials Group Corporation Limited	SINOMA
75	China National Building Materials Group Corp.	CNBM
76	China Nonferrous Metal Mining (Group) Company	CNMC
79	China International Intellectech Corporation	CIIC
80	China Academy of Building Research	CABR
81	China CNR Corporation Limited	CNR
82	China CSR Corporation Limited	CSR
83	China Railway Signal & Communication Corporation	CRSC
84	China Railway Group Limited	China Railway
85	China Railway Construction Corporation Limited	CRCC
86	China Communications Construction Company Limited	CCCC
87	China Potevio Company, Limited	China Potevio
88	Datang Telecom Technology & Industry Group	Datang
89	China National Agricultural Development Group Company	CNADC
90	Chinatex Corporation	Chinatex
91	China National Foreign Trade Transportation Corp.	SINOTRANS

**Addendum I: SASAC Companies, Large State-owned Banks, and Insurance Companies (2011)—Continued**

	<b>Company name</b>	<b>Abbreviation</b>
92	China National Silk Import & Export Corporation	Chinasilk
93	China Forestry Group Corporation	CFGC
94	China National Pharmaceutical Group Corporation	SINOPHARM
95	CITS Group Corporation	CITS
96	China Poly Group Corporation	POLY
97	Zhuhai Zhen Rong Company	Zhzrgs
98	China Architecture Design & Research Group	CAG
99	China Metallurgical Geology Bureau	CMGB
100	China National Administration of Coal Geology	CNACG
101	Xinxing Cathay International Group Company, Limited	XXPGroup
102	China Travelsky Holding Company	Travelsky
103	China Aviation Fuel Group Corporation	CNAF
104	China National Aviation Supplies Holding Company	CASC
105	China Power Engineering Consulting Group Corporation	CPECC
106	HydroChina Corporation	HYDROCHINA
107	Sinohydro Corporation	Sinohydro
108	China National Gold Group Corporation	CNGC
109	China National Cotton Reserves Corporation	CNCRC
110	China Printing (Group) Corporation	CPGC
111	China Lucky Film Corporation	Luckyfilm
112	China Guangdong Nuclear Power Holding Corporation	CGNPC
113	China Hualu Group Company, Limited	Hualu
114	Alcatel-Lucent Shanghai Bell Company Limited	Alcatel-sbell
115	IRICO Group Corporation	IRICO
116	FiberHome Technologies	WRI
117	OCT Enterprises Company	OTC
118	Nam Kwong (group) Company, Limited	Namkwong
119	China XD Group	XD Company
120	China Gezhouba Group Corporation	CGGC
121	China Railway Materials Commercial Corporation	CRM



**Addendum I: SASAC Companies, Large State-owned Banks, and Insurance Companies (2011)—Continued**

	<b>Company name</b>	<b>Abbreviation</b>
122	Industrial & Commercial Bank of China	ICBC
123	China Life Insurance Group	China Life
124	China Construction Bank	CCB
125	Bank of China	BOC
126	Agriculture Bank of China	ABC
127	China Taiping Insurance Group Company	China Taiping
128	Bank of Communications	BOCOM
129	China Development Bank	CDB
130	People's Insurance Company of China	PICC

Notes and sources: The first 121 companies are listed in the order provided by SASAC. Data derived from <http://www.sasac.gov.cn/n1180/n1226/n2425/index.html>; <http://www.ceda.org.cn/china-500/>; and individual companies' websites.

**Addendum II: U.S. Direct Investment Position in China on a Historical-cost Basis by Industry, 2000–2010**  
(U.S. \$ million)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total	11,140	12,081	10,570	11,261	17,616	19,016	26,459	29,710	52,521	49,403	60,452
Mining	1,404	1,791	1,179	1,263	1,966	2,039	1,958	1,772	3,022	3,648	3,595
Utilities	583	487	540	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Total Manufacturing	7,076	7,727	5,554	5,499	9,008	9,346	14,759	18,461	22,584	22,618	29,477
• Food	286	329	425	528	388	402	401	544	2,659	2,874	3,290
• Chemicals	1,122	1,062	1,132	1,338	1,811	2,335	3,308	4,402	5,266	4,987	6,459
• Primary and Fabricated Metals	157	139	151	115	286	432	471	588	672	691	1,252
• Machinery	218	203	335	298	564	386	796	1,269	1,447	1,186	1,258
• Computers and Electronic Products	3,500	3,993	1,275	721	1,719	1,689	5,325	6,965	6,416	5,745	7,963
• Electrical equipment, appliances and components	458	625	521	376	510	531	433	487	556	493	576
• Transportation Equipment	652	650	802	1,209	1,879	1,501	1,665	1,738	2,007	2,736	4,150
• Other Manufacturing	n.s.	n.s.	n.s.	915	1,850	2,071	2,361	2,468	3,561	3,904	4,530
Wholesale Trade	378	576	1,144	1,538	1,705	2,147	3,318	2,015	2,781	2,899	4,018
Information	79	112	218	544	604	801	357	546	427	459	789
Depository Institutions	64	151	319	413	563	757	1,095	850	(D)	10,856	13,413
Finance (except depository institutions) and insurance	43	-30	(D)	-49	1,299	1,480	1,661	1,798	1,877	1,834	1,898
Professional, scientific, and technical services	245	121	406	171	597	523	1,159	227	359	605	890
Holding Companies (nonbank)	n.s.	n.s.	n.s.	1,063	1,452	1,159	1,220	1,644	3,099	3,882	3,445
Other Industries	1,267	1,146	(D)	819	422	763	932	2,397	(D)	2,602	2,928

Source: Bureau of Economic Analysis, *U.S. Direct Investment Abroad (USDIA): Operations of U.S. Parent Companies and Their Foreign Affiliates* (Washington, DC: U.S. Department of Commerce (Issues 2000–2010), <http://www.bea.gov/international/di/usdial.htm>).

Legend:

n.s.—Not shown. Data may not be shown for several reasons:

1. The data appear on another line in this table.
2. The data are not shown in this table but may be available in detailed country- or industry-level tables in this interactive system or in other Bureau of Economic Analysis published tables on direct investment.
3. The data are not available, do not apply, or are not defined.

(D)—Indicates that the data in the cell have been suppressed to avoid disclosure of data of individual companies.

## **SECTION 3: INDIGENOUS INNOVATION AND INTELLECTUAL PROPERTY RIGHTS**

### **Introduction**

China's program for encouraging "indigenous innovation" has its origin in the central government's decades-old policy of favoring domestic goods and services over imports. A new element was added to the policy with the publication in 2009 of government procurement catalogues at the national, provincial, and local levels. The catalogues were written to exclude the services and products of foreign-based corporations, including those with foreign affiliates operating in China that have not transferred their technology. The move represented an escalation in China's longstanding efforts to substitute domestic goods and services for imports.

The Commission held hearings in Washington on May 4 and June 15 to examine China's indigenous innovation policy and the likelihood that it will require the transfer of critical technology to Chinese companies. In addition, the Commission examined China's intellectual property protections related to business software during the May 4 hearing. This section will trace the development of China's indigenous innovation policy in the context of China's industrial policy and its potential effect on the economy of the United States. This section will also examine China's failure to enforce intellectual property protections for business software.

U.S. and European-based companies raised two main objections to the new procurement catalogues. First, foreign-based companies as well as their affiliates operating within China would be excluded from sales to governments in China, since only domestic companies or those holding registered Chinese patents were eligible to be included in the procurement catalogues. Second, any attempt to qualify a foreign affiliate for the official procurement catalogue would likely require foreign companies to transfer or reveal sensitive and proprietary technology to Chinese companies.

The stakes for foreign companies hoping to sell to all levels of government in China are substantial. The indigenous innovation policy involves a number of separate requirements including patent and trademark filing and registration regulations that may lead to involuntary releases of proprietary information. The European Chamber of Commerce estimated in April 2011 that the discriminatory policy would cover more than \$1 trillion in goods and services purchases on an annual basis.<sup>217</sup> The international business community criticized the proposed indigenous innovation regulations by requesting that the U.S. government oppose the policy during future bilateral negotiations with China. In December 2009, the heads of 34 U.S., European, and Japanese companies and business associations wrote to Chinese leaders to protest the catalogues. In

January 2010, the heads of 19 U.S. business associations wrote to the Obama Administration to warn that the new Chinese policy posed “an immediate danger to U.S. companies.”

The government in Beijing subsequently responded by promising to modify the program and pledged to revoke the requirement that government purchases be made exclusively from the procurement catalogues. Despite such assurances by President Hu Jintao during his trip to Washington in January 2011, there are few signs that China intends to rescind its overall indigenous innovation policy and only inconclusive signs that the use of procurement catalogues will be abandoned.

The theft of intellectual property in China\* is a longstanding problem despite efforts by the Chinese central government over more than a decade to pass laws and regulations prohibiting such theft. In fact, Chinese officials are able to point to many Chinese statutes protecting copyrights, trademarks, and patents. And yet the problem persists because enforcement is ineffective. Administrative fines are low, and the threshold for criminal prosecution is high, according to U.S. government complaints. This allows Chinese pirates and counterfeiters to stay in business and pay fines out of their cash flow.

The cost to the United States of intellectual property violations in China is considerable. Based on a survey of U.S. companies operating in China, the U.S. International Trade Commission estimates that employment in the United States would increase by a range of 923,000 to 2.1 million jobs if China were to adopt an intellectual property system equivalent to that of the United States.<sup>218</sup>

### **Development of China’s Indigenous Innovation Policy**

Chinese leaders dating back to Deng Xiaoping have explicitly sought to bolster China’s high-technology industries by obtaining foreign technology and by favoring the products of China’s fledgling high-tech industries over foreign technology imports whenever possible. In 2002, for example, President Jiang Zemin proclaimed a Government Procurement Law limiting government purchases to domestically made goods.<sup>219</sup> China made a promise during the negotiations to allow China’s admission to the World Trade Organization (WTO) in 2001 to join the WTO’s Agreement on Government Procurement (GPA) “as soon as possible.” That agreement pledges the 41 GPA signatories to refrain from discriminating against foreign imports in government procurement. China still has not done so. (For more information on China’s refusal to join the WTO’s government procurement code, please see the Commission’s 2010 Annual Report, chap. 1, sec. 3.)

China’s current indigenous innovation policy was unveiled officially in the government’s *National Medium- and Long-Term Plan for the Development of Science and Technology (2006–2020)*.<sup>220</sup> That plan, known as the MLP and released in February 2006, directs government officials to “formulate policies that encourage independent innovation and restrict unscrupulous and redundant imports.”<sup>221</sup> Ma Kai, minister of the National Development and Re-

\* Counterfeiting refers to the violation of a trademark, while piracy is the violation of a copyright. Most seizures of such contraband at U.S. borders are for trademark infringements.

form Commission (NDRC), explained the need for the policy this way:

*China's competitive edge is to a great extent based on cheap labor, cheap water, land, resources, and expensive environmental pollution. [This] will be weakened with the rising price of raw materials and enhancement of environmental protection. Therefore, we must enhance independent innovation capability vigorously. ... [W]e will promote development by relying on enhancing independent innovation capability, and as a national strategy, shift economic growth from relying on the import of capital materials to relying on scientific and technological advancement and human resources."*<sup>222</sup>

### **The Size of China's Public Procurement Market**

China's Ministry of Finance estimates the annual total of government contracts at \$103 billion at the government's official exchange rate.<sup>223</sup> But this estimate does not include purchases by China's state-owned enterprises, many of which are the largest in their industrial sector.

Also excluded from this total are almost all large-scale infrastructure and public utility projects.<sup>224</sup> These huge projects were estimated by the office of the United States Trade Representative (USTR) to represent at least one-half of China's total government procurement market.<sup>225</sup> These include such public projects as the Three Gorges Dam; the Bird's Nest, Water Cube, and other Olympic venues; and China's high-speed railroad network.

In addition, the official finance ministry figures exclude provincial and municipal government purchases. Once all those additional contracts are added in, the total is far larger. The European Chamber of Commerce included purchases by central and local governments as well as state-owned enterprises and public infrastructure projects in its estimate of \$1 trillion annually. If the European Chamber's figures are correct, China's indigenous innovation policy and official procurement catalogues would wall off 17 percent of China's \$5.9 trillion economy from foreign participation.<sup>226</sup>

The indigenous innovation plan specifically envisions reducing China's reliance on products containing foreign technology to 30 percent by 2020 from an estimated 60 percent in 2006.<sup>227</sup> To do so, the plan calls for "enhancing original innovation through 'co-innovation' and 're-innovation' based on the assimilation of imported technologies."<sup>228</sup> In 2007, the Ministry of Finance issued two notices providing implementation regulations for the indigenous innovation initiatives outlined in the MLP. The first, *Administrative Measures on Government Procurement of Imported Products*, established procedures and rules that severely limited the procurement of imported products. The second, *Administrative Measures for the Government to Initially and Selectively Purchase Indigenous Inno-*

vation Projects,\* promoted the development of domestic companies not currently competitive in the marketplace. This was to be accomplished during the evaluation process for government procurement through preferential treatment to “accredited indigenous innovation products.”<sup>229</sup>

The “chief aim” of the MLP and its subsequent regulations and guidelines “was to foster the development, commercialization, and procurement of Chinese products and technologies,” said John Neuffer, vice president for global policy at the Information Technology Industry Council.<sup>230</sup> “More precisely, it was developed to give a leg up to domestic producers by compelling government agencies to adopt rules and regulations favoring products that use Chinese-developed ideas and technologies,” Mr. Neuffer told the Commission.

Various agencies of the central government continued to promulgate rules and regulations to implement the MLP by discriminating against non-Chinese products. In November 2009, Beijing issued the *Notice of the Launch of National Indigenous Innovation Product Accreditation Work for 2009* (Circular 618).† Circular 618 defined an “indigenous innovation product” as one with intellectual property fully owned by a Chinese company and a trademark initially registered within China. At this point, the intent of the indigenous innovation goal became clear: Chinese government agencies at all levels were to shun even those goods manufactured in China by joint ventures with foreign affiliates and to demand that original patents be filed first in China, a particular requirement of Chinese patent law. Because Chinese patent law is less protective of proprietary information contained in patent applications, foreign affiliates risk having their intellectual property compromised. In addition, the Chinese government in 2010 expanded the conditions under which the government can require a company to license its patent to other companies.<sup>231</sup> For example, Chinese patent law allows the government to grant a compulsory license on a patent involving semiconductor technology if the government rules that expanding production to other producers would be “in the public interest.”<sup>232</sup>

In December 2009, the central government produced a list of 240 types of industrial equipment in 18 categories that the government wished to support and offered domestic producers a range of tax incentives and government subsidies as well as priority status in indigenous innovation product catalogues.<sup>233</sup>

U.S., European, Canadian, and Japanese business groups complained in a December 2009 letter to the heads of four relevant Chinese ministries that “the very restrictive and discriminatory program criteria would make it virtually impossible for any non-Chinese supplier to participate—even those non-Chinese companies that have made substantial and long-term investments in China, employ Chinese citizens, and pay taxes to the Chinese govern-

\* Along with these broader policies, the Finance Ministry issued a number of other measures in 2006 and 2007 detailing the accreditation for indigenous innovation products as well as administrative measures on budgeting, contract requirements, and evaluation of the government procurement of indigenous innovation products.

† For a more detailed discussion of Circular 618, see U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2009), pp. 47–48.



ment.”<sup>234</sup> In response, the Chinese government revised Circular 618 in April 2010 to remove the requirement that trademarks and brands must first be registered in China and that the intellectual property be owned entirely by the Chinese company.<sup>235</sup>

Despite the revisions to Circular 618 in 2010, many local policies on government procurement and indigenous innovation product accreditation still contain references to intellectual property requirements and the substitution of domestic goods for imports.\* Of the 31 provincial and municipal accreditation rules and guidelines for indigenous innovation product certification identified in a February 2011 report by the U.S.-China Business Council, all 31 contained intellectual property qualifications, and 23 contained references to requirements for import substitution.<sup>236</sup>

The apparent discrepancy between the central government’s promised revisions and the continued publication of discriminatory local product catalogues indicates a struggle between the two levels of government that is familiar to close observers of China. An alternative interpretation is that Beijing uses the excuse that it cannot control localities as a justification to do business as usual. Another theory ascribes Beijing’s lax enforcement to a deliberate decision to enforce only those laws and regulations that benefit China at the expense of foreigners. For example, because revisions to Circular 618 refer only to the proposed national product catalogue, there is no guarantee that such reforms will apply at a provincial or local level. Furthermore, circulars issued by the government “do not require that its content be implemented,” according to Kenneth Lieberthal of The Brookings Institution.<sup>237</sup>

Provincial and municipal governments continue to grant strong preferential treatment to domestic firms in their indigenous innovation product catalogues. In a 2011 article published on the Ministry of Finance government procurement website, an unnamed source within a provincial-level government procurement office explained that, while the establishment of a national indigenous innovation catalogue is unlikely, local government catalogues exist regardless.<sup>238</sup> The composition of these catalogues often reflects the strong barriers to entry for foreign-invested enterprises seeking government procurement contracts at the provincial and municipal level.

The U.S.-China Business Council report identified 61 separate indigenous innovation catalogues released by 22 provincial- and municipal-level governments by mid-November 2010.<sup>239</sup> Among the 59 products listed in Beijing’s government procurement catalogue through November 2010, only one is produced by a foreign company.<sup>240</sup> Nanjing’s draft catalogue, published in June 2010, is comprised of 42 products, not one of which is produced by a foreign-invested enterprise.<sup>241</sup>

The persistence of local catalogues indicates that the promised reforms of the central government are not reflected in the provinces. Without strong support at the provincial and municipal levels for delinking government procurement from indigenous innova-

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\*“IP [intellectual property] Qualification” refers to the inclusion of certain intellectual property conditions such as origin or country of ownership. “Import substitution” refers to policies that encourage the development of domestic products that can replace imports.



tion catalogs, foreign affiliates of U.S. and European companies will continue to face discrimination, according to U.S. business groups.<sup>242</sup>

### **Policies Favoring Chinese Enterprises**

Although China's government procurement policies have garnered the greatest attention from the international media and business community, Chinese indigenous innovation strategy is multifaceted, incorporating numerous other laws and regulations that promote domestic industry.

#### **Tax Incentives**

China has implemented a number of tax laws that favor innovative domestic industries. In September 2006, China's Tax Bureau issued the *Circular on Preferential Tax Policies for Innovation Enterprises*, which offers "innovation enterprises" a two-year exemption from the enterprise income tax.<sup>243</sup> In January 2008, the National People's Congress issued the *Enterprise Income Tax Law of the People's Republic of China*, Article 28 of which states, "Enterprise income tax for State-encouraged high and new technology enterprises shall be levied at a reduced rate of 15 percent" rather than the standard 25 percent top corporate tax rate.<sup>244, 245</sup>

#### **Subsidies and Loans**

The Chinese government has long provided extensive subsidies to favored industries and companies, both private and state owned. The direct subsidies include low-interest-rate loans and loan forgiveness, discounted or free land, electricity, fuel, water, and sewerage. Indirect subsidies can include lax enforcement of environmental standards and workers' rights laws. The Chinese government in particular provides subsidies to a large number of designated "strategic industries" and included \$216 billion in subsidies for its green technology sector as part of its economic stimulus package.<sup>246</sup>

At the May 5, 2011, hearing before the Commission, Thea Lee of the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO) characterized Chinese industrial policy as "targeting favored sectors and technologies through below-market loans and subsidies."<sup>247</sup> (For more on subsidies, see the Commission's *2009 Annual Report to Congress*, chap. 1, sec. 3, "China's Industrial Policy and its Impact on U.S. Companies, Workers, and the American Economy.")

#### **Patent Regulations**

The development of the Chinese patent system follows the goals specified in the 15-year MLP and the 12th Five-Year Plan (2011-2015). Provincial and municipal governments provide technical assistance for preparing patent applications as well as subsidies for patent application fees.<sup>248</sup> The Chinese government has encouraged state-owned enterprises (SOEs) to file numerous patents.<sup>249</sup> These measures have already made China's State Intellectual Property Office "the 3rd largest patent office in the world in terms of the number of invention patent applications received per year" and put it on track to become the largest patent office in the world by 2010.<sup>250</sup>

### **Policies Favoring Chinese Enterprises—Continued**

Skeptics have noted that many of these patents represent only small adjustments or changes from previous patents and are unlikely to foster substantial innovation. In the May 5, 2011, hearing before the Commission, Alan Wm. Wolff described many of these patents as “utility model patents, just having incremental technology change, requiring and getting no review.” In fact, even these seemingly mundane patents serve a particular purpose. According to Dieter Ernst, senior fellow at the East-West Center, “Chinese firms regularly file ‘utility patents’ on known products in order to prevent their original foreign developers from selling these products within China.”<sup>251</sup> Commissioners have also heard from American businesses in Beijing that Chinese companies can use these utility patents as reprisals for litigation in other areas. Chinese holders of utility patents can file a patent infringement case against a foreign competitor who has filed an infringement lawsuit outside of China.<sup>252</sup> The Chinese holder might expect to win in Chinese courts even if the case has no merit.

#### **Technical Standards**

China has sought to impose Chinese technical standards on foreign competitors even in cases where widely accepted technical standards already exist. For example, China’s government created a third-generation mobile telecommunications standard, the Time Division Synchronous Code Division Multiple Access to compete with the U.S. CDMA (Code Division Multiple Access) and the European GSM (Global System for Multiple Communications) standards. The Chinese standard “requires firms to incur large costs to obtain access to the Chinese market as well as reduce the royalties that would otherwise accrue to U.S. firms and shift some royalties to Chinese firms,” according to Karen Laney, acting director of operations at the U.S. International Trade Commission.<sup>253</sup>

More recently, the Chinese government developed regulations to require testing and certification to Chinese standards for information and computer technology sold to Chinese government agencies. “These regulations require sellers to provide Chinese regulators with complete details of the inner workings—including information security functions such as encryption codes—of computer products in 13 product categories,” said Ms. Laney.<sup>254</sup>

### **High-level Dialogues Address the Indigenous Innovation Dispute**

Complaints by the U.S. business community and the Obama Administration to Chinese officials over the indigenous innovation policy and its link to official procurement catalogues placed the issue on the agenda for three high-level meetings during the past year. In December 2010, the Joint Commission on Commerce and Trade concluded with a promise by China to submit a revised proposal to join the WTO’s Agreement on Government Procurement. Previous Chinese proposals were rejected by other members of the GPA be-

cause Beijing had sought to exclude subcentral governments and SOEs even when the companies were performing government functions. At the conclusion of the talks in Washington, China agreed to provide equal treatment to companies operating in China and to refrain from measures to make the location or ownership of intellectual property a condition for eligibility for government procurement.<sup>255</sup>

USTR Ron Kirk, a co-chair of the 2010 U.S.-China Joint Commission on Commerce and Trade, concluded:

*China's announcement that it will not discriminate in government procurement decisions based on where the intellectual property component of the products was developed is a valuable outcome for America's innovators and entrepreneurs who can continue to create American jobs and selling to the Chinese Government without concern that they will be unfairly blocked from the market.*<sup>256</sup>

One month later, during the January summit between President Barack Obama and President Hu Jintao in Washington, the Chinese leader made further commitments to opening the government procurement market to foreign firms. In a U.S.-China Joint Statement, China agreed to “not link its innovation policies to the provision of government procurement preferences.”<sup>257</sup> At a joint press conference, President Obama said:

*I did also stress to President Hu that there has to be a level playing field for American companies competing in China that trade has to be fair. So I welcomed his commitment that American companies will not be discriminated against when they compete for Chinese government procurement contracts.*<sup>258</sup>

The third round of the Strategic and Economic Dialogue in May 2011 strengthened these promises with a further commitment that “China will revise Article 9 of the Draft Regulations Implementing the Government Procurement Law\* to eliminate the requirement to link indigenous innovation products to the provision of government procurement preferences.”<sup>259</sup> However, the U.S. Information Technology Office reports that it “continues to find current provincial and municipal policies that still require domestic intellectual property for government procurement preferences or otherwise give preferences to domestic products and the thematic underpinnings of China’s indigenous innovation drive remains strong in official rhetoric.”<sup>260</sup>

### **Chinese Policy Adjustments Following the High-level Dialogues**

In recent months, central authorities have announced steps to break the link between indigenous innovation preferences and government procurement. On June 23, China’s Ministry of Finance rescinded a 2007 series of measures concerning the evaluation, budg-

\* Article 9 states, “Government procurement agencies should strictly enforce the government procurement product catalogue and carry out all relevant policies and regulations.”

eting, and contract management of government procurement of indigenous innovation projects.\* The revoked measures included:

- Price credits of 5 to 10 percent for indigenous products during the evaluation process.
- Extra credits in the evaluation of the price point and technology of indigenous products.
- Priority given to indigenous suppliers unless their products exceed the quoted price for nonaccredited goods by 5 to 10 percent.
- The transfer of core technology as a requirement for foreign suppliers entering government procurement contracts.<sup>261</sup>

On July 4, 2011, the Chinese Ministry of Finance, the Ministry of Science and Technology, and the NDRC announced the repeal of the 2006 measure *Trial Measures for the Administration of the Accreditation of National Indigenous Innovation Products*.<sup>262</sup> The policy established specific certification criteria for the accreditation of indigenous innovation products, including the Chinese ownership of core intellectual property and trademarks.<sup>263</sup>

U.S. and European Union (EU) business organizations applauded these repeals yet remained careful not to overstate their significance. In a June 29 press release, the U.S.-China Business Council noted that while “the measures represent only a portion of the full list of regulations that tie indigenous innovation and government procurement, the elimination of these measures is an important step towards fulfilling pledges made by PRC [People’s Republic of China] leaders during President Hu Jintao’s January 2011 visit to the United States and the May 2011 Strategic and Economic Dialogue.”<sup>264</sup> Paul Ranjard, chair of the European Chamber’s Committee on Intellectual Property Rights, noted that central policy shifts do not always precipitate change at the provincial and municipal levels but said the repeal was “especially important because it is addressed to all levels of government departments, including provincial and municipal levels.”<sup>265</sup>

In some cases, however, local governments responded immediately to the central policy repeals with corresponding adjustments to local policies or practices. A report summarizing the Jiangsu Province semiannual conference on the government procurement of indigenous products held in Nanjing on July 17 emphasized the provincial government’s commitment to incorporate national-level policy revisions into the province’s procurement protocol.<sup>266</sup> The vice minister of the Jiangsu Ministry of Finance, the conference’s most distinguished participant, called on all members of government in attendance to review the implementation of provincial procurement policies in light of the central policy revision.<sup>267</sup>

Some of China’s large municipalities also were quick to step in line with central policy adjustments. Following the repeals of the central-level policies, both Shanghai and Xiamen municipal authorities effectively suspended accreditation programs for indige-

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\*The three measures are *Evaluation Measures on Indigenous Innovation Products for Government Procurement*, *Administrative Measures on Budgeting for Government Procurement Contracts for Indigenous Innovation Products*, and *Administrative Measures on Government Procurement Contracts for Indigenous Innovation Products*.

nous innovation products. The Shanghai Finance Bureau announced that on July 1 it would cease implementing the 2009 *Shanghai Municipality Operating Procedures on the Government Procurement of Indigenous Innovation Products*.<sup>268</sup> While the repeal of this law is significant, the Shanghai municipal government did not announce plans to repeal a more recent law dictating product accreditation, the 2010 *Shanghai Municipality Measures for the Administration of the Accreditation of Indigenous Innovation Products*. Among the accreditation requirements of the 2010 measure, products must hold indigenous intellectual property rights developed by Chinese companies.

### **Will the Promises Be Kept?**

U.S. politicians, businessmen, and academics have expressed doubt that China's central and subcentral governments will comply with commitments made during high-level dialogues. Following President Hu's visit, then Commerce Secretary Gary Locke noted that when he talked to U.S. business leaders, "they continue to voice significant concerns; the fundamental problem often boils down to the distance between the promise of China's government and its actions."<sup>269</sup>

Months later, in a speech before the Asia Society in May 2011, Mr. Locke noted a history of noncompliance by China: "The Chinese pledges—at the S&ED [Strategic and Economic Dialogue] two years ago and at last year's JCCT [Joint Commission on Commerce and Trade]—that they would lift prohibitions in the revised catalogue on many industries in which U.S. firms are world leaders and have much to offer the Chinese economy. . . . Well, the new foreign investment catalogue falls far short of that promise."<sup>270</sup>

At the Commission's March 30 hearing, Theodore Moran, who holds the Marcus Wallenberg Chair in International Business and Finance at Georgetown University's School of Foreign Service, also expressed skepticism: If China "heads in that direction, I think that would be spectacular," he said. "But there are so many interests trying to force technology transfer that I'll believe it when I see it."<sup>271</sup> Mr. Ernst warned at the Commission's June 15 hearing that China may instead follow a well-established pattern of promising much but delivering little:

*A detailed analysis of recent developments of China's innovation policies finds a fairly consistent pattern of China's response to foreign complaints. In round one PRC [People's Republic of China] government regulations start out with quite demanding requirements that exceed established international norms. This typically gives rise to a wave of criticism from foreign enterprises and business organizations, but also from Chinese companies that have established a significant position in the international market and that have begun to accumulate a reasonably broad portfolio of intellectual property rights. In response to this criticism, round two then leads to some adjustments in PRC government regulations that combine a selective relaxation of contested requirements with persistent ambiguity.*<sup>272</sup>



Despite these promising examples, many local governments may still favor domestic companies for government procurement contracts. Without a strict requirement that local government procurement policy reflect changes made at the central level, provincial and municipal governments can favor domestic products, partially nullifying the expected improvements to the procurement environment for foreign firms in China. An article on the Finance Ministry's website reported that many representatives of provincial-level government procurement offices believe repealing central government policies that discriminate against foreign firms will not change the propensity of local governments to favor domestic goods.<sup>273</sup> For example, only two days after the last central policy repeal went into effect, the Shenzhen Science, Industry, Trade and Information Technology Committee officially called for support of indigenous innovation policies. Specifically, it called on reporting enterprises—those applying for product accreditation—to adhere to the *Shenzhen Municipality Measures for the Administration of the Accreditation of Indigenous Innovation Products*, Shenzhen's municipal counterpart to the already repealed national regulation.

Commerce Secretary Locke, who is now the U.S. ambassador to the People's Republic of China, anticipated the difficulty of implementing agreements made with China's central government only. Ambassador Locke outlined five key steps for the China's promises to become reality:

1. Chinese officials pledge to resolve the issue of market access
2. The agreement is codified into binding laws or regulations
3. The law is strictly implemented by the central government
4. The law is strictly implemented at local and provincial levels
5. The law or regulation becomes standard practice in China<sup>274</sup>

Speaking of China's current progress, then Secretary Locke remarked, "When it comes to indigenous innovation, intellectual property, or a variety of other market-access issues, an enduring frustration is that in too many cases only the earliest steps are taken, but not all five." Recent developments support this claim. While the Chinese government did make promises (step 1) and has begun efforts to reflect those promises in policy decisions (step 2), China continues to struggle to translate policy changes into institutional reform. The central policy repeals, although a political victory for the United States and Europe, will do very little for U.S. and European businesses without strict implementation by the central government and equally firm commitments from local authorities.

#### **China in Search of Western Technology: A Case Study**

While China has refrained since 2001 from explicitly requiring foreign companies operating in China to share technology and trade secrets, the Chinese government still seeks to obtain critical information on cutting-edge technology by other means. One example involves the Chevrolet Volt, a plug-in hybrid that employs three important technologies sought by the Chinese government: electric motors; complex electronic controls; and power storage devices, including batteries and fuel cells.

**China in Search of Western Technology: A Case Study—  
*Continued***

The Chinese government has refused to extend to General Motors (GM) a \$19,300 per car subsidy that is available to Chinese competitors unless GM provides its core technology to a Chinese car company. Thus far, GM has refused, even though the Chinese subsidy is nearly half the sales price of the Volt in the United States, \$41,000.<sup>275</sup> The car has not yet been priced in the Chinese market. Lacking the subsidy, GM would likely find it difficult to sell the Volt against its Chinese competitor, BYD, which manufactures two versions of a plug-in electric car. Complicating GM's dilemma is the fact that the Chinese market for auto sales is now the world's largest and the fastest growing, and GM is the largest foreign manufacturer in China. Said GM Chief Executive Officer Dan Akerson: "There are technology risks, there are relationship risks. I am sure China will do what's best for China. ... But you ignore China at your own peril."<sup>276</sup>

Meanwhile, GM has an eye on its major Detroit rival, the Ford Motor Company, which has announced plans to build four new plants in China and roll out 15 new vehicles there by the end of 2015. That move would double its capacity in China. Ford has not yet decided how much of its technology it would be willing to share in order to qualify for the subsidies.<sup>277</sup> The Chinese government is thus encouraging Ford and GM to compete on the basis of which company will surrender the most technology to Chinese rivals.

**Intellectual Property Infringement in China: The Business Software Case**

All members of the World Trade Organization, including China, are required to provide minimum levels of protection to the intellectual property of fellow WTO members. An agreement within the WTO specifically ensures that copyright protections extend to computer programs, which are protected as literary works under the amended Berne Convention of 1886.<sup>278</sup> The People's Republic of China agreed to enforce these widely recognized rules and regulations when it joined the WTO in 2001.

By nearly all accounts, however, the People's Republic of China is one of the largest sources in the world of counterfeit and pirated goods. China in 2011 remains first on the "priority watch list," a designation shared with 11 other countries, which are among the world's worst enforcers of intellectual property rights, according to the Office of the U.S. Trade Representative.<sup>279</sup> The Chinese government itself estimates that "counterfeits constitute between 15 percent and 20 percent of all products made in China and are equivalent to about 8 percent of China's GDP [gross domestic product]."<sup>280</sup>

China is by far the dominant source of counterfeit and pirated goods that U.S. customs agents seize at ports and airports around the United States. According to U.S. Customs and Border Protection, Chinese-sourced goods accounted for 53 percent of the sei-



zures at U.S. ports of entry in 2010, up from 6 percent in 1995. The second-largest number of seizures originated from Hong Kong.<sup>281</sup> It is likely that many of the illicit goods from Hong Kong actually originated on the mainland; in all, more than three-quarters of the seizures of infringing goods were from mainland China and Hong Kong in 2010.<sup>282</sup>

### **The Importance of Intellectual Property to the U.S. Economy**

Intellectual property plays a key role in creating high-wage jobs and fueling new economic growth. Much of the U.S. economy consists of intellectual assets such as patents, copyrights, and trademarks. These assets compose an estimated 76 percent of the *Fortune 100*'s total market capitalization and approximately 80 percent of the value of the Standard & Poor's 500.<sup>283</sup> Within the United States, intellectual property-intensive companies generated nearly \$7.7 trillion in gross output in 2008, totaling a third of U.S. total gross output.<sup>284</sup>

Intellectual property-intensive industries are particularly critical in the tradable goods\* sector and accounted for 60 percent of all U.S. exports in 2007, a total of \$910 billion.<sup>285</sup> Intellectual property-intensive industries also provide high wages. Between 2000 and 2007, the salary of all workers in intellectual property-intensive industries was on average about 60 percent higher than their counterparts at nonintellectual property-intensive industries.<sup>286</sup>

Major copyright industries—including software—contribute nearly 6.5 percent of the total U.S. gross domestic product (GDP), employ over 5.5 million workers, and generate more than \$125 billion annually in foreign sales and exports.<sup>287</sup> Solely looking at software, in 2010, “the direct, commercial value of stolen software tools for personal computers came to \$59 billion globally . . . [and] the indirect costs are even greater. Enterprise software theft undercuts legitimate business activity and imperils job creation in every sector of the economy.”<sup>288</sup>

Business associations also list China as among the largest sources of intellectual property infringement. An estimated 78 percent of the software on personal computers in China is pirated, according to an annual study by the Business Software Alliance. That figure was down from 82 percent in 2006, but the total commercial value of unlicensed software on mainland Chinese computers rose from \$5.4 billion in 2006 to \$7.8 billion in 2010.<sup>289</sup> Hong Kong's piracy rate was considerably lower than on the mainland—45 percent in 2010.<sup>290</sup> Further evidence that China is a large-scale source of piracy: China was the second-largest market for computer hardware in the world—\$64.4 billion in 2009, behind only the United States. But in terms of software sales, China was eighth—behind Canada and Italy, at \$5.4 billion.<sup>291</sup>

The International Intellectual Property Alliance reports that China's lack of enforcement and lack of market access “suggest a con-

\*Tradeable goods are those that can be exported or imported.

scious policy seeking to drive Chinese competitiveness while permitting free access to foreign content through unapproved pirate channels.”<sup>292</sup> Says the Alliance:

*High copyright piracy levels persist in China, from pervasive use of unlicensed software by businesses and pre-installation of unlicensed software (hard disk loading piracy) at the distribution level, to widespread online piracy of music, films, television programming and other copyright materials, and piracy of hard goods. . . . China’s principal reliance on its woefully under resourced administrative system to deal with IPR [intellectual property rights] infringements rather than through criminal enforcement presents a significant hurdle to effective enforcement.*<sup>293</sup>

Among the remedies suggested by the United States and required by the WTO<sup>294</sup> during negotiations with China is the greater use of criminal penalties rather than administrative fines, which are too often levied at a nominal rate and are absorbed by Chinese counterfeiters as a cost of doing business.

#### **A Case Study: The Rise of Internet Piracy in China**

The increased use of the Internet to market and to sell products and services has also created a new and hard-to-trace pathway for illicit sales of copyrighted software. The case of music piracy offers an illustration of how the Internet eventually could facilitate lawbreaking on a massive scale in other information technology sectors, such as business software. In the case of music, Chinese government statistics indicate that nearly 80 percent of listeners use the Internet to obtain music. And nearly all music downloads are pirated. “Legitimate [music] content is not made available in significant quantities online in China due to the prevalence of piracy, market access restrictions, and other discriminatory measures which effectively keep legitimate content out,” according to Michael Schlesinger of the International Intellectual Property Alliance.

In addition, music piracy in China is facilitated by official tolerance for websites, such as the search engine Baidu, that directs users to infringing content and is supported by advertising. The website has promised to end the practice of providing pirated music but only in the case of music with a Chinese copyright.<sup>295</sup> As a result, the International Intellectual Property Alliance estimates the piracy level for music in China on the web is 99 percent.<sup>296</sup> Many of the same websites and techniques used to distribute pirated music can be employed to distribute pirated business software, including Internet auction sites, peer-to-peer sites, BitTorrent sites, and social networking sites.<sup>297</sup>

China’s 457 million Internet users constitute the largest group of computer users in the world, most of them with broadband connections. Two-thirds of them use mobile phones to surf the web for music downloads.

**A Case Study: The Rise of Internet Piracy in China—  
Continued**

The International Intellectual Property Alliance calculates the value of legitimate music sales in 2009 in China at \$94 million. By contrast, in Thailand, with just 5 percent of China's population and the same GDP per capita, sales were \$142 million. Legitimate sales in the United States were \$7.9 billion, about 7,000 times as much as in China.<sup>298</sup>

The trend of Internet piracy established for music downloads is having a spillover effect on business software, noted Commission witness Ken Wasch, president of the Software and Information Industry Association: "What we are finding increasingly is that China is becoming the primary source for illegal intellectual property goods of all kinds being distributed through Chinese servers."<sup>299</sup>

**China's Recent Efforts to Protect Software**

Chinese leaders made significant promises over the past 12 months to improve the level of intellectual property enforcement. At the December 2010 Joint Commission on Commerce and Trade negotiations in Washington and in the joint statement following the summit between President Obama and President Hu in January 2011, China's government committed to buy legitimate software licenses for central government agencies (although not provincial or local government offices.) The central government committed to a pilot program for 30 SOEs to increase the level of software licenses and agreed to audit central government agency budgets to ensure that they appropriated money for legitimate software purchases (although not to audit installed software nor to appoint independent auditors.)<sup>300</sup>

However, China has been making promises in bilateral negotiations to buy only licensed software for government offices since 2004 and during that time, the value of unlicensed software use in China rose from \$3.6 billion in 2004 to \$7.6 billion in 2009, according to Commission witness Mr. Schlesinger.<sup>301</sup>

China also announced in late 2010 that the government would conduct a six-month campaign against intellectual property theft, denoted the "Special Campaign to Strike IPR [intellectual property rights] Infringements and Counterfeit and Shoddy Goods." After complaints that such temporary campaigns in the past had produced a flurry of activity followed by a resumption of counterfeiting and piracy, the campaign was extended for three months until the end of June.

Skeptics noted that the timing coincided with the start of the Joint Commission on Commerce and Trade negotiations in Washington and that such a move might have been made for political reasons. One American businessman operating in China told the Commission during an interview in Hong Kong:

*The problem is that authorities preannounce, for example, six month crackdowns; this allows people to close up shop temporarily and get back in business later. More vagueness would help. Another problem is corruption. Local Party of-*

*officials are sometimes shareholders in counterfeiting companies. Other times, if a factory that produces counterfeit closes in a small city, 30 to 40 percent of the local population might become unemployed, which would reflect poorly upon the local government.*<sup>302</sup>

After Premier Hu's visit and the special campaign ran its original course, Business Software Alliance President and Chief Executive Officer Robert Holleyman told Congress that his member companies "report no significant uptick in sales to the Chinese government, in contrast to what had been expected in light of the commitments" made by China to boost government agencies' purchase of legal software.<sup>303</sup> In May, Mr. Holleyman told the U.S. International Trade Commission that "the towering piracy rate [in China] remains stagnant, the commercial value of it continues to rise, and US software companies are seeing very little in the way of new sales even though China's PC [personal computer] market is surging."<sup>304</sup>

Not all software companies were equally affected, however. One computer executive from a company that aggressively pursues court challenges in China of users of unlicensed operating system software told Commission members during an August trip to China that sales of software had increased by 7 percent in 2010. Still, said the executive, the company's revenue in China is only about 5 percent of the revenue in the United States, despite the fact that China is now the world's largest market for computer sales.<sup>305</sup>

Losses to U.S. software companies from intellectual property theft in China include the loss of royalty and licensing fees that would otherwise be paid to U.S. software firms such as Microsoft, Oracle, and Symantec. In fact, royalties and licensing fees are the most heavily impacted of all U.S. export receipts, since they are derived directly from the protection of intellectual property. The May 2011 U.S. International Trade Commission study notes that software makes up the largest share—nearly a third—of the total of all royalties and licensing fees that Chinese users paid to American companies.

The U.S. International Trade Commission calculated that an improvement in Chinese intellectual property protection would more than double the fees collected by U.S. software firms. Fees paid to U.S. software companies totaled \$737 million in 2009. That amount would increase by \$1 billion if China were to raise its intellectual property protections to the U.S. level.<sup>306</sup>

#### **Reciprocity in Intellectual Property Protection**

In testimony before the Commission on May 4, former U.S. Senator Slade Gorton cited the lack of incentives as the reason for China's failure to enforce intellectual property protections. "As a matter of fact," he said, "all the incentives are in the other direction. There's no real penalty for piracy, and there's a great deal of profit to be made by it." Mr. Gorton noted a troubling new trend—Chinese-produced, counterfeit business software is being exported to the United States and is now being purchased in "significant" numbers by American consumers.

**Reciprocity in Intellectual Property Protection—  
Continued**

The solution, said Mr. Gorton, is to levy a punitive tariff on all imports from China and other countries that fail to safeguard intellectual property. The tariff should exceed the value of trade lost to piracy and counterfeiting. While such a tariff “obviously violates various international trade agreements,” he said, “a country (such as China) with a \$273 billion trade surplus with the United States is never going to win a tit-for-tat exchange of tariffs or trade restrictions with us under those circumstances.”

The goal, said Mr. Gorton, would be to force countries to enforce their intellectual property protection laws so that U.S. companies would gain market access for legitimate products. Once their enforcement improved sufficiently, the tariff could be rescinded.<sup>307</sup>

**Implications for the United States**

China’s indigenous innovation policy is intended to restrict foreign access to the government procurement market or to require the transfer of critical technology to Chinese companies as the price of even limited market access. The result has been job loss in the United States and the transfer of technology to Chinese competitors. Many foreign firms, including those with affiliates in China, will be excluded from a large part of China’s market.

Indigenous innovation needs to be viewed in the larger context of China’s trade policies, which continue to violate the basic principles of the World Trade Organization: national treatment and free and fair market access. The U.S. Chamber of Commerce has said that China’s innovation policy:

*restricts the ability of American companies to access the market and compete in China and around the world by creating advantages for China’s state-owned enterprises and state-influenced champions, [and has] the potential to undermine significantly the innovative capacity of the American economy in key sectors [and] harm the competitiveness and livelihood of American business and the workers that they employ.*<sup>308</sup>

By most accounts, the Chinese government tolerates a very high level of intellectual property theft. In particular, China’s purchases of licensed computer software lag far behind its rapidly rising purchases of computer hardware. Chinese businesses and even government offices typically purchase unlicensed software or fail to obtain licenses for multiple copies of software. The result is a large loss of revenue and jobs in one of America’s most competitive industries.<sup>309</sup>

Longstanding rules of international commerce, including WTO standards, require countries to enforce internationally recognized standards of intellectual property. Nevertheless, the piracy of business software in China continues despite many promises to crack down on violations. This failure in China results from lax enforcement rather than the absence of regulations and laws prohibiting

intellectual property theft. The damage to the U.S. economy is measured in lost sales and lost jobs, not only in the software industry in the United States but also those U.S. domestic industries that use licensed software and compete against Chinese industries.

### Conclusions

- China's indigenous innovation policy is an outgrowth of the government's broad industrial policy and has been openly developed and documented through public plans and pronouncements, particularly the *National Medium- and Long-Term Plan for the Development of Science and Technology (2006–2020)*. The indigenous innovation policy seeks to nurture certain high-wage, high value-added industries designated by the government. Chinese firms are to be favored over foreign firms or China-based foreign affiliates in government procurement contracts. State-owned enterprises and municipal and provincial governments are also to show favoritism to Chinese domestic industries and businesses.
- Chinese officials, including President Hu, have pledged to modify China's indigenous innovation policy in response to protests from U.S. business leaders and top officials. Those promises have not been implemented at the local and provincial levels, however. China has a history of making promises and delivering little, particularly when doing as little as possible benefits the Chinese economy, as has been the case with China's promises to bring its intellectual property protections up to international standards and to cease requiring technology transfers from foreign firms.
- Foreign-invested enterprises seeking to be considered for government procurement contracts or public works projects are expected to file for patents and copyrights within China in order to qualify for preferential treatment in government contracting. Foreign affiliates risk the unintended transfer of their technology to Chinese firms if they do so, because of the nature of the Chinese intellectual property system and the lax enforcement of intellectual property laws and regulations in China.
- Although China agreed in 2001 to stop explicitly requiring foreign companies to surrender their technology to China in return for market access and investment opportunities, the government in Beijing still employs several tactics to coerce foreign firms to share trade secrets with Chinese competitors. China's industrial policy in general and its indigenous innovation policy in particular seek to circumvent accepted intellectual property protections and to extort technology from U.S. companies.
- In addition, the long effort by the central government to foster indigenous innovation is a message that will likely outlive any product catalogues. Restricting market access to domestic firms and requiring technology transfer as a cost for foreigners attempting to do business in China demonstrated the government's view that Chinese companies and governments are better off substituting domestic goods for imports.



## **SECTION 4: CHINA'S 12TH FIVE-YEAR PLAN AND TECHNOLOGY DEVELOPMENT AND TRANSFERS TO CHINA**

### **Introduction**

While China seeks to be considered a market-oriented economy, its government continues to engage in comprehensive economic planning, direction, support, and control. During the 2011 report cycle, the Commission examined various aspects of China's industrial policy and the implications it may have for U.S. companies competing for a share of the Chinese market. This section continues the discussion started in sections 2 and 3 of this Report, with a particular focus on China's newly adopted 12th Five-Year Plan (2011–2015). This section also addresses the policies aimed at helping China move up the manufacturing value-added chain, fostering strategic emerging industries (SEIs), which include new-generation information technology, high-end manufacturing, alternative energy, and biotechnology, and completing its transformation to a global technological powerhouse.

China's rapid industrialization and economic growth during the past 30 years has often been attributed to liberalization policies undertaken as part of its "reform and opening up" era. But that only tells half the story. Chinese economic development during the same period has relied extensively on a government-directed industrial policy to promote certain segments of the economy and support export-led growth. Many such policies are outlined in five-year plans that identify broad development goals. The process then develops regulations, guidelines, and tools to accomplish those objectives. Examples include providing subsidies to companies in select industries and encouraging foreign investment of money and technology in target sectors. Aaron L. Friedberg, professor at Princeton University, noted that "vital though imports have undoubtedly been, it is foreign direct investment that has served as the 'decisive catalyst' propelling China up the high-tech ladder."<sup>310</sup>

### **China's 12th Five-Year Plan**

China began implementing five-year plans in 1953 in order to align the economy with top policy goals and to communicate this directive throughout the government bureaucracy.<sup>311</sup> Five-year plans are designed to be roadmaps for regulators and provincial officials, who are responsible for their implementation and act as "key indicators of the directions and changes in development philosophy" at the highest levels of Chinese leadership, according to Cindy Fan, a professor at the University of California, Los Angeles.<sup>312</sup>



Like previous plans, the 12th Five-Year Plan ratified by the National People's Congress in March 2011 sets out a broad range of goals, policy prescriptions, and reform priorities.\* Unlike earlier plans, however, the 12th Five-Year Plan shifts its emphasis from enumerating hard production targets to describing broader principles, consistent with China's goal of economic rebalancing, and technological and scientific upgrading, especially in industrial production.<sup>313</sup>

The 12th Five-Year Plan attempts to restructure the Chinese economy by encouraging domestic consumption, developing the service sector, shifting to higher value-added manufacturing, conserving energy, and cleaning up the environment. Premier Wen Jiabao's annual address to the National People's Congress on March 5, 2011, the "Report on the Work of the Government," listed the expansion of domestic demand as a key aspect of the government's work in 2011.<sup>314</sup> This section will focus on economic restructuring and industrial upgrading.

### ***Economic Goals and Rebalancing***

Although China has maintained gross domestic product (GDP) growth averaging 10 percent for the past decade, this success was achieved largely due to massive fixed-asset investment† and policies aimed at boosting the export sector. During the past decade, exports and investment that supported export industries were the biggest contributors to China's gross domestic product (GDP) (see Addendum II: Figure 1). Household consumption, by contrast, stagnated (see Addendum II: Figure 1). Moreover, such reliance on investment-led growth resulted in personal disposable income falling as a share of GDP (see Addendum II: Figure 2), causing consumption to lag behind GDP growth.<sup>315</sup>

The Chinese government has long been aware that maintaining growth in an economy so substantially dependent on exports and fixed investment is unsustainable, as articulated by Premier Wen in 2007, when he called the Chinese economy "unstable, unbalanced, uncoordinated and unsustainable."<sup>316</sup> As Chinese economic growth slowed sharply in late 2008 when U.S. and European demand collapsed (together they account for over 40 percent of China's exports), the imperatives of rebalancing became clear.<sup>317</sup>

Fearful of economic instability, however, in the wake of the 2008 crisis, the Chinese government embarked on a massive fiscal and monetary stimulus program, which relied significantly on state-owned bank lending to boost growth. Banks lent out nearly \$1.5 trillion in 2009, leading to a massive investment boom that amounted to nearly 90 percent of GDP growth in the same year.<sup>318</sup> In short, China's dependence on investment and exports grew at a time when global demand for Chinese exports floundered.<sup>319</sup>

\*See Addendum I for a list of 11th and 12th Five-Year Plan key economic indicators.

†Fixed-asset investment includes land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings.

### Key Economic Targets of the 12th Five-Year Plan

In the “Report on the Work of the Government,” Premier Wen has outlined the key economic targets of the 12th Five-Year Plan:<sup>320</sup>

- Annual GDP growth: 7 percent
- Increase service sector contribution to GDP by 4 percentage points, from 43 percent to 47 percent
- Increase per capita disposable income of urban and per capita net income of rural residents by 7 percent per annum
- Increase spending on research and development (R&D) to 2.2 percent of GDP [from 1.75 percent as of 2010]

**GDP Growth:** The 7 percent GDP growth target is aimed primarily at reining in the Chinese economy, which has been overheating. It is also a signal to provincial and local governments to focus on generating economically and environmentally sustainable growth rather than growth at any cost. China has been trying to accomplish this transition for many years, though with limited success. For example, the 11th Five-Year Plan similarly had a lower GDP growth target (7.5 percent) but achieved rates of nearly 11 percent.<sup>321</sup>

**Service Sector:** The 12th Five-Year Plan places an emphasis on moving away from labor-intensive and low-skilled manufacturing toward more sophisticated and capital-intensive production. As a result, China will need a new source of employment. China’s service sector is underdeveloped: in 2009 it accounted for just 42 percent of total GDP (compared to 54 percent for India and 57 percent for Taiwan).<sup>322</sup> It has the potential, however, to generate new urban jobs and absorb surplus rural labor.<sup>323</sup> According to Trevor Houser, an economist with the Rhodium Group, achieving such structural changes is the best way to meet long-term employment goals: “[I]f I invest a million RMB [renminbi] on services, I create three times more jobs than in the iron and steel sector . . . if you’re resource-constrained and desperate for new jobs [like China is], [being the] world steel mill is a losing strategy in a wide variety of ways.”<sup>324</sup> However, Premier Wen’s work report fails to address the implementation of his goals, that is, how China will actually encourage growth in service industries. (For more on the Chinese government’s concerns over unemployment and social stability, see chap. 1, sec. 5, of this Report.)

**Income:** The government views income inequality and the urban/rural divide as sources of potential social instability (see chap.1, sec. 5, of this Report for more). According to the Chinese government, the 12th Five-Year Plan is intended to help increase income through raises in minimum wages, with a particular focus at the low end of the pay scale.<sup>325</sup> However, boosting income does not guarantee that consumers will reduce precautionary savings. The 12th Five-Year Plan also contains a set of reform priorities, including improving the social safety net and providing low-cost housing, in the hope that this will lead Chinese households to reduce savings rates and increase consumption.<sup>326</sup>

In practice, five-year plans are constantly reviewed and revised over the course of five years.<sup>327</sup> Reversing years of economic policies aimed at growth at all costs will not be easy. Critics doubt the Chinese government's ability to overcome entrenched domestic interests to push through a reform agenda. The 12th Five-Year Plan does not indicate how the economy will become less reliant on capital spending, have more liberalized financial markets, or fundamentally shift China's global trade balance. According to Stephen Green, regional head of research at the Standard Chartered Bank in Shanghai, so far "[t]here's absolutely no sign that the percentage of investment in GDP is slowing. And there are no signs of liberalization of the service sector to allow the private sector to take a bigger share of the economy."<sup>328</sup>

Cornell University economist Eswar Prasad testified before the Commission that one reason that the 12th Five-Year Plan offers few details related to major structural changes, especially a shift to a consumption-driven economy, is the inherent tension between China's short- and long-term objectives. For example, while significantly raising wages would certainly boost domestic consumption, it would also drive up inflation.<sup>329</sup> Moreover, structural change would not be to everyone's benefit. As Dr. Prasad stated, "For the politically well-connected state-owned enterprise bosses, for many of the bank chairmen, this is actually a very good system because it keeps profits flowing into the state enterprises, into the banks."<sup>330</sup> With the leadership change next year, the Communist Party may be reluctant to upset the status quo.

In meetings with the Commissioners, Hong Kong-based journalists have noted that there is a contradiction at the heart of China's 12th Five-Year Plan: It aims to create domestic consumption but an active consumer class will mark a shift in power away from the government and state-owned enterprises (SOEs). Michael Pettis, professor of finance with Peking University's Guanghua School of Management, has pointed out that a key characteristic of China's development model is financial repression. The vast majority of household savings takes the form of bank deposits, while the vast majority of corporate financing takes the form of bank loans. With the lending and deposit rates set very low, household savings are used by the state to heavily subsidize the cost of capital. This amounts to a transfer from the household sector to favored borrowers.<sup>331</sup> Efforts to boost consumption will necessarily cut into household savings thus limiting the amount of the capital available for loans to SOEs and other state-supported entities.

### ***Industrial Upgrading and Strategic Emerging Industries***

For the first time, the 12th Five-Year Plan also makes explicit mention of SEIs. According to Dr. Roach, "the new plan targets a major move up the manufacturing value chain."<sup>332</sup> It focuses on the development and expansion of seven SEIs: New-generation information technology, high-end equipment manufacturing, advanced materials, alternative-fuel cars, energy conservation and environmental protection, alternative energy, and biotechnology. Within these industries, 37 projects have been identified, which are listed in Addendum III of this section. The goal is to take the SEIs

from a current combined share of 3 percent of Chinese GDP to 8 percent by 2015 and 15 percent by 2020.<sup>333</sup>

Willy Shih of the Harvard Business School told the Commission that the 12th Five-Year Plan is a “continuation of a long-term strategy of capability building that has been in place for decades” and is strongly aligned with other guiding policies from the central government, in particular, the National Medium- and Long-Term Plan for the Development of Science and Technology (MLP), issued in 2006. This plan articulated the goal of making China an innovation-oriented society.<sup>334</sup>

The 12th Five-Year Plan calls for funding SEI development and increasing the scale of government and capital-market investment in SEIs and proposes using various subsidization policies to support the SEIs. As with other five-year plan policies, the national five-year plan only provides general guidance, and regional governments are responsible for devising precise subsidies and policies. For example, in May 2011, the Taiyuan City government passed an “opinion” on speeding up the development of SEIs, which calls for various local government measures to enable SEIs to account for 20 percent or more of Taiyuan City GDP and develop locally branded SEIs worth 1 billion RMB (about \$157 million) or more by 2015.<sup>335</sup>

To achieve its SEI goals, the central and local government and private sectors would have to spend between \$600 billion and \$2.1 trillion over the next five years, according to industry experts’ estimates.<sup>336</sup> The central and local governments will likely combine this investment with preferential tax and procurement policies to ensure that Chinese firms emerge as global leaders, or “national champions,” in these industries within the next five years. Similar policies previously have been successful in establishing “national champions” in industries such as telecommunications, steel, and railway, although it is unclear how much of this success can be attributed to China’s domestic innovation and how much to technology transferred or illegally copied from foreign producers. For example, in the railway industry, China went from producing steam engines just over ten years ago to competing internationally, including a joint proposal with General Electric for constructing bullet trains in California.<sup>337</sup>

According to Ministry of Finance Chief of Staff Hu Jinglin, the ministry will actively use finance and taxation policy to support the development of the SEIs, including providing multiple channels for financing. The ministry will encourage its regional offices to develop relevant policies based upon local conditions and will encourage local governments to take a share in SEIs and actively develop investment funds.<sup>338</sup> According to the National Development and Research Commission’s draft, “Major Tasks and Measures for Economic and Social Development in 2011,” released during the Eleventh National People’s Congress on March 5, 2011:

*We will quickly formulate and implement a development plan and supporting policies for strategic emerging industries, set up a special fund for promoting their development, expand the scale of venture capital investment in them, formulate a guiding list for developing them, and work out industry standards for major emerging industries. We will*

*organize the implementation of industrial innovation and development projects, including those on National Broadband Internet Agenda, cloud computing, the Internet of Things, integrated circuits, flat-panel displays, space infrastructure, regional aircraft and industrialization of general aviation aircraft, as well as major application and demonstration, projects on the health of the people and on using information technology to benefit the people. We will advance national pilot programs and demonstrations for IT [information technology] promotion.<sup>339</sup>*

The 12th Five-Year Plan also includes the following, more precise goals for each of the seven SEIs:

<b>Innovation and development of new strategic industries<sup>340</sup></b>
<b>01 Energy conservation and environmental protection industries</b> —Implement major exemplary projects in energy conservation and environmental protection and promote the industrialization of efficient energy conservation, advanced environmental protection and resource recycling.
<b>02 New-generation IT [information technology] industry</b> —Construct new-generation mobile communication networks, the new-generation Internet, and digital broadcast and television networks. Implement exemplary application projects of the Internet of things and special industrialization projects of network products. Construct industrial bases of IC [integrated circuit], panel display, software, and information services.
<b>03 Biological industry</b> —Build databases of gene resources for pharmaceuticals, important plants and animals, and industrial microbial bacteria. Construct R&D [research and development] and industrialization bases for biopharmaceuticals and biomedical engineering products, biological breeding, testing, detection and fine breeding bases, and exemplary biomanufacturing application platforms.
<b>04 High-end equipment manufacturing industry</b> —Construct industrialization platforms for homemade trunk and feeder airplanes, general-purpose airplanes and helicopters, and a spatial infrastructure framework composed of navigation, remote sensing and communication satellites, and develop intelligent control systems, high-class numerically controlled machines, high-speed trains and urban rail traffic equipment, etc.
<b>05 New energy industry</b> —Construct industrial bases for new-generation nuclear power equipment, large wind power generating sets and parts, new assemblies of efficient solar power generation and heat utilization, biomass energy conversion and utilization technologies, and intelligent power grid equipment, and implement exemplary large-scale application projects of marine wind power, solar power, and biomass energy.
<b>06 New material industry</b> —Promote the R&D and industrialization of carbon fibers, semiconductor materials, high-temperature alloy materials, superconductive materials, high-performance rare earth materials and nanometer materials for aviation and spaceflight, energy and resources, traffic and transport, and major equipment.
<b>07 New-energy automobile industry</b> —Conduct R&D and large-scale commercialization demonstration projects for plug-in hybrid electric vehicles and pure electric vehicles, and promote industrialized application.



Four of these industries (biopharmaceuticals, high-end equipment manufacturing, new materials, and next-generation information technology) were previously identified as target industries in the 11th Five-Year Plan. Three of these industries align with sustainable growth (alternative energy, clean energy vehicles, and clean energy technology), and four industries align with moving up the value chain (biotechnology, new materials, next-generation information technology, and high-end manufacturing).<sup>341</sup> There is also overlap between the SEIs and industries the Chinese government previously identified as strategic or heavyweight, including information technology and automobiles. (For more information, see chap. 1, sec. 2, of this Report.)

## **Technology Development and Transfers to China**

### ***Upgrading Manufacturing and Industrial Policy***

Over the past several decades, Chinese exports to the United States have primarily been low-value, labor-intensive products such as toys and games, footwear, textiles, and apparel. However, since China entered the World Trade Organization (WTO) in 2001, an increasing proportion of U.S. imports from China have been more technologically advanced.<sup>342</sup> By far the largest growth sector in Chinese exports to the U.S. market since 2000 has been computer and electronic products, exploding from \$24.7 billion in 2000 to nearly \$132.8 billion in 2010.<sup>343</sup> (See chap.1, sec. 1, of this Report for more on China's exports of advanced technology products.)

But China's evident success in increasing exports of advanced technology does not tell the whole story. To some degree, China has become the assembler of parts produced throughout much of Asia. Assembly operations typically do not pay high wages nor do they represent the majority of the value added to a product along the line from research, design, parts supply, assembly, marketing, advertising, shipping, distribution, financing, retail sales, and servicing. There is a perception in China that opening the country to foreign investment has not led to improvement of domestic capabilities and that foreign technologies continue to dominate, with China "relegated to low value-added labor intensive roles."<sup>344</sup>

The Chinese government desires to become competitive in technology-intensive areas and has adopted a set of policies to achieve this. In October 2005, the Chinese Communist Party Central Committee met and elevated the importance of China's "indigenous innovation to a strategic level equal to Deng Xiaoping's 'reform and opening' policy," according to a comprehensive study of the evolution of the program.<sup>345</sup> The National Medium- and Long-Term Plan for the Development of Science and Technology followed in 2006 with the goal to "increase investments in research and development to 2.5 percent of GDP and reduce reliance on foreign technology by 9 percent by 2020."<sup>346</sup> At the time, China's reliance on foreign technology was estimated at 60 percent.<sup>347</sup>

The term "indigenous innovation" appears in both the 11th and 12th Five-Year Plans. In the 11th Five-Year Plan, strengthening "indigenous innovation" is listed as a "national strategy," and in the 12th Five-Year Plan it is included as a primary objective. According to Jia Qinglin, chairman of the Chinese People's Political

Consultative Conference National Committee, “The success of the 12th FYP [Five-Year Plan] (2011–2015) rests on science and technology and indigenous innovation capacity.”<sup>348</sup> To help promote “indigenous innovation,” the 12th Five-Year Plan has added a new target not present in the 11th Five-Year Plan: patents per 10,000 people. In 2010, there were 1.7 patents per 10,000 people in China; by 2015, the 12th Five-Year Plan anticipates nearly doubling that number to 3.3 patents per 10,000 people. (For more information on patents and indigenous innovation, see chap. 1, sec. 3, of this Report.)

In addition to patents, the 12th Five-Year Plan seeks to improve the international competitiveness of Chinese firms by upgrading and consolidating certain industries (especially high-polluting industries) and promoting mergers and investments in advanced manufacturing equipment and technology.<sup>349</sup> While not mentioned explicitly in the five-year plan, favored companies in China may receive various subsidies, such as inexpensive loans, tax benefits, utility services, and free land.<sup>350</sup> Moreover, even if China’s innovation strategy fails to achieve a broad range of innovation, by heavily investing in certain critical technologies, China could make innovative breakthroughs in those favored technologies.<sup>351</sup> For example, according to Christopher McNally of the East-West Center, state support has enabled hardware and software manufacturers like Huawei and ZTE to innovate.<sup>352</sup> And, according to the consulting firm McKinsey, Chinese innovation has contributed to such fields as pharmaceuticals, genetics, and structural biology.<sup>353</sup>

#### **Global Supply Chains, Innovation, and the Case of Apple Corporation**

A great majority of U.S. technology companies manufacture advanced technology products in China via networks of global (largely Asian) supply chains and then sell them in the United States. Such production often results in lower manufacturing costs, which benefits both U.S. companies and consumers. According to Wayne Morrison of the Congressional Research Service, “U.S. firms that use China as the final point of assembly for their products, or use Chinese-made inputs for production in the United States, are able to lower costs and become more globally competitive.”<sup>354</sup> Becoming more globally competitive allows U.S. companies to increase profits and market share and theoretically should facilitate the hiring of more employees, both in the United States and abroad. Such benefits are not always distributed equally. According to the U.S. Bureau of Economic Analysis, U.S. multilateral corporations cut their work forces in the United States by 2.9 million during the 1999–2009 decade while increasing employment overseas by 2.4 million.<sup>355</sup>



**Global Supply Chains, Innovation, and the Case of Apple Corporation—Continued**

Apple has become a go-to example of such a company. Apple neither manufactures nor assembles any of the components of its famous range of products, including iPods. Instead, components from a variety of suppliers are assembled by Foxconn, a Taiwanese contract manufacturer, at its plant in China. A 2009 study by researchers at the University of California-Irvine, has estimated that the iPod and its components accounted for about 41,000 jobs worldwide in 2006, of which about 27,000 were outside the United States (of which 19,160 were in manufacturing) and 14,000 within the United States (6,101 in engineering and other professional jobs and 7,789 in retail and other nonprofessional jobs).<sup>356</sup>

In the same study, however, the authors concluded that the professional jobs, such as those maintained by Apple in the United States, were “at risk on multiple fronts”:

*Many U.S. high-tech companies are investing in white-collar job creation offshore to tap pools of low-cost talent and gain access to growing markets. The offshore jobs often support high-value jobs in the U.S., but this may not always be the case. Also, when U.S. companies lose their innovation leadership, foreign competitors do not typically employ many engineers or other professionals in the U.S.*<sup>357</sup>

Apple’s success is due in great measure to the company’s emphasis on designing and marketing unique products to a loyal and technologically sophisticated clientele. Business experts typically rank the Apple brand as among the top brands in the world, along with Coca-Cola and IBM. The company has focused its efforts on innovation and in-house research and design far more than most technology companies. For example, according to Gary Pisano and Willy Shih of Harvard Business School, “nearly every U.S. brand of notebook computer, except Apple, is now designed in Asia, and the same is true for most cell phones and many other handheld electronic devices.”<sup>358</sup> Commission witness Ralph Gomory said that an economy based on the Apple model is “both unattainable and undesirable,” because (1) the huge profits generated by Apple are specific to the company and, in any event, “unlikely to last,” and (2) there would be only few high-paying jobs, with the rest in retail.<sup>359</sup>

***Technology Transfers***

The alternative to research-driven innovation is technology transfer. During their 2011 trip to China, the Commissioners heard from representatives of the American Chamber of Commerce in China that the Chinese government mandated technology transfer for some ventures. In the case of joint ventures, in particular, any concession made to the Chinese partner increases the likelihood of the venture being approved.

When joining the WTO, China agreed to the “elimination and cessation of enforcement of trade and foreign exchange balancing requirements, local content and export performance offsets and technology transfer requirements made effective through laws, regulations or other measures.”<sup>360</sup> China has circumvented these WTO obligations through a combination of local-content requirements, mandatory joint ventures, and forced technology transfers. Chinese policies since 2006 “limit investment by foreign companies as well as their access to China’s markets, stipulate a high degree of local content in equipment produced in the country, and force the transfer of proprietary technologies from foreign companies to their joint ventures with China’s state-owned enterprises.”<sup>361</sup>

Thomas Hout and Pankaj Ghemawat wrote in “China vs. the World: Whose Technology Is It?” of the ease with which China has circumvented the WTO rules:

*The WTO’s broad prohibitions on technology transfers and local-content requirements are more complex and easier to subvert than its rules pertaining to international trade in products. Furthermore, China hasn’t yet signed the level playing-field provisions covering government procurement; it claims that its policies don’t violate them, because the WTO allows domestic policy concerns to be accommodated in government purchases. Although the WTO prohibits mandatory technology transfers, the Chinese government maintains that incentivized transfers, whereby companies trade technology for market access, are purely business decisions.*<sup>362</sup>

China’s strategy has been successful because “U.S. industry has feared being locked out of the vast Chinese central, provincial and local government procurement markets.”<sup>363</sup> Dieter Ernst of the East-West Center has argued that foreign firms often must still compromise intellectual property in order to establish a presence in China.<sup>364</sup> Describing Chinese strategy for technological upgrading, Drs. Hout and Ghemawat noted that “Chinese officials have learned to tackle multinational companies, often forcing them to form joint ventures with its national champions and transfer the latest technology in exchange for current and future business opportunities.”<sup>365</sup>

Chinese industrial strategy appears to have become more aggressive since 2006. Drs. Hout and Ghemawat note in their research that:

*[S]ince 2006 the Chinese government has been implementing new policies that seek to appropriate technology from foreign multinationals in several technology-based industries, such as air transportation, power generation, highspeed rail, information technology, and now possibly electric automobiles. These rules limit investment by foreign companies as well as their access to China’s markets, stipulate a high degree of local content in equipment produced in the country, and force the transfer of proprietary technologies from foreign companies to their joint ventures with China’s state-owned enterprises. The new regulations are complex and ever changing. They reverse decades of grant-*

*ing foreign companies increasing access to Chinese markets and put CEOs [chief executive officers] in a terrible bind: They can either comply with the rules and share their technologies with Chinese competitors—or refuse and miss out on the world’s fastest-growing market.*<sup>366</sup>

In a recent example, the Chinese government is refusing to let the Chevy Volt qualify for subsidies totaling up to \$19,300 a car unless General Motors (GM) agrees to transfer the engineering secrets for one of the Volt’s three main technologies to a joint venture with a Chinese automaker.<sup>367</sup> Thus far, GM has refused to transfer the Volt technologies (in a separate case, GM has agreed to develop electric cars in China through a joint venture with a Chinese automaker).<sup>368</sup> The proposed Chinese subsidy rules in question cover new energy vehicles (one of the seven SEIs highlighted in the 12th Five-Year Plan), which China defines as including electric cars, plug-in hybrids, and fuel-cell cars. The three core technologies that China is most interested in acquiring through the subsidy provision are electric motors, complex electronic controls, and power storage devices, whether batteries or a fuel cell. At least one of those systems would need to be included in the technology transfer for a vehicle to qualify for the consumer subsidies. Several trade experts said such a Chinese requirement violates WTO rules.<sup>369</sup> (For more on GM’s negotiations with China on hybrid car technology see chap. 1, sec. 3, of this Report.)

The Chinese government also has sought to encourage multinational companies to invest in R&D in China. According to APCO’s James McGregor, “The government provides incentives for foreign-invested R&D centers, including exemptions of customs duties on imported equipment, as well as business and income tax deductions.”<sup>370</sup> Intellectual property lawyers Jason Cooper and Stephanie Chu of Alston & Bird argue that “innovation centers in China are finding robust funding available for their R&D-related expenses, [which] have already caused significant reverse brain drain from Silicon Valley and are also inducing many foreign corporations without previous ties to China into opening operations there.”<sup>371</sup> Table 1, below, shows R&D expenditures by majority-owned foreign affiliates of U.S. companies in China through 2008 (latest available). There are certain limitations to the data, however, including that the data do not cover R&D expenditures of non-majority-owned affiliates.

**Table 1: R&D Performed in China by Majority-owned Foreign Affiliates of U.S. Parent Companies (2000-2008)**  
(U.S. \$ million)

2000	2001	2002	2003	2004	2005	2006	2007	2008
\$506	*D	\$645	\$565	\$575	\$668	\$759	\$1,173	\$1,517

\* D indicates suppression to avoid disclosure of confidential information.

Source: Bureau of Economic Analysis, *U.S. Direct Investment Abroad (USDIA): Operations of U.S. Parent Companies and Their Foreign Affiliates* (Washington, DC: U.S. Department of Commerce, various BEA issues). <http://www.bea.gov/international/di1usdbal.htm>.

Many incremental design tasks are already delegated to Chinese engineers by multinational corporations, for example, through large, original equipment manufacturers.<sup>372</sup> According to the consulting firm McKinsey, as of January 2011 “foreign-invested com-

panies account[ed] for fully 7 percent of [R&D] spending [by large- and medium-sized enterprises], spread among nearly 1,500 R&D centers established by multinational companies.”<sup>373</sup> This includes major American firms like General Electric (GE) and Caterpillar.<sup>374</sup>

Witnesses at the Commission’s June 15 hearing disagreed about the threat to U.S. technological leadership and competitiveness posed by China’s efforts to move up the value-added chain. Commission witnesses Ralph Gomory and Leo Hindery viewed Chinese efforts with alarm. Philip Levy, another witness, contended that China’s industrial policies are self-harming and will sabotage China’s growth because “state-sponsored attempts to grab technological leadership” stifle the competitive environment, often generating sales but not real innovation.

According to Mr. Hindery, China’s demands that the United States and other developed countries’ advanced technology companies seeking to do business in China make massive transfers of their intellectual property “will, because of their perpetual ripple effects throughout our economy, ultimately . . . be an even bigger drain on our economy than the direct offshoring of millions of American jobs over the last 15 years.”<sup>375</sup>

Dr. Levy, on the other hand, concluded that the government-dominated approach to technological development and innovation favored by the Chinese state was “stultifying” and “unlikely to achieve its objective of vaulting [China] to the forefront of global innovation.”<sup>376</sup> He cautioned, however, that while China’s policies do not threaten U.S. technological leadership in the long run, they do have the potential ability to impose substantial costs on U.S. businesses in the short run.

### **Outsourcing of Manufacturing**

China’s 12th Five-Year Plan is the latest example of China’s efforts to upgrade its technological capabilities and encourage production in China. There is considerable debate about whether Chinese industrial policies and outsourcing of manufacturing and R&D to China harm the United States. At the Commission’s June 15, 2011, hearing, the Commissioners heard testimony on China’s efforts move up the value-added chain and their implications for the United States.

According to Dr. Gomory, it is a “dangerous delusion” to maintain that Americans do not need manufacturing jobs and will instead focus on “design and innovation and let other nations do the grunt work.”<sup>377</sup> Dr. Gomory also cautioned that U.S. corporations are increasingly locating their R&D in China, which can have a further detrimental effect on U.S. economic growth. The “interests of our global corporations and the interests of our country have, in fact, diverged,” Dr. Gomory said.

Echoing this argument, Willy Shih wrote in the *Harvard Business Review* with Gary Pisano that:

### **Outsourcing of Manufacturing—Continued**

*[O]utsourcing has not stopped with low value tasks like simple assembly or circuit-board stuffing. Sophisticated engineering and manufacturing capabilities that underpin innovation in a wide range of products have been rapidly leaving, too. As a result, the U.S. has lost or is in the process of losing the knowledge, skilled people, and supplier infrastructure needed to manufacture many of the cutting-edge products it invented.* <sup>378</sup>

Mr. Hindery expressed a similar view, noting that a country as large and complex as the United States needed to maintain high rates of manufacturing employment.<sup>379</sup> He suggested that jobs such as administration and marketing, which are often proposed as alternatives to manufacturing jobs, would not be able to substitute for wealth creation generated by manufacturing.

Dr. Levy, however, urged caution in blaming China for the decline of U.S. manufacturing employment, noting that “we have seen in manufacturing . . . a steady decline as a share of employment, dating back to 1979. This long predates China’s emergence . . . [and] has probably much more to do with technological change . . . [and] a dramatic increase in productivity [in the United States].”<sup>380</sup>

According to the U.S. Bureau of Labor Statistics, the number of U.S. manufacturing jobs fell by a third, from 12.2 million to 8.1 million, during the past decade.<sup>381</sup> The precise number of job losses that can be attributed to outsourcing to China is not known.

### **Implications for the United States**

The policy of indigenous innovation in government procurement, in particular state and local procurement, as well as forced technology transfers, poses a significant challenge to the ability of U.S. companies to export goods and services to China (see chap.1, sec. 3, of this Report for further discussion).

The Chinese government’s emphasis on technology development through technology transfer also poses multiple risks. At the Commission’s June 2011 hearing, witnesses expressed concern over whether U.S. companies’ transferring of technology to Chinese partners in exchange for market access or to be closer to the domestic market ultimately may lead to the growth of Chinese industries and the decline of U.S. equivalents.<sup>382</sup> Even if high-tech manufacturing activity in China has in the past largely been confined to low-value labor and basic engineering to the benefit of U.S. multinational companies, it is unlikely that this will always remain the case. According to Dr. Prasad, “The companies that hand over proprietary technology do so in the hope that they’ll be the ones to get the better end of the bargain. But so far the Chinese have come out ahead in most cases. Hope springs eternal, but it’s a very dangerous bargain to make.”<sup>383</sup>

Transfer of manufacturing and R&D facilities from the United States to China has the potential to damage U.S. competitiveness.



Dr. Shih has testified before the Commission that as a consequence of the long-term implications of outsourcing, as well as the faltering investment in research, the United States “has lost or is on the verge of losing” its collective R&D, engineering, and manufacturing capabilities that sustain innovation. With the loss of these capabilities, according to Dr. Shih, the United States will lose its ability to develop and manufacture many high-tech products.<sup>384</sup> With the transfer of manufacturing to China, vital innovation ecosystems in the United States are lost to Chinese competition.

The handing over of proprietary technology also raises questions about the impact on U.S. national security. For example, a report prepared for the Commission by the RAND Corporation stated that there is “no question . . . that foreign involvement in China’s aviation manufacturing industry is contributing to the development of China’s military aerospace capabilities.”<sup>385</sup> This contribution, the report states, is “increasing China’s ability and possibly its propensity to use force in ways that negatively affect U.S. interests and would increase the costs of resisting attempts to use such force.”<sup>386</sup> Dr. Shih cautioned that the United States “must prepare for the eventuality that we will have to source critical military technology abroad as more of our domestic capabilities wither away.”

A recent case that attracted much interest involves a 50–50 joint venture between GE Aviation and the systems branch of Aviation Industry Corporation of China (AVIC), a Chinese state-owned group corporation which has both civilian and military components. The joint venture will develop and market integrated avionics systems for the global civil aviation industry.<sup>387</sup> Members of Congress raised concerns that AVIC could divert U.S. commercial avionics technology to China’s military systems, as China has done with missile, jet, and satellite know-how.<sup>388</sup> On a voluntary basis GE has sought and received an official ruling from the U.S. government that the joint venture does not involve controlled military technology.\* In press statements and in a meeting with the Commissioners, GE has also noted that the joint venture will have in place several safeguards to prevent diversion of technology to China’s military. Examples of such safeguards include not hiring any AVIC personnel or other Chinese citizens who retain military- or intelligence-related employment or responsibilities, and having separate information technology systems and facility locations. Some U.S. security officials have commented anonymously in the press that such measures, especially relating to employment prohibitions, will be difficult to enforce.<sup>389</sup> (For more information on U.S. involvement with China’s aviation programs in 2011, see chap. 2, sec. 1, of this Report.)

For the U.S. economy more generally, the large-scale outsourcing of high-tech manufacturing activities may lead to a hollowing out of America’s industrial base (a diminishing of skills within the labor pool, supplier base, and infrastructure),<sup>390</sup> the outsourcing of high-wage professional jobs (in addition to assembly jobs),<sup>391</sup> and the inhibition of future U.S.-led innovation.<sup>392</sup>

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\*The technology in question, the civilian version of the integrated modular avionics (IMA), does not require a license for exports to China.

According to Andy Grove, chief executive officer and later chairman at Intel from 1987 to 2005, as the “scaling process” (the process by which “technology goes from prototype to mass production”) has moved to China, it has taken the potential for future breakthroughs with it. Mr. Grove illustrates the danger of breaking “the chain of experience that is so important in technological evolution” with the example of advanced batteries:

*It has taken years and many false starts, but finally we are about to witness mass-produced electric cars and trucks. They all rely on lithium-ion batteries ... [and] the U.S. share of lithium-ion battery production is tiny ... The U.S. lost its lead in batteries 30 years ago when it stopped making consumer electronic devices. Whoever made batteries then gained the exposure and relationships needed to learn to supply batteries for the more demanding laptop PC [personal computer] market, and after that, for the even more demanding automobile market. U.S. companies did not participate in the first phase and consequently were not in the running for all that followed. I doubt they will ever catch up.<sup>393</sup>*

### Conclusions

- One of the main objectives of the 12th Five-Year Plan is to redirect China’s economy to one more focused on domestic consumption and less on exports and investment. The plan assumes that China’s growth would therefore be more balanced and sustainable. The plan also emphasizes higher value-added production and increased government support for domestic high-tech industries.
- There is cause for skepticism about China’s prospects for carrying out the rebalancing goals of the 12th Five-Year Plan. The Chinese government had similar goals in previous plans, but their implementation was sidelined in favor of pursuing higher export and investment growth.
- Increasing household consumption, a major goal of the 12th Five-Year Plan, and the subsequent emergence of a more assertive consumer class, may be in direct contradiction to the Chinese government’s policy of keeping economic power firmly in the hands of the state and may compromise lending to many vested interests, including SOEs and the export sector.
- The 12th Five-Year Plan also advocates a move up the manufacturing value chain with the explicit mention of seven strategic emerging industries: New-generation information technology, high-end equipment manufacturing, advanced materials, alternative-fuel cars, energy conservation and environmental protection, alternative energy, and biotechnology. These industries, which will receive targeted government support, have the potential to be a source of economic growth and advanced innovation.
- Analysts and foreign business leaders fear that the emphasis on industrial upgrading will lead to the introduction of new govern-



ment subsidies, which in turn will disadvantage foreign competitors.

- As part of its indigenous innovation policy, China incentivizes foreign companies to transfer technology in exchange for market access.
- Chinese government requirements that foreign corporations transfer technology to Chinese joint venture partners in exchange for market access violate written WTO prohibitions on forced technology transfers. The new requirements for technology transfer from foreign partners are often made in implicit rather than explicit terms, which may make challenging them in the WTO dispute procedure more difficult.

**Addendum I: Key Economic Indicators (11th and 12th Five-Year Plans)\***

<b>Target</b>	<b>11th FYP (2010 Target)</b>	<b>2010 (Actual)</b>	<b>12th FYP (by 2015)</b>
Average GDP Growth	7.5% (E)	11.2%	7% (E)
Average GDP Growth Per Person	6.6% (E)	10.6%	N/A †
Service Sector as % of GDP	43.3% (E)	43%	47% (E)
Service Sector as % of Total Employment	35.3% (E)	34.8%	N/A
Urbanization (%)	47% (E)	47.5%	51.5% (E)
R&D as % of GDP	2% (E)	1.75%	2.2% (E)
Patents per 10,000 People	N/A	1.7	3.3 (E)
Strategic Industry as a % of GDP ‡	N/A	N/A	+8.0%
Average Educational Attainment	9 Years (E) (+0.5 Years)	9 Years	N/A
Rate of Nine-Year Compulsory Education Enrollment	N/A	89.7%	93% (R)
Rate of High School Enrollment	N/A	82.5%	87% (E)
New Urban Jobs Created (5-year total)	45 million (E)	57.71 million	45 million (E)
Urban Registered Unemployment Rate	5% (E)	4.1%	Under 5%
Urban Annual per Capita Disposable Income (RMB)	13,390 (+5%) (E)	19,109 (+9.7%)	>26,810 (>+7%) (E)
Rural Annual per Capita Income (RMB)	4,150 (+5%) (E)	5,919 (+8.9%)	>8,310 (>+7%) (E) <sup>¶</sup>

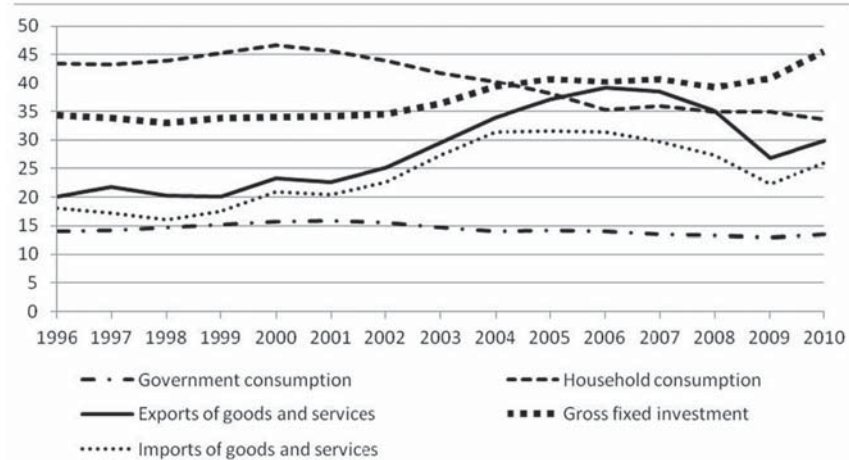
\* In the chart, restricted targets have an (R) next to them, and expected targets an (E).

† N/A indicates that this was not a designated key indicator in the relevant Five-Year Plan.

‡ This is not officially included among key indicators in the Five-Year Plan but is instead only stated later in the plan. Therefore, it is neither “restricted” nor “expected.”

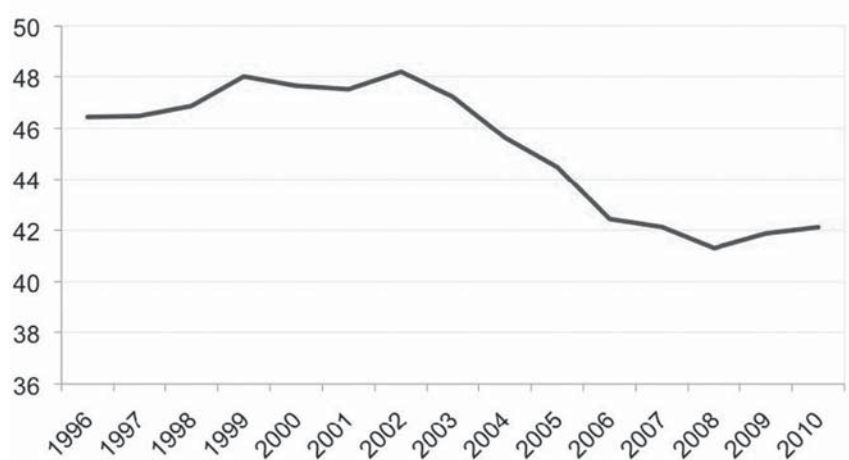
**Addendum II: Figures 1-2**

**Figure 1: Composition of China's GDP, 1996-2010**  
(as share of GDP; in percent)



Source: World Bank China data. <http://data.worldbank.org/country/china>. Note: Data for 2010 are Economist Intelligence Unit (EIU) estimates.

**Figure 2: Personal Disposable Income as Share of China's GDP, 1996-2010<sup>394</sup>**  
(in percent)



Source: EIU Country Data. Data for 2009 and 2010 are EIU estimates.

**Addendum III: China's Seven Strategic Emerging Industries and 37 Projects for Subindustries included in the 12th Five-Year Plan**<sup>395</sup>

Energy Saving and Environmental Protection	<ul style="list-style-type: none"> <li>• High-efficiency and energy saving</li> <li>• Advanced environmental protection</li> <li>• Recycling usage</li> <li>• Reusing waste products</li> </ul>
Next-generation IT	<ul style="list-style-type: none"> <li>• Next-generation mobile communications</li> <li>• Next-generation core Internet equipment</li> <li>• Smart devices</li> <li>• Internet of Things</li> <li>• Convergence of telecom / cable TV / Internet networks</li> <li>• Cloud computing</li> <li>• New Displays</li> <li>• Integrated circuits</li> <li>• High-end software</li> <li>• High-end Servers</li> <li>• Digitization of culture and creative industries</li> </ul>
Bio Industries	<ul style="list-style-type: none"> <li>• Bio-pharmaceuticals</li> <li>• Innovative pharmaceuticals</li> <li>• Biomedicine</li> <li>• Bio-agriculture</li> <li>• Bio-manufacturing</li> <li>• Marine biology</li> </ul>
High-end Assembly and Manufacturing Industries	<ul style="list-style-type: none"> <li>• Aerospace and space industries</li> <li>• Rail and transport</li> <li>• Ocean engineering</li> <li>• Smart assembly</li> </ul>
New Energy Sources	<ul style="list-style-type: none"> <li>• Nuclear power</li> <li>• Solar power</li> <li>• Wind power</li> <li>• Biomass power</li> <li>• Smart power grids</li> </ul>
New Materials	<ul style="list-style-type: none"> <li>• New function materials</li> <li>• Advanced structural materials</li> <li>• High performance composites</li> <li>• Generic base materials</li> </ul>
New Energy-Powered Cars	<ul style="list-style-type: none"> <li>• Electric hybrid cars</li> <li>• Pure electric cars</li> <li>• Fuel cell cars</li> </ul>

## SECTION 5: CHINA'S INTERNAL DILEMMAS

### Introduction

The Chinese Communist Party (CCP) and the central government in Beijing face a variety of challenges in maintaining control over a fractious and geographically vast nation. To do so, the party and the government have relied upon two principal strategies: a strict authoritarian rule to discourage challenges from potential political opponents and a record of 30 years of strong economic growth. Opposition parties are banned, senior government leaders are chosen by top Communist Party officials, and only village leaders are elected and even then, only from slates of officially approved candidates. In marked contrast to the social and economic turmoil of the era of Mao Zedong, central party leaders since 1978 have focused their efforts on delivering economic growth at an average 10 percent annual rate. In the process, China has lifted an estimated 400 million people from poverty.<sup>396</sup> Government policies have helped to establish China as the world's largest manufacturer and have fostered a small but growing middle class.

Continued Communist Party rule in China nevertheless remains a challenge for its leaders, who equate the success of the party with the existence of the nation.<sup>397</sup> The central government and the Communist Party face increasing protest from citizens outraged over government corruption, the failure of government regulators to protect the public from unsafe food, and environmental degradation. China's emerging entrepreneurial class has been accompanied by a growing income inequality between the wealthy urbanites and the poorer rural residents and between the coastal region and the interior and western provinces. "Even as the overall level of poverty has dropped, inequality has increased, and remaining poverty has become concentrated in rural and minority areas," notes the World Bank.<sup>398</sup>

Growing inflation particularly threatens lower-income workers, while China's system of residency permits, or *hukou*, creates a disadvantaged migrant worker class. Outbreaks of "mass unrest," which sometimes include violent demonstrations against the government and its policies, have increased from 8,700 incidents in 1998 to over 120,000 incidents in 2008, according to outside estimates.<sup>399</sup> Many such disputes involve illegal land seizures by local authorities, a growing source of income for corrupt local officials. Without recourse to an independent judiciary free of party control, Chinese citizens cannot rely on the courts to intercede on their behalf. In many cases, citizens feel that noisy and sometimes violent demonstrations are their only recourse. The government response to such demonstrations swings between repression and accommodation, seemingly without an overall direction.

On February 25, the Commission held a hearing and a roundtable discussion in Washington on these and other dilemmas faced by the CCP and by the central government. This section examines the origin of the problems faced by the party in maintaining control and describes the reaction of the Chinese citizens to the government's efforts to suppress dissent.

The party has created an extensive police and surveillance network to monitor its citizens and to forestall or react to any potential threat to social stability. However, the party still struggles to respond to the root causes of these protests, such as local corruption and the effects of rising food costs on the rural poor. Other current and potential causes of unrest include the unmet aspirations of the rural poor, the urban middle class, and college and technical school graduates unable to find work. Authorities in China are also concerned that a real estate bubble in the largest cities, particularly along the coast, may be followed by a market crash that could destroy the savings of the urban middle class.

### **Corruption and Abuses of Power**

Government and private sector corruption and abuse of power are prevalent in China, despite growing central government efforts to combat the problem.\* Among those efforts is a relaxation of government press controls on the reporting of cases of local government corruption and the harsh penalties assessed to government officials who take bribes or private businesses that sell adulterated food. Still, the problem persists.

Certainly, the public perceives corruption to be acute. Surveys of Chinese citizens found that 27 percent of respondents had been faced with arbitrary actions by a Chinese official, according to Martin Whyte, a Harvard sociologist who conducted the surveys and presented his findings to the Commission.<sup>400</sup> “[T]his finding suggests that such official mistreatment is a surprisingly common occurrence,” said Dr. Whyte. “We may hazard a generalization that many Chinese feel they now live in a society characterized by distributive justice but fairly widespread procedural injustice.”

In a 2010 ranking of corruption, based on surveys of public perceptions, China ranked 78th worst among 178 nations, sharing this position with Colombia, Greece, Lesotho, Peru, Serbia, and Thailand. According to Transparency International's 2010 Corruption Perception Index, China scored an overall rating of 3.5 on a scale of 0 (highly corrupt) to 10 (highly clean).<sup>401</sup> In comparison, the United States scored a 7.1, tying with Belgium for 22nd place.<sup>402</sup>

Official Chinese statistics, official news accounts, and regulatory efforts also reveal a high incidence of corruption—with over 240,000 official corruption cases investigated from 2003 to 2009, ac-

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\*Transparency International defines corruption as “the abuse of entrusted power for private gain.” [http://www.transparency.org/news\\_room/faq/corruption\\_faq](http://www.transparency.org/news_room/faq/corruption_faq). The Millenium Challenge Corporation defines a corrupt practice as “the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of a public official . . . in the selection process or in contract execution, or the making of any payment to any third party, in connection with or in furtherance of a contract, in violation of the Foreign Corrupt Practices Act, or any other actions taken that otherwise would be in violation of the Act if the Act were applicable, or any applicable law in the (relevant) country.” <http://www.mcc.gov/documents/guidance/mcc-policy-fraudandcorruption.pdf>. Most definitions include fraud and extortion and theft by government officials of public or private funds or assets, including the seizure by government officials of private land without adequate compensation.

ording to China's State Council.<sup>403</sup> From January to November 2010, 113,000 officials received some form of punishment related to corruption.<sup>404</sup> In December 2010 alone, Chinese media reported five cases of local officials murdering their mistresses in an attempt to avoid being exposed for corruption or for infidelity.<sup>405</sup>

Accounts in the Chinese news media and on the Internet have focused on the growing numbers of officials who kept mistresses on government salaries padded with misappropriated funds. In July, Xu Maiyong, former vice mayor of Hangzhou, was executed for bribery and embezzlement of more than \$30 million. The media reported that Mr. Xu had kept dozens of mistresses.<sup>406</sup> China's top prosecutor estimated in 2007 that 90 percent of the country's most senior officials implicated in corruption scandals in previous years had kept mistresses.<sup>407</sup> In a December 2010 report, the State Council announced new rules aimed at preventing Chinese officials from funneling misappropriated funds, bribes, and other illegally accrued gains into the bank accounts of family members.<sup>408</sup> This method of embezzlement is the most common method for officials to hide extra income. Another method is simply to leave the country. The People's Bank of China estimates that 16,000 to 18,000 corrupt Chinese officials and executives at state-owned enterprises absconded with \$123 billion from China between the mid-1990s and 2008.<sup>409</sup>

Enforcement efforts often focus on local rather than central government officials and often involve the lack of due process in local regulatory decisions. Dr. Whyte testified that procedural injustice has drawn the most citizen ire:<sup>410</sup>

*In the growing body of research on social protest activity in China in recent years, it seems to me that almost always the sparks that set off popular anger and public protests are abuses of power and other procedural injustice issues, rather than distributive injustice complaints. . . . However, by my reading, protest targets tend to be local officials, employers, and other powerful figures, rather than individuals who are simply very rich.*

Senior party officials are more frequently seen as a recourse to corrupt local governments. Chinese officials in the central government have worked to propagate this view among Chinese citizens, notes Dr. Whyte:<sup>411</sup>

*CCP leaders have also proved very adept at taking credit for wise guidance of the economy and the improved living standards of ordinary Chinese citizens, while being perhaps even more obsessed with deflecting blame for procedural abuses onto local officials and bosses rather than on the system itself (and its top leaders). As a result, China displays a 'trust differential' that is common in many authoritarian regimes (although not in Tunisia and Egypt recently). Many citizens get angry at arbitrary and unfair actions of local authorities while having more faith in the central leadership, to whom they direct complaints and appeals in the hope that 'grandpa' Wen Jiabao or other top leaders will intervene and set things right.*



One of the most recent examples did not directly involve a Chinese official, but it quickly came to symbolize the suspicion by ordinary Chinese that the justice system is rigged against them, particularly in disputes between citizens and officialdom. As Li Qiming, 23, was driving recklessly through Hebei University in October 2010, he struck two female pedestrians, killing one 20-year old student and injuring the other. As the drunken Mr. Li tried to flee the scene, he yelled out, "Sue me if you dare, my father is Li Gang."<sup>412</sup> (Li Gang was a deputy chief of security in the university's district.) Authorities censored news reports about the incident, but the declaration became a popular rallying cry of Chinese citizens in online posts about Chinese corruption. The son was given a relatively light sentence of six years in prison after the Li family paid \$84,000 in restitution.

Chinese Internet users also highlighted the death of Qian Yunhui, a village leader in Yueqing who had been carrying on a six-year fight with local officials over land seizures. Witnesses reported that four security officers held down Mr. Qian as a truck drove over him. Officials initially described the death as an unfortunate traffic accident.<sup>413</sup> Photos of the scene refuted the official account, showing that Mr. Qian was perpendicular to the truck and that there was no damage to the front of the truck. Even after the truck driver was found guilty and sentenced to three-and-a-half years in prison, Chinese Internet users continue to discuss the incident and remain suspicious of the police and judicial forces involved in the investigation.

The Internet continues to be a useful tool both for the central government and citizens in the fight against local corruption. *China Daily*, a CCP-controlled newspaper with print and Internet editions, will cover instances of crackdowns on abuses of power and corruption and has commented in a positive vein on citizen whistleblowers who target local corruption. The state-owned *Beijing News* revealed that public security officials in Xintai City had been committing to mental institutions residents who protested official corruption or the unfair seizure of their property.<sup>414</sup> In March, *China Daily* published a survey paid for by the Ministry of Industry and Information Technology that was critical of local government websites for lack of information and access to officials. The survey of 450,000 citizens showed that 78 percent were "very unsatisfied" with local web portals.<sup>415</sup> A February article announced an audit of local land use regulators in an effort to stop illegal seizures of rural land.<sup>416</sup> The newspaper also noted that a position reserved for a former city official's son had been eliminated after Internet protests that local government officials favor hiring the children of senior officials.<sup>417</sup>

The party has attempted to draw a sharp distinction between local officials, who are sometimes portrayed as corrupt, and central party leaders, who are portrayed as trying to end corruption. For example, the central government issued new rules in March on foreign travel by Chinese central government officials to prohibit non-business-related excursions, according to one news report.<sup>418</sup> In contrast to local officials who may line their pockets and fill the municipal coffers with the proceeds of forced sales of land, the government limits the property ownership rights of State Council

members. Commission witness Yukon Huang, from the Carnegie Endowment for International Peace, refers to this official mandate of transparency as the “fishbowl” for top Chinese leaders.<sup>419</sup> The trade-off, said Dr. Huang, is that top officials “be subjected to scrutiny in exchange for assuming power.”<sup>420</sup> He continued:

*When they assume those positions [they] have given up their ability to operate in the economy. They can't earn income; they can't give speeches; they don't own property; they can't even travel without someone signing off on them. When they leave and retire, you don't hear of them anymore. They can't do anything.*<sup>421</sup>

However, this fishbowl does not extend to the families of State Council members, Dr. Huang said. The children and families of Chinese officials regularly own businesses and earn income. Family members are still able to benefit from business and political connections.

Despite such efforts at reform, corruption remains a significant issue even among higher-ranking officials. In one recent example, Liu Zhijun, the former party chief of the Ministry of Railways, was dismissed from his position and placed under investigation for “severe violation of discipline,” a charge frequently used in cases of corruption.<sup>422</sup> The next month, Zhang Shuguang, the Railways Ministry deputy chief engineer, was also dismissed and investigated for corruption. *China Daily* reported that an audit found that at least \$28 million of the Beijing-Shanghai high-speed railway project had been misappropriated through “fake invoices, faulty bidding procedures and mismanagement.”<sup>423</sup> China’s newest rail system drew increased scrutiny after a collision between two bullet trains on July 23 killed 40 people. The state-owned China North Locomotive and Rolling Stock Company admitted that an automatic safety system had malfunctioned.<sup>424</sup> Onlookers were punished for photographing the site, and journalists were prohibited, in some cases, from initially reporting on the accident.

According to Xinhua, the official news agency, 11 ministerial-level officials were sentenced for corruption convictions to life imprisonment or faced other severe punishments in 2010.<sup>425</sup> Even so, officials have an easier time getting their sentences reduced. Xinhua reported that 20–30 percent of prisoners receive a reduced sentence, while convicted officials are given reduced sentences in 70 percent of the cases.<sup>426</sup> A common punishment for high-ranking officials guilty of corruption is a death sentence with a two-year reprieve. While seemingly harsh, this sentence can be legally reduced to life in prison and further commuted to “no less than 12 years for good behavior or contributing to society.” In the first five months of 2011 alone, at least four high-ranking officials were found guilty of corruption charges and sentenced to death with a two-year reprieve. These included former mayor of Shenzhen Xu Zongheng,<sup>427</sup> former Dangchang County Communist Party Chief Wang Xianmin,<sup>428</sup> former Deputy Director of Shanghai’s municipal housing support and building administration bureau Tao Xiaoxing,<sup>429</sup> and former Vice President of the Superior People’s Court of Chongqing Municipality Zhang Tao.<sup>430</sup>

After personal encounters with corrupt officials and institutions, Chinese citizens are becoming increasingly discouraged and aggravated by abuse of power even as the government works to demonstrate competency in reducing corruption at all levels. Given the regime change of the Arab Spring in the Middle East, the Chinese government is keenly aware of the potential that corruption has in serving as a rallying point of discontent under which dissatisfied citizens can gather, Dr. Huang told the Commission:<sup>431</sup>

*Much of this frustration is directed at failings that emanate from corruption and inconsistent application of the rule of law. Corruption in China is a major concern and source of potential internal instability. Even the senior leadership has recognized its seriousness in noting that if unchecked, it could threaten the credibility of the Party.*

### **Inflation**

The CCP faces the difficult challenge of maintaining a balance between growing too fast and overheating the economy, leading to price increases, or slowing growth to a level at which job creation lags behind the number of young adults entering the workforce. The problem for the party and the government is all the more difficult because China's central bank lacks the autonomy and the monetary tools to wage an all-out battle against inflation. Consumer prices increased by 6.1 percent in September, maintaining the fastest pace of inflation since the summer of 2008.<sup>432</sup> Particularly worrisome for Chinese officials was a 13.4 percent increase in food prices.

Food inflation also exacerbates the growing rural/urban wealth inequality divide. Food represents a larger percentage of overall consumption expenditures for rural households in China, 41 percent, than that of urban households, at 37 percent, according to official Chinese statistics.<sup>433</sup> By contrast, food expenditure in Japan averages 14 percent of household income and in the United States just 7 percent, according to UN statistics.<sup>434</sup>

Economic issues have been a large driver of protest in China. Sharp price rises were "perhaps the most pivotal factor" in the early days of the student protests in Tiananmen Square in 1989, Murray Scot Tanner, RAND Corporation senior political scientist, told the Commission. "If growth rates go below about 8 or 10 percent, [Chinese officials] think they're in trouble, but if the economy starts growing too fast and inflation starts taking over, that's been historically another source of unrest[.]"<sup>435</sup>

Nearly 22 years after the 1989 Tiananmen Square massacre, "the most powerful and widespread roots of discontent [are] unaffordable urban real estate followed by inflation—specifically rising commodity and food prices," noted Elizabeth Economy of the Council on Foreign Relations.<sup>436</sup> Several protests have already occurred in China as a result of increasing food and fuel costs. The government has largely relied on price controls to curb discontent, with mixed results. One demonstration against rising costs in April 2011 drew several hundred truck drivers to obstruct access to a Pudong district dock in Shanghai, China's most active port. The

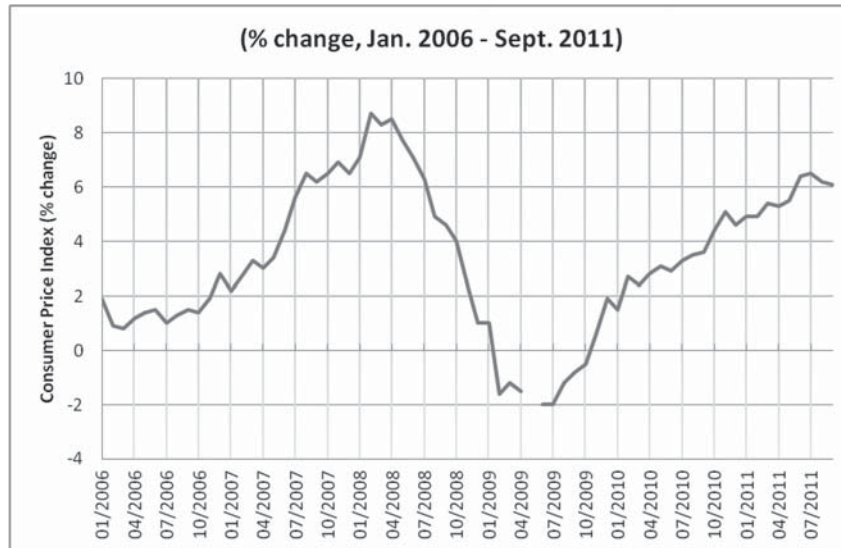
drivers cited increased fuel prices and new fees imposed by warehouse operators as the basis of their anger.<sup>437</sup> In response, the Shanghai Municipal Transport and Port Authority withdrew a fuel surcharge and reduced the cost of other related fees.<sup>438</sup>

While measures such as direct price controls are often effective in the short term in lowering specific costs, their effect is quickly dissipated as secondary or black markets spring up in response to shortages caused by hoarding or production cutbacks. In China, price reductions on energy also reduce the revenue of government-owned or -controlled energy companies, including coal mines. Managers of state-owned companies are expected to meet sales and revenue quotas at the same time that price controls reduce their company income. For example, oil and gasoline distributors suffer when their acquisition costs rise but their retail sales prices remain frozen by government fiat. Consequently, price controls are especially unpopular with government officials and state-owned businesses.

One way that the government has tried to hold down inflation is by pressuring companies to cancel price increases. The government has accused some foreign and domestic companies of “intensifying inflationary expectations among consumers” and “seriously disturbing market order.”<sup>439</sup> One such company, Unilever, was fined \$308,000 by the National Development and Reform Commission (NDRC) in March after announcing it planned to increase product prices by as much as 15 percent.<sup>440</sup> The announcement led to panic buying and hoarding among Chinese consumers and spurred the government to charge Unilever under its pricing law, which limits a company’s ability even to comment about future prices.<sup>441</sup> *China Daily* also reported that the NDRC instructed more than a dozen industry associations to postpone or call off planned price increases.<sup>442</sup>

China has a history of rapid price surges and strong but ultimately ineffective responses. In 2008, China registered a consumer price index that was 8 percent higher in the first quarter than during the same period in the previous year. In response, the government allowed the renminbi (RMB) to appreciate in order to lower the real costs of imports, raised the bank reserve requirement ratio to cut down on bank lending, and rejected requests for price hikes from several companies involved in the food industry.<sup>443</sup> Nevertheless, the consumer price index continued its climb and reached an 11-year high in November 2010, as the government froze the price of gasoline, natural gas, electricity, water heating, and urban public transport fees while setting temporary price controls on staples such as grain, edible oil, meat, milk, eggs, and liquefied petroleum gas.<sup>444</sup>

But the efforts to halt inflation did not keep prices from accelerating throughout 2011. Chinese officials reported that the inflation rate rose from 5.0 percent in the first quarter to a 6.3 percent rate in the third quarter. (See figure 1, below).<sup>445</sup>

**Figure 1: China's Consumer Price Index January 2006–September 2011**

Source: International Monetary Fund, accessed through CEIC Data Manager, *Consumer Price Index: % Change* (Washington, DC: May 31, 2011); *Trading Economics*, “China Inflation Rate at 6.1% in September” (New York, NY: October 14, 2011). <http://www.tradingeconomics.com/china/inflation-cpi>.

Despite the government’s dramatic moves, inflation may even be higher than government figures show. China relies on an inflexible consumer price index to measure inflation.\* China’s National Bureau of Statistics only updates the basket contents every five years, so it does not accurately capture current trends.<sup>446</sup> Commission witnesses suggested that Chinese methodology also fails to capture the true rate of inflation, perhaps deliberately.<sup>447</sup> While government-reported data may be erroneous, Dr. Economy noted that information on inflation in China is nevertheless available from a variety of nongovernmental sources including consumer-based tracking of foodstuff price increases, and those numbers are considerably higher:

*While the government may try to downplay the challenge of inflation or report specious numbers, postings by concerned citizens ensure that information is available from a number of sources. As one posting on a Chinese website noted, ‘As a whole, food prices have risen 10.3 percent since this time last year. The price increases, however, are not uniform across the board. The price of wheat has risen 15.1 percent, the price of meat 10.9 percent, eggs 20.2 percent, water 11.1 percent, vegetables have risen 2 percent and fruits have shot up over 34.8 percent.’<sup>448</sup>*

\*The consumer price index examines trends in prices for a sample, or basket, of goods within an economy to determine inflation. China does not publish the list it uses, but economists believe that food is 30 percent of the index.



In addition to price controls, China has also used monetary policy in an attempt to lower the rate of inflation. Since October 2010, the central bank has boosted interest rates five times. The People's Bank also raised reserve requirements five times in 2011, bringing the cash reserve ratio to a record high of 21 percent.<sup>449</sup> By requiring banks to hold more money in reserve for each loan a bank makes, China hopes to slow lending and therefore economic growth. This may be a false hope, however, as "shadow banking" or unregulated loans to the private sector from hedge funds, insurance companies, and money market funds, among others, continue to undermine China's efforts to control lending.<sup>450</sup> In December 2010, Fitch Ratings released a report warning that "[l]ending has not moderated, it has merely found other channels . . . [this] helps explain why inflation and property prices are still stubbornly high, why [third-quarter] GDP [gross domestic product] growth was stronger than expected."<sup>451</sup>

China has limited options for responding to inflation because of its steadfast policy of maintaining an undervalued RMB. This policy actually exacerbates China's inflationary problems by driving investment into manufacturing for exports and interfering with an important market mechanism, the appreciation of the RMB against other currencies, which would make imports cheaper, particularly manufacturing components and energy.

### **Income Inequality and *Hukou***

China faces a large and growing gap in income between its urban and rural populations and between its richest and poorest citizens. In 2010, the average urban citizens' overall income was 3.23 times greater than the average rural income.<sup>452</sup> Urban per-capita disposable income was 5,963 RMB in the first quarter of 2011, while rural residents' per-capita disposable income was less than half that amount, 2,187 RMB.<sup>453</sup> Urban citizens also have access to more jobs, sophisticated health care, better education, and available housing.

Another indicator of China's growing income disparity is its "Gini coefficient." The Gini coefficient is a measure of inequality. A score of 0 indicates total equality, while a score of 1 indicates maximum inequality. China's Gini coefficient rapidly increased from 0.215 20 years ago to 0.447 in 2001 and 0.490 in 2010.<sup>454</sup> China's income inequality is similar to that of the United States, Malaysia, and Singapore, Dr Huang noted to the Commission.<sup>455</sup> (By comparison, the United States also had a high Gini coefficient of 0.469 in 2009.)<sup>456</sup> But China's Gini coefficient may be understated because of China's generally unreliable statistical methods.

While China's official Gini coefficient of 0.490 is not excessively high, it does exceed what some characterize as the "danger" line of 0.4.<sup>457</sup> Dr. Huang characterized China's rate of growth as troubling for government authorities, because it means that China is facing a quickly bifurcating social structure.<sup>458</sup> Even the global recession did not change the trend. The number of "high net worth individuals" in China—defined as a person with \$1.5 million or more—doubled to 585,000 from 2008 to 2011.<sup>459</sup> Additionally, a report by the China Reform Foundation indicated that China's real Gini



score was actually considerably higher than the score quoted in official accounts. According to the *Wall Street Journal*:

*[A] landmark study earlier this year on unreported income ... found that hidden income totaled \$1.5 trillion, with 80 percent in the hands of the richest 20 percent. That would put China's Gini index at over 0.500, on par with many South American countries, and, if trends continue, headed for the income inequality of much of Africa.*<sup>460</sup>

The top income levels may be 3.2 percent wealthier than official data indicate, according to the study by economist and deputy director of the National Research Institute at the PRC's China Reform Foundation, Wang Xiaolu. Corruption may be one answer for the undercounting. Based on a detailed look at spending and income patterns in China in 2008, Dr. Wang estimates China's average urban household income is 90 percent higher than official data. His figures suggest the top 10 percent of Chinese households are 3.2 times richer than public data show, while the second decile income is 2.1 times higher.<sup>461</sup>

Other witnesses, however, were less concerned with the growing inequality, asserting that while the majority of Chinese citizens perceived income disparities as excessive, they did not feel that the gap was unfair. Noted Dr. Whyte:

*If income gaps widen but most people feel that the widened gaps are fair (as appears to be the case in our surveys), then feelings of inequity and injustice will not be generated. Contrary to some public statements in China, there is no Gini coefficient 'danger line' above which further widening of income gaps inevitably produces political turbulence.*<sup>462</sup>

Dr. Whyte did, however, find broad dissatisfaction among both urbanites and rural dwellers with the *hukou* registration system and its intrinsic tendency to produce inequality.<sup>463</sup> Created in its current form in 1960, China's modern *hukou* system was developed after 20 million migrants rushed to China's cities during the Great Leap Forward (1958–1960) in order to fill a perceived labor gap.<sup>464</sup> The *hukou* system was created to manage intracountry migration and 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.

Since *hukou* is hereditary, changing the designation of one's *hukou* is extremely difficult and requires either large amounts of money paid to well-connected officials or a specific exemption, such as admittance to an urban university. Individuals are more easily allowed to migrate downward, from a small city to a village, or horizontally, from small town to small town. This often occurs when a rural bride moves from her hometown to her husband's village.<sup>465</sup>

According to a 2010 Harvard University study:

*The hukou is the core of Chinese citizenship rights allocation, without which the state would not have been able to*

*curb rural-to-urban migration; the hukou is used to maintain the urban unit (danwei) system, to extract agricultural surplus (especially during the high Maoist period), and to enforce rigorous birth control measures (in the reform era), among other policy goals. . . . Likewise, China's hukou system has persisted and evolved into an even more complicated matrix of governance during the market transition years.*<sup>466</sup>

Although rural migrants are a key part of the workforce for China's urban-based exporters, these transplanted workers must live as second-class citizens when in urban areas, due in part to their rural *hukou* status. Not only do migrant workers face discrimination and lower wages from employers, but their families also are restricted from access to government services, including education, Dr. Huang testified. In some areas, migrant workers are restricted from purchasing property and registering vehicles and are ineligible for subsidized housing and public health insurance programs.<sup>467</sup>

Migrant workers in urban areas therefore live very basic lifestyles and tend to have high rates of saving. This allows migrant workers to maximize the amount they can send home and to accrue funds to cover healthcare, housing, and education costs.

According to the 2010 national census, more than 260 million Chinese citizens are a part of the "floating population" and do not live in the area designated on their *hukou*.<sup>468</sup> In Beijing alone, one in three residents is a migrant. This is a significant increase when compared with the year 2000's ratio of one in five.<sup>469</sup> Similarly, Shanghai's migrant population accounts for approximately 39 percent of the city's total population, an increase of 159 percent since 2000.<sup>470</sup> For both cities, migrants have been both a burden and an asset. On the one hand, the influx of migrants has taxed local transportation and healthcare facilities. On the other hand, migrants have reduced labor shortages in Shanghai and alleviated Beijing's aging population issue.

This dichotomy has made it difficult for the central government to overcome objections from municipalities to ending the *hukou* system. The Chinese government at the central and local levels has begun to address some of the problems, with mixed results. Healthcare has been expanded in rural areas. However, the level of care provided in rural areas is still below the urban standard, and doctors often will require full payment in advance for more complicated treatments.<sup>471</sup>

Holders of rural and urban *hukou* have joined in protest over the past year against the registration system's unfair policies. One of the most popularly supported issues is education and the inability of rural *hukou* holders to sit for the national university entrance examination in cities despite having lived there for the majority of their lives. Students must take the exam wherever their *hukou* is registered. For children of migrant workers, this means traveling to their parent's hometown and taking tests based on the local curriculum, which may differ from what they have prepared for in the cities.<sup>472</sup>

In May 2011, Beijing authorities revised public middle school admissions policies to give more access to non-Beijing *hukou* holders.

Previously, options for migrant students were scarce and included paying upwards of 30,000 RMB for “sponsorship fees” that would allow non-Beijing *hukou* holders access to Beijing public middle schools.<sup>473</sup> Of 102,000 children who graduated primary school in Beijing this year, 33.4 percent did not possess a Beijing *hukou*.<sup>474</sup> The new policy is expected to equalize entrance requirements for more than 30,000 students without a Beijing *hukou*.

Protests are rarely focused on the *hukou* system alone but rather on specific effects of the system. Farmers, whose residency licenses require them to live in rural areas, can be evicted nevertheless by Chinese officials through land seizures for infrastructure projects or land development. Without their means of livelihood, they are forced to move. Indeed, local governments rely on land sales for as much as 60 percent of their revenues in some cases, according to City University of Hong Kong political scientist Joseph Cheng.<sup>475</sup> This type of activity frequently results in protests.<sup>476</sup> In March, 2,000 Chinese villagers in Suijiang in Yunnan Province launched a five-day protest against unfair prices offered for land in a forced relocation for a hydroelectric dam. Most farmers in the region were offered the equivalent of only \$1,740 per acre, but many without the proper *hukou* were disqualified from any payment. Chinese paramilitary police broke up the demonstration, claiming that a dozen police, but no civilians, had been injured.<sup>477</sup>

One of the most notable calls to action against the *hukou* system occurred in March 2010 when 13 Chinese newspapers initiated a coordinated petition for *hukou* reform. Part of their jointly published editorial read:

*‘China has suffered from the hukou [household registration] system for so long,’ the appeal said. ‘We believe people are born free and should have the right to migrate freely, but citizens are still troubled by bad policies born in the era of the planned economy and [now] unsuitable.’<sup>478</sup>*

Chinese officials are exploring ways to amend the structure without completely abolishing *hukou*. China has launched several programs in rural areas and second-tier cities to improve access to social services, such as basic healthcare. However, Chinese officials still fear they would be faced with a massive influx of migrants into the cities. Local governments argue that the increased demand for public services, such as housing and healthcare, would overwhelm them if the influx were too rapid. In addition, urban residents in major Chinese cities have already protested modest attempts at increasing the rights of migrant workers out of fear that the current residents would face a loss of jobs and increased competition.<sup>479</sup> In both cases, the party and the government consider the potential instability too great a risk. Dr. Huang estimated that China’s rate of urbanization would grow rapidly from the current 40 percent to nearly 70 percent.

### The “Ant Tribe”

Chinese attempts to help citizens in rural and second-tier urban settings have also raised expectations and created disappointment. Graduates from second-tier universities in rural areas are unlikely to find employment in urban areas, because they often lack connections. *Hukou* plays a role in exacerbating the situation, since these students are ineligible for subsidized housing and healthcare due to their migratory status. This situation has created a large surplus of underemployed young people living in substandard housing, dubbed “the ant tribe.”<sup>480</sup> This ant tribe consists of over 6 million college graduates who annually flock to major Chinese cities such as Beijing and Shanghai looking for work.<sup>481</sup> Instead of finding jobs in their fields of study, they are forced to take sweatshop jobs or perform other low-skilled work.<sup>482</sup>

In the aftermath of the recent Middle East and North African revolutions, which featured a prominent role for disaffected youth, many academics pondered whether China could undergo a similar experience given its large population of unemployed recent graduates. Many academics agreed that while China shared some similarities to the attacked regimes, it was missing a few critical elements. Compared to Egypt and Tunisia, where youth unemployment is around seven to nine times higher than the national average, China’s unemployed youth, at 2.5 times the average, “is a serious but not explosive social problem,” according to Ho Kwon Ping, chairman of the Singapore Management University. However, quoting Lenin, that “awakened desperation, not idealism makes revolutionaries,” Mr. Ho further notes that:<sup>483</sup>

*Because of hukou ... these jobless graduates are living on the edge of society, almost as disenfranchised as Arab youth. This educated underclass will potentially be more angry and assertive than the floating mass of roughly 100 million to 150 million unskilled migrant workers, simply because their expectations are much higher. Connected by the Internet, they are a potent and potentially organizable force, watching and learning from events in the Arab world with growing interest.*

### The Middle Class

During the Commission’s February 25 hearing, witnesses discussed whether the middle class is a force for political change or for stasis. For the present, the growing middle class is considered unlikely to risk its future economic well-being by defying the Communist Party. The party has successfully taken credit for 30 years of economic growth—the very source and foundation of China’s middle class. The party, in turn, comprehends that its control rests, in part, on a middle class that places a high premium on economic stability.

Part of the divergence between these two views of the middle-class role in China’s transformation is due to the nature and size of China’s middle class. Cheng Li, a scholar at The Brookings Institution, notes that there are multiple paths to achieving middle-

class status, making the group heterogeneous and difficult to study. These paths include success in business, party membership, and through an urban social network.<sup>484</sup> This makes blanket conclusions about what the Chinese middle class will do difficult to formulate.<sup>485</sup>

In a book edited by Dr. Li, *China's Emerging Middle Class*, no agreement emerged on a single definition of the term.<sup>486</sup> Some have attempted to define the term based on surveys examining an index of key factors, including education, income, occupation, consumption, and self-identification. One article notes the broad range of estimates that have appeared as a result of varying criteria, stating that “[e]stimates of just how big China’s middle class is range from a low of 157 million (which would be second only to the United States) to more than 800 million.”<sup>487</sup>

Reflecting the importance of the role the middle class is expected to play in China’s future, the government has attempted to study and characterize the group. The Chinese Academy of Social Sciences estimated China’s middle class accounted for 19 percent of the nation’s 2003 population of 1.3 billion, or 247 million. The academy defined the group as having assets between \$18,137 and \$36,275. (This level of wealth would exclude the vast majority of China’s workers. That same year, the per-capita income of China’s 786 million farmers registered only \$317.)<sup>488</sup>

By 2009, China’s urban middle class had reached 230 million, or 37 percent of those living in cities, the academy reported. Based on historical patterns, China’s middle class would make up 40 percent of the population in 2020, the academy predicted. By 2010, 40 percent of Beijing citizens, or 5.4 million, were in the middle class, with an average monthly income of \$885, according to the Academy of Social Sciences.<sup>489</sup>

Precise numbers are debatable and comparisons among the surveys are difficult because some estimates use wealth and others calculate according to annual income. There is more consensus on the existence of two groups: a new and an old middle class. The old middle class is composed of the “self-employed, small merchants and manufacturers” who emerged from the economic reforms of the 1980s, while the new middle class consists of “salaried professionals and technical and administrative employees who work in large corporations” as well as small- and medium-sized enterprise owners.<sup>490</sup> It is, therefore, difficult to categorize the different middle classes as either a force for stability or for change. As Yang Jing, a sociologist at the East Asian Institute notes:

*China’s middle class composes of [sic] not only the majority of white-collar workers and well-educated professionals, but also those at the top of the social hierarchy in terms of wealth. Except for the new middle class who exhibit the most democratic mentality compared with the other two groups, China’s middle class as a whole has yet to hold a distinctive sociopolitical ethos. . . . Their acknowledgement of state authority is similar to that accorded by the rest of the society. As long as the majority of the middle class are able to maintain their current lifestyle despite the social policy reform, the force of democratization is unlikely to become strong.*<sup>491</sup>



Other experts, too, are skeptical that China's middle class will contribute to large-scale unrest or initiate a drive for democracy. George Washington University Professor Bruce Dickson wrote that the party has effectively linked the continued success of China's middle class to the current economic model. Instability or movement away from the current system would endanger that success.<sup>492</sup> Instead, some experts believe that China's urban middle class and elite will remain focused on local issues, especially in preventing construction of polluting or unsafe industry in their areas. Dr. Dickson suggested that China's middle class will be more focused on smaller, "not-in-my backyard" issues rather than with larger social change.

Another Commission witness, sociologist Martin Whyte, agreed.<sup>493</sup> Dr. Whyte's studies have focused on public perceptions of inequalities in China and have found that Chinese citizens are optimistic about their futures, which downplays the chance of significant social unrest. This is a surprising result, he argues, because China has become more unequal as it has developed. Dr. Whyte has written that "forms of wealth and privilege that the revolution set out to destroy have returned with a vengeance—millionaire business tycoons, foreign capitalists exploiting Chinese workers, gated and guarded private mansion compounds, etc."<sup>494</sup>

However, Chinese citizens are willing to accept this growing inequality, because they believe they have a chance to succeed. Dr. Whyte conducted a four-year study, including a questionnaire submitted to Chinese citizens, and found that the Communist Party had effectively convinced most of China's upwardly mobile population that its continued prosperity is inextricably linked to continued stability, while effectively shifting blame for corruption to local-level officials. He argued that China has successfully incorporated China's middle class into the group of winners in the current economic model. They are unlikely to push for systemic change, because their economic well-being remains linked to the control of the party.

Another aspect of China's middle class that pegs it as a force of stability is its size. Even when calculating the magnitude of the middle class at the highest end of the spectrum, the middle class remains a minority. Therefore, in theory, the middle class would be disinclined to bring about a democratic system that would put the majority of voting and political power in the hands of the lower class and the poor. "Those who have prospered from economic reform have no interest in sharing power or the spoils of prosperity with those beneath them," said Li Fan, director of the World and China Institute, a nongovernmental group in Beijing that studies political reform.<sup>495</sup>

Additionally, with the harsh punishments doled out to advocates of democracy such as Nobel Peace Prize winner Liu Xiaobo, the costs of supporting democracy are regarded as prohibitively high. The 2011 activities of Chinese security forces served as a powerful reminder to citizens that supporting the current regime and playing within the system was a far better alternative to near-certain arrest for protest. (For more on this topic, see the following subsection.)



There are some experts, however, who believe that China's middle class is a potential force for instability and that its members will likely challenge the CCP in the coming years. Commission witness Elizabeth Economy observed that China's middle class is now more willing to work to prevent the government from threatening their quality of life:

*In the past few years, the urban middle class has demonstrated a newfound willingness to advance its interests through protest. In addition, the Internet has become a virtual political system with individual complaints able to go viral in a matter of minutes, gaining widespread popular support across gender, age, profession, and provincial boundaries.<sup>496</sup>*

Middle-class protests in recent years have covered a variety of issues, including objections over a garbage incinerator being built in close proximity to middle-class homes, destruction of homes without proper compensation in the lead-up to the World Expo, concern over the environmental impacts of the extension of Maglev lines, and pollution concerns over the construction of a chemical plant. The majority of middle-class protests centered on issues that would adversely impact members' health and/or property value.

According to a survey by China's Academy of Social Sciences, the middle class is also the most likely group in China's social stratum to be critical of the present social and political situation and is the least confident of the government's performance.<sup>497</sup> However, the middle classes' higher levels of criticism and uncertainty about the party's abilities do not necessarily mean that they are the group with the most potential to destabilize the government. Protests among the middle class remain small in frequency and size, and government officials have acted quickly in redressing issues that have attracted significant middle-class anger. As a result, it seems likely that should the CCP continue to sustain healthy economic growth for the country and citizens remain optimistic about the future and see potential for upward mobility, the middle class will continue to be a force for stability for the current regime.

### **China's "Aging" Problem**

Although not as immediate a problem as inflation or mass unrest, China's aging population and stagnant population growth could act as a brake on the economy and an impediment to the growth of a middle class. The Chinese labor force, so crucial to the manufacturing sector, is due to start shrinking in 2016.<sup>498</sup> In addition, as the average age of the population increases, there will be fewer workers supporting more retirees.

Much of the demographic change is due to China's one-child policy, which was instituted in 1980. The policy prevented 400 million births, which would have pegged China's population at 1.73 billion by now, according to the National Population and Family Planning Commission, which administers the program.<sup>499</sup> The population over age 60 is now 13.3 percent of the total, up from 10.3 percent in 2000. Those under age 14 now make up 16.6 percent of the population, down from 23 percent in 2001. One solution is to raise the retirement age, but that would not be popular with those grad-

uating from college and hoping to find a job that might still be occupied.

One problem for China's rulers is the potential for wage inflation as the labor pool declines relative to the demand. However, that problem would be offset by a higher per-capita income.<sup>500</sup>

### **The Party's Response to Growing Unrest**

While the number of protests in China continues to rise, the Communist Party seeks to respond quickly and efficiently either to head off trouble or to quell disturbances before they escalate and serve as a rallying point for further protest. Internal security is one of the top priorities of the Communist Party, which has created a vast apparatus of government control. Monitoring and restraining the population from direct confrontations with the party and the central government are the top priorities. An indication of this is China's 12th Five-Year Plan (2011–2015), which includes a broad range of programs imposing strict controls over the population.<sup>501</sup> The outline, released in March 2011 to the National People's Congress, laid out the party's rapid response system for "emergency incidents." The plan "must be under a comprehensive, unified command, rationally structured, capable of nimble reactions, and it must have guaranteed capability and high-efficiency operations."<sup>502</sup>

The scope of the investment in stability, which includes collaboration among police and paramilitary forces, Internet monitors, and the judiciary, has surpassed China's published military budget.\* China's Finance Ministry budget report showed that in 2010, China's spending on law and order, including police, state security, armed militias, and courts and jails was \$83.5 billion. China's officially reported military expenditure was \$81.2 billion in 2010. The security budget was due to grow faster than military expenditures, by 13.8 percent versus 12.7 percent for the military budget.<sup>503</sup> One example of China's spending on internal security is the effort underway in Chongqing to create the largest police surveillance system in the world, with 500,000 cameras intended to cover a half-million intersections, neighborhoods, and parks over 400 square miles in an area more than 25 percent larger than New York City.<sup>504</sup>

Despite rapid economic growth and increased prosperity, China continues to face growing numbers of public protests, officially referred to as "mass incidents."<sup>505</sup> While official Chinese numbers have not been released since 2005, Dr. Tanner has studied protest statistics, including local Chinese police statistics, and has detected a spike in incidents following the financial crisis in 2008:<sup>506</sup>

*Protest numbers apparently spiked with the onset of the financial crisis soon after the Summer Games, and by the end of 2008, total mass incidents had reportedly risen to 120,000 despite the pre- and post-Olympic security. Nationwide figures for 2009 and 2010 are not yet available, although local data and reports by some prominent Chinese academics indicate protests climbed greatly in 2009 in the wake of economic difficulties.<sup>507</sup>*

\*China's military budget is generally assumed to be larger than officially published figures.

Traditionally, protests were centered in rural areas in response to repressive government actions, especially over abuses by corrupt local officials. While rural protests continue today at record numbers, protests now occur more frequently in urban areas, drawing greater attention. One tactic of suppressing rural riots—blocking foreign media access to remote areas—is not possible within cities. The party has seen a growing number of middle-class and urban residents beginning to protest government actions prior to their enactment. These urban protests were notably different from rural incidents, because they involved middle-class Chinese citizens protesting policies before they were imposed, substituting a demonstration for a petition.<sup>508</sup>

The common theme among all of these issues is China's inability to respond to the underlying factors creating them. This is why protest numbers have continued to increase while China's economy has grown.<sup>509</sup> According to Dr. Economy:

*The roots of protest in China rest in the systemic weakness of the country's governance structure. A lack of transparency, official accountability, and the rule of law make it difficult for public grievances to be effectively addressed and encourage issues such as inflation, forced relocation, environmental pollution, and corruption to transform from otherwise manageable disputes to large-scale protests.*

Dr. Tanner agreed, noting that “[p]arty leaders have repeatedly had to reissue orders calling for an end to these abuses, even while these abuses remain leading causes of unrest.”<sup>510</sup>

### **Censorship and Thought Control**

The CCP and the central government also seek to control the Internet. However, protesters and activists continue to play a cat-and-mouse game with Chinese censors. Chinese microblogs, similar to Twitter, are widely used in China, with over a million posts every hour.<sup>511</sup> China's top two microblogs have over 200 million subscribers.<sup>512</sup> Besides their immense popularity, microblogs are particularly useful for organizing events in China under the nose of Chinese censors, for two reasons. First, 140 characters can convey far more information in Mandarin than in English. Second, the number of homonyms in Mandarin allows users to mask the true meaning of posts from censors.<sup>513</sup> For example, the Mandarin word for harmony sounds like the word for river crab. When Chinese bloggers want to mock the government's “harmonious society” propaganda themes, they reference a river crab with watches lining its arms as a symbol of greedy officials. A “watered weasel ape” sounds like the word for “administrator” and is used to refer to the much-maligned Internet censors. A mythical creature, the grass mud horse, sounds like “... your mother,” where the reference to mother is taken to mean the Communist Party.

China's government has fought the technology. In 2010, the government blocked more than one million websites, including Facebook, Twitter, YouTube, and Evite.<sup>514</sup> Domestic microblogs were required to self-censor postings. In 2011, foreign microblog providers, including Twitter, remained unable to gain market ac-

cess. Most market analysts believed the prohibition on foreign microblogs was driven by concerns among government regulators over the ability to censor those sites.<sup>515</sup>

China began requiring that bars, restaurants, hotels, and bookstores offering access to the Internet install Web-monitoring software to provide the identities to the public security agencies of those logging on. Establishments that resist face a \$2,300 fine and revocation of their business license. Cybercafés offering computers must demand from the customers a state-issued identification before logging on.<sup>516</sup>

China's central government responded forcefully to the possibility that the unrest in the Middle East might spread to China. In January, as protests began in Egypt, Chinese Internet users could not complete keyword searches for terms such as "Egypt" or "Cairo." Official reporting on the protests, such as coverage on the Xinhua website, glossed over the causes of the protests or framed them in a negative light.<sup>517</sup> In a March front-page editorial, *Beijing Daily* had this to say of protests in the Middle East: "Such movements have brought nothing but chaos and misery to their countries' citizens and are engineered by a small number of people using the Internet to organize illegal meetings."<sup>518</sup>

By February, China began to detain human rights and democracy activists<sup>519</sup> and to reimpose restrictions on foreign journalists and to disrupt access to certain websites, including Google's e-mail product, Gmail.<sup>520</sup> Text messages with the words "jasmine" and "revolution" were bounced back. This response was triggered by anonymous Internet postings calling for a Jasmine Revolution in China, the same name given to the December 2010–January 2011 Tunisian revolution in which President Zine El Abidine Ben Ali was ousted after mass civil protests were launched.<sup>521</sup> U.S. ambassador to China Jon Huntsman's name was also blocked from Chinese microblogs in February after he was photographed near an anticipated Jasmine Revolution gathering in Beijing.<sup>522</sup>

On April 3, 2011, Chinese officials detained noted activist Ai Weiwei. Mr. Ai is one of China's most famous artists and an architect who helped design Beijing's "Bird's Nest" building used in Beijing's 2008 Summer Games opening ceremonies. Mr. Ai's wife and employees were also questioned or arrested. Authorities later reported that Mr. Ai was being charged with "economic crimes" including tax evasion. After his release on bail in late June 2011, Mr. Ai eventually returned to posting on the Internet even though he had been ordered not to "be interviewed by journalists, meet with foreigners, use the Internet and interact with human rights advocates for a year from his release."<sup>523</sup> Mr. Ai may have violated the terms of his release when he began posting again on his Twitter account. Mr. Ai revealed that he had undergone "intense psychological pressure" and been interrogated more than 50 times.<sup>524</sup> He also began talking about other prisoners of conscience and abuses by authorities.

Another high-profile case of censorship this year concerned Liu Xiaobo, a human rights activist who was sentenced to 11 years in prison for inciting subversion as one of 303 Chinese activists who called for an expansion of freedoms for Chinese citizens and an end to one-party rule in China in the *Charter 08* manifesto.<sup>525</sup> In Octo-

ber 2010, the Nobel Committee announced that Liu Xiaobo had won the Nobel Peace Prize. In response, China's cybersecurity team blocked all searches of his name and prevented access to foreign news websites such as CNN and the BBC.<sup>526</sup> Mr. Liu's wife was also placed under house arrest, and any gatherings to celebrate the award were quickly dispersed and some attendees jailed.<sup>527, 528</sup> On the day of the actual awards ceremony, CNN and BBC television channels and websites were blocked in mainland China, and text messages containing the words "Liu Xiabo" or "Nobel prize" were blocked as well.<sup>529</sup>

In addition to foreign media being censored online, foreign reporters in China have noticed increased monitoring by authorities and restrictions on their movement. The *New York Times* reported in March that one of its staff had two telephone calls dropped when the call quoted Queen Gertrude from William Shakespeare's *Hamlet*. The line "the lady doth protest too much, methinks" in either English or Mandarin caused both calls to be disconnected due to the use of the word "protest."<sup>530</sup> The Chinese government has also instituted new rules requiring foreign journalists to have government permission when interviewing anyone in a public area.<sup>531</sup>

China has rescinded many of the freedoms that were granted to foreign reporters in the run-up to the Beijing Olympic Games. Reporters are no longer allowed to cover protests or the state response. These restrictions, as well as the arrests of well-known Chinese activists and lawyers, prompted an official complaint from the U.S. embassy in early March, according to a State Department briefing:

*[T]he United States is increasingly concerned by the apparent extralegal detention and enforced disappearance of some of China's most well-known lawyers and activists, many of whom have been missing since mid-February. We note that Teng Biao, Tang Jitian, Jiang Tianyong, and Gu Chuan all disappeared between February 16 and February 19. We have expressed our concern to the Chinese Government over the use of extralegal punishments against these and other human rights activists. We continue to urge China to uphold its internationally recognized obligations of universal human rights, including the freedoms of expression, association, and assembly.*<sup>532</sup>

In response to these protests, a Foreign Ministry spokeswoman said that China would "urge the [UN] mechanism to respect China's judicial sovereignty."<sup>533</sup>

### **Implications for the United States**

China's neighbors, and trading partners, particularly the United States, have an interest in China's peaceful rise and its transition to a modern economic and political system. An evolution of the Chinese government and economy to a multiparty democracy and a free market system would benefit China's citizens as well. Chinese political dissidents, advocates of human and labor rights, and its entrepreneurs all have an incentive and an important role in fostering such a change.



The party and the government in Beijing are determined to pursue at all costs the preservation of single-party rule and the existence of a large, state-owned and -controlled economic sector. In recent years, this has led to violent confrontations and counterstrikes against citizens airing legitimate grievances. These protests are most often aimed at specific instances of local corruption or abuses of power, yet the central government is fearful that such protests could become a political movement.

Internal dilemmas such as the *hukou* system, by definition, are more likely to have an impact on Chinese citizens than the United States. However, issues including governance practices, consumer product safety regulations, and media restrictions may have transnational implications. For example, corruption, abuse of power and suppression of the media may compromise U.S. commercial opportunities just as weak safety supervision may result in tainted food or hazardous products entering the U.S. markets. In addition, tolerance of corruption disadvantages American companies complying with the Foreign Corrupt Practices Act.

The Chinese government continues to manipulate the value of its currency, keeping the RMB at an artificially low value in order to reduce the price of its exports and to increase the price of imports. This policy creates inflation within China's economy and reduces the ability of China's central bank to conduct monetary policy. This policy also reduces U.S. exports to China while it encourages U.S. consumers to purchase Chinese exports. The result has been lost production and jobs in the United States.

### Conclusions

- The primary objective of the CCP is to remain in power. All other goals are intended to serve that end. As a consequence, the party has dedicated enormous resources to repress dissent before it becomes a destabilizing element and threatens the party's control.
- Despite the efforts of the party and the government to minimize dissent, citizen protest has been on the rise. Protests are sometimes brutally suppressed. The government will arrest and detain as a precautionary measure those it considers a threat to its control. The party and the government employ the news media to propagandize and mislead the public.
- The party is well aware of the dangers to its continuing authority posed by public rejection of a government that is unresponsive to the people. The party therefore reacts to citizen ire by attempting appeasement. This may take the form of authorizing the news media to highlight official abuses, particularly those committed by local officials. Still, corruption in all levels of government remains a problem for Beijing.
- Inflation has historically caused problems for the government in China. The rural poor and migrant workers are particularly disadvantaged by higher prices because they are so often reflected disproportionately in food and energy, which consume a larger portion of family expenses in rural areas. The government has responded to rising inflation with price controls and some curbs on bank lending. These tools are inadequate in the long run. Chi-



na's policy of keeping the RMB undervalued in order to gain an export advantage removes a powerful anti-inflation tool from the central bank.

- Income and wealth inequality is a growing problem in China. One cause is the *hukou* system of residential registration, which was intended to limit the migration of the rural poor to the cities. This has created a large migrant population in China, moving from city to city to seek work in factories but unable to access healthcare and education services without the proper *hukou* designation for that area. This situation perpetuates poverty among the disadvantaged. Local officials favor it, because it limits their responsibility toward the migrant workers. A smaller group, known as the "ant tribe," consists of college graduates from second-tier schools in rural areas who also lack the *hukou* to live in urban areas but who nevertheless seek but are unable to find the jobs that they have trained for. This restive and disappointed population is a potential source of unrest.
- China's middle class has been considered by some to be a potential force for political reform. But the opposite is likely. As long as the party can deliver strong economic growth, particularly in urban areas, the middle class is likely to remain a force for stability.
- China's central government has reacted strongly to perceived challenges to its authority. It detains and imprisons dissidents. It censors the news and punishes journalists for infractions of its unwritten and arbitrary rules. China also attempts to control and censor the Internet and has had more success than most other authoritarian regimes in suppressing the flow of information among the public.

## RECOMMENDATIONS

### *Chinese State-owned Enterprises and U.S.-China Bilateral Investment*

The Commission recommends that:

- Congress urge the administration to employ all necessary remedies authorized by WTO rules to counter the anticompetitive and trade-distorting effects of the Chinese government's extensive subsidies for Chinese companies operating in China and abroad.
- Congress assess the extent to which existing laws provide for effective remedies against the anticompetitive actions of Chinese state-owned or state-invested enterprises operating in the U.S. market. Appropriate remedies, if they are not readily available, should also be considered.
- Congress urge the administration to include in any bilateral investment treaty with China the principles of nondiscrimination and competitive neutrality between SOEs and other state-invested or -supported entities and private enterprises.
- Congress assess China's new national security review process for foreign investment to determine whether it is being used as a trade barrier.
- Congress direct the U.S. Department of Commerce to report annually on Chinese investment in the United States including, among other things, data on investment in the United States by Chinese SOEs and other state-affiliated entities.
- Congress direct the U.S. Securities and Exchange Commission to revise its protocols for reviewing filings by foreign entities listed on or seeking to be listed on the U.S. stock exchanges. The Securities and Exchange Commission should develop country-specific data to address unique country risks to assure that U.S. investors have sufficient information to make investment decisions. The commission should focus, in particular, on state-owned and -affiliated companies, and subsidies and pricing mechanisms that may have material bearing on the investment.
- Congress urge the administration to review federally subsidized contracts provided under the American Recovery and Reinvestment Act of 2009 and report on the extent to which Chinese-produced goods and services were procured using such funds.
- Congress urge the administration to direct the USTR to move aggressively to bring more WTO cases against China for violating its obligations under the WTO Subsidies Agreement.

- Congress urge the administration to direct the USTR to strengthen its mandated annual review of China's compliance with its WTO obligations by adding conclusions and recommendations to its annual report to Congress.

### ***Indigenous Innovation and Intellectual Property Rights***

The Commission recommends that:

- Congress request the administration to report on whether procurement catalogues are actionable under WTO obligations.
- Congress instruct the administration to insist that all procurement catalogues at all levels of government be explicitly recalled in order to comply with assurances by President Hu Jintao to separate government procurement from the catalogues.
- Congress urge the administration to raise with China in the Strategic and Economic Dialogue and the Joint Commission on Commerce and Trade and in other appropriate bilateral and multilateral venues the need for China to table a serious offer to join the Government Procurement Agreement that provides reciprocal opportunities for access to the estimated \$1 trillion in procurement controlled by central, provincial, and local governments as well as state-affiliated entities. If China fails to engage in serious negotiations, the U.S. government should restrict access to Chinese suppliers to government procurement opportunities and should coordinate policies with the states to limit procurement contracts with China.
- Congress instruct the administration to make a top priority within the Joint Commission on Commerce and Trade and the Strategic and Economic Dialogue negotiations an agreement to lower the threshold for criminal prosecution of cases of piracy and counterfeiting of business and entertainment software.
- Congress recommend the administration adopt a more reciprocal trading relationship in critical areas, such as intellectual property protection. The United States should demand the same level of treatment from its major trading partners that it provides to those other nations. The administration should identify those sectors that China has failed to open up to trade in goods and services and identify the practices that act to nullify and impair anticipated economic benefits for U.S. producers and service providers. The administration should seek the elimination of such practices in a timely manner and, if unable to gain sufficient market access, should evaluate what reciprocal actions may be appropriate.
- Congress urge the administration to insist that China audit the use of licensed software on government computers rather than just audit the budget for software procurement. The audit should be performed by the World Bank.
- Congress assess the reauthorization of Super 301 to assist in the identification of the policies and practices that China pursues that create the greatest impediment to U.S. exports entering the Chinese market and the most important policies or practices that

unfairly or unjustifiably harm U.S. producers and workers in the U.S. market. Priority should be given to addressing such practices by the United States Trade Representative under such legislation.

- The President should direct USTR to move aggressively to bring cases to the WTO to enforce intellectual property rights.

### ***China's 12th Five-Year Plan and Technology Development and Transfers to China***

The Commission recommends that:

- Congress hold hearings to assess the success of the Strategic and Economic Dialogue and the Joint Committee on Commerce and Trade in addressing Chinese actions to implement its WTO commitments, including with regard to the issue of technology transfers. In preparation for such hearings, Congress should request that the Government Accountability Office prepare an inventory of specific measures agreed to as part of these bilateral discussions and the implementation efforts of the Chinese.
- Congress direct the Government Accountability Office to undertake an evaluation of investments and operations of U.S. firms in the Chinese market and identify what federally supported R&D is being utilized in such facilities and the extent to which, and on what terms, such R&D has been shared with Chinese actors in the last ten years.

### ***China's Internal Dilemmas***

The Commission recommends that:

- The administration work with the Chinese leaders in the Strategic and Economic Dialogue and the Joint Commission on Commerce and Trade talks to identify specific commodities and products in the case where supply does not adequately meet demand in China and where enhanced access for U.S. goods might help alleviate inflationary pressures. Specific attention should be given to agricultural commodities and Chinese barriers that may limit access to the Chinese market for American goods and products.
- Congress direct the Government Accountability Office to conduct a review of efforts by the Chinese government to censor content on the Internet and identify the extent to which any foreign technology providers may be assisting the government in its efforts.

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531. Keith B. Richburg, "Amid fears of unrest, China imposes new restrictions on foreign journalists," *Washington Post*, March 8, 2011.
532. U.S. State Department Daily Press Briefing, comments by Spokesman P.J. Crowley (Washington, DC: March 8, 2011).
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## **CHAPTER 2**

### **CHINA'S ACTIVITIES DIRECTLY AFFECTING U.S. SECURITY INTERESTS**

#### **SECTION 1: MILITARY AND SECURITY YEAR IN REVIEW**

##### **Introduction**

This section provides an overview of the most relevant Chinese military and security developments since the Commission's *2010 Annual Report to Congress*. It is divided into three subsections: military developments, China's recent foreign policy activities, and updates on China's cyber activities. This year's military developments section describes progress in China's military modernization efforts, official statements from Beijing concerning its security interests, recent People's Liberation Army (PLA) activities, and the U.S.-China military-to-military relationship. China's foreign policy subsection focuses on China's assertive behavior in the South China Sea over the past year. The final subsection describes China's recent cyber activities, both at home and abroad.

##### **Military Developments in 2011**

Over the past year, several notable developments involving China's military have occurred. China's military modernization continued to progress, as evidenced by a series of firsts: China conducted test flights of its first stealth fighter, conducted a sea trial of its first aircraft carrier, and may have deployed the world's first ballistic missile capable of hitting moving ships at sea. China also conducted a major noncombatant evacuation of its citizens from Libya, the first involving the PLA. The past year also saw the resumption of military-to-military engagement between the United States and China, with three consecutive meetings between senior U.S. and Chinese military officials. The following subsection describes these events.

##### **Military Modernization**

###### ***J-20 stealth fighter***

In January 2011, China conducted the inaugural test flight of its next-generation fighter aircraft, the J-20. Although the flight attracted considerable attention in and outside of China, few details emerged about the fighter. Developed at the Chengdu Aircraft Design Institute, the plane appears to have a sufficient combat radius

to operate beyond China's borders and will likely have midair refueling capabilities.\* The fighter's other features, such as the speed and altitude at which it can travel, and its thrust capabilities and maneuverability, could not be determined by foreign observers of the test. Each of these capabilities depends on the J-20's engine, a component that the manufacturer may not yet have finally selected.<sup>1</sup> As described in the Commission's 2010 Report, turbofan engine development remains a persistent weakness in China's aviation industry,<sup>2</sup> which raises questions about the J-20's performance potential if it relies on domestic technology. The use of a Russian engine is one possibility to overcome any problems with an indigenous Chinese engine.† The U.S. Department of Defense (DoD) does not anticipate the J-20 to be operational prior to 2018.<sup>3</sup>

The J-20's design has led to considerable speculation about its stealth capability, or ability to evade radar detection. This capability consists primarily of the plane's configuration and design, as well as the materials and coatings it incorporates.‡ Aspects of the J-20's design, such as the forewings ("canards"), engine cover ("cowling"), jet and pelvic fin, and engine nozzles raise questions about whether it would successfully evade advanced radars.<sup>4</sup> In addition to design, the use of certain materials and coatings absorb radar signals, which can increase stealth. Pictures and video of the J-20 do not provide enough information to determine whether China's defense industries have mastered this aspect of advanced aircraft design. However, in late January 2011, Croatia's former military chief of staff stated that China had possibly received the stealth technology for the J-20 from parts of a U.S. F-117 stealth bomber shot down over Serbia in 1999.§

### U.S. Corporate Participation in China's Aviation Programs in 2011

Several western aviation firms established or deepened ties to Chinese state-owned aviation firms in 2011. For example, General Electric (GE) Aviation and the state-owned Aviation Industry Corporation of China announced in January a joint venture

\* "Combat radius" refers to the distance a plane can travel to a mission area, execute a mission, and have adequate fuel to return to its base. Combat radius estimates for the J-20 range from 1,000 to 1,500 nautical miles. Carlo Kopp, "An Initial Assessment of China's J-20 Stealth Fighter," *China Brief* 11:8 (May 6, 2011): 9. [http://www.jamestown.org/uploads/media/cb\\_11\\_8\\_04.pdf](http://www.jamestown.org/uploads/media/cb_11_8_04.pdf).

† Two J-20 demonstrators may exist: one with a Chinese WS-10A engine and one with a Russian-made AL-F1FN engine. Notably, China has been unable to place the WS-10 series engine into serial production even several years after its development plans had been completed. As recently as last year, China requested advanced 117S engines from Russia. Tai Ming Cheung, "What the J-20 Says About China's Defense Sector," *Wall Street Journal*, January 13, 2011. [http://blogs.wsj.com/chinarealtime/2011/01/13/what-the-j-20-says-about-chinas-defense-sector/?mod=rss\\_WSJBlog&mod=chinablog](http://blogs.wsj.com/chinarealtime/2011/01/13/what-the-j-20-says-about-chinas-defense-sector/?mod=rss_WSJBlog&mod=chinablog).

‡ This discussion includes passive design features but not active measures, such as electronic warfare, that might be used to evade radar detection.

§ China's state-run newspaper, *Global Times*, referred to this claim as a "smear." BBC, "China stealth fighter 'copied parts from downed US jet,'" January 24, 2011. <http://www.bbc.co.uk/news/world-asia-pacific-12266973>; BBC, "China newspaper rejects J-20 stealth jet claim," January 25, 2011. <http://www.bbc.co.uk/news/world-asia-pacific-12274807>. China also reportedly gained access to U.S. stealth materials from Pakistan following the downing of a U.S. stealth helicopter used for the raid on Osama Bin Laden's compound in May 2011, although the event took place after the J-20's maiden voyage. Reuters, "Pakistan let China see crashed U.S. 'stealth' copter," August 14, 2011. <http://www.reuters.com/article/2011/08/14/us-pakistan-china-usa-idUSTRE77D2BT20110814>.



**U.S. Corporate Participation in China's Aviation Programs in 2011—Continued**

for integrated avionics, which, according to a GE press release, will transfer ownership of GE's existing civilian avionics operations to the joint venture and be "the single route-to-market for integrated avionics systems for both GE and AVIC [Aviation Industry Corporation of China]." The press release further describes the deal, stating that "the new AVIC [Aviation Industry Corporation of China] and GE joint venture company will develop and market integrated, open architecture avionics systems to the global commercial aerospace industry for new aircraft platforms. This system will be the central information system and backbone of the airplane's networks and electronics and will host the airplane's avionics, maintenance, and utility functions."<sup>5</sup> Notably, GE characterized the joint venture's work in China as research and development "to come up with breakthrough technologies and create 'new IP [intellectual property] and new technology'." In describing the Aviation Industry Corporation of China, the press release also noted that "[t]he company has also developed strong capabilities to supply avionics products to various models of aircrafts, both for military and civil use."<sup>6</sup> Of import, because GE is also providing the engines for the C919, through a joint venture with the French firm Snecma (Safran Group),<sup>7</sup> improving the C919's avionics will make it more marketable, which will in turn allow GE to sell more engines. It is worth noting that as a Commission-sponsored report details, both engine development and avionics are areas where China's aviation industry continues to have problems and currently must rely on foreign imports.<sup>8</sup>

Boeing also undertook several new projects with the Aviation Industry Corporation of China in 2011. In June, the firms announced the creation of a new Manufacturing Innovation Center in Xi'an, which would, among other things, "support AVIC's [Aviation Industry Corporation of China] goals of improving its manufacturing and technological capabilities and the competitiveness of its affiliated factories to achieve global Tier-1 supplier status."<sup>9</sup> In addition, Boeing announced in April that it planned to double the capacity of a joint venture with the Aviation Industry Corporation of China, called Boeing Tianjin, which produces composites.<sup>10</sup> One of the joint venture's customers is the Xi'an Aviation Industry Corporation,<sup>11</sup> which manufactures components for civil aircraft and produces military aircraft, such as the JH-7A fighter bomber and the H-6 bomber, for the PLA.<sup>12</sup>

***Aircraft carrier program***

In July 2011, China officially revealed its long-suspected aircraft carrier program when it publicly announced that it was developing an aircraft carrier.<sup>13</sup> A month later, China conducted a sea trial of its first aircraft carrier off the port of Dalian.<sup>14</sup> Not an indigenously developed vessel, China's aircraft carrier is a renovated Soviet *Kuznetsov*-class carrier (the *Varyag*) purchased from Ukraine in 1998. At the time of its purchase, a Hong Kong company, with al-



leged ties to the Chinese government and the PLA, purchased the carrier without engines, rudders, or weapons, ostensibly for use as a floating casino off the island of Macau.<sup>15</sup> After several years of setbacks, in 2002 the *Varyag* finally arrived at the Chinese port of Dalian, its current homeport.\*<sup>16</sup> Although it is unclear when the PLA officially gained control over the vessel, China has been working since 2004 to make the carrier operational. After the sea trial, the *Varyag* returned to Dalian for further work.<sup>17</sup> According to unnamed PLA sources, the carrier will not be launched officially until October 2012.<sup>18</sup> Unconfirmed rumors also posit that China is constructing one or more indigenous carriers for a future aircraft carrier fleet.<sup>19</sup> China is also developing the aircraft to be deployed along with the aircraft carriers. In April 2011, Internet photos revealed a test version of a carrier-based fighter, the J-15.<sup>20</sup> According to analysts, this aircraft appears to be a modified version of China's J-11B fighter, which in itself is an unlicensed adaptation of Russia's SU-27 Flanker. The J-15 is not expected to be deployed before 2016.<sup>21</sup> The PLA Navy is also developing the means to train future pilots in the dangerous task of taking off from and landing on an aircraft carrier. In June 2011, China's Guizhou Aviation Industry conducted the test flight of an advanced trainer aircraft, the JT-9 (also referred to as the JL-9H).<sup>22</sup> China has also constructed at least two land-based pilot training centers to teach PLA Navy pilots how to land on an aircraft carrier. Both centers have ski-jump platforms that mimic the shape of the *Varyag's* deck.<sup>†</sup><sup>23</sup>

The People's Republic of China's (PRC) official position about the use of its aircraft carrier is that it will be used for "scientific research, experiment and training."<sup>24</sup> This corresponds with the U.S. Department of Defense's view, which maintains that China's first aircraft carrier "will likely serve initially as a training and evaluation platform and eventually offer a limited operational capability."<sup>25</sup> However, a Chinese Ministry of Defense spokesman noted in July 2011 that a carrier could be used for offensive or defensive purposes as well as for disaster relief and that China was pursuing its carrier program "in order to increase its ability to protect national security and world peace."<sup>26</sup> Another article in China's official press says that aircraft carriers are vital to China given China's "vast territorial waters" and the current inability of the PLA Navy to safeguard this region. The article also points out China's need to safeguard its global interests and protect the sea lanes upon which China's continued economic development rests.<sup>27</sup>

China's aircraft carrier development program currently poses little direct threat to the United States and is likely more of a concern to regional maritime states. In testimony to the U.S. Senate, Robert F. Willard, commander of the U.S. Pacific Forces, stated

\* Because the *Varyag* lacked engines and rudders, Turkish authorities were reluctant to allow it to be towed through the Bosphorus Strait, for fear of damaging the narrower portions of the strait. Ian Story and You Ji, "China's Aircraft Carrier Ambitions: Seeking Truth from Rumors," *Naval War College Review* LVII: 1 (Winter 2004): 83.

† Given the small flight deck of carriers compared to land-based runways, aircraft rely upon two means for successfully lifting off from an aircraft carrier. Conventional aircraft carriers, such as U.S. carriers, have a catapult system that assists the aircraft in reaching the requisite speed prior to take-off. Another method is to install a slight ramp on the end of the deck, referred to as a "ski-jump," that propels the aircraft up and out as it exits the ship's deck. China's *Varyag* aircraft carrier has a ski-jump type deck. Michael Wines, "Chinese State Media, in a Show of Openness, Print Jet Photos," *New York Times*, April 25, 2011. <http://www.nytimes.com/2011/04/26/world/asia/26fighter.html>.

that he was not concerned about the military impact of the carrier. However, Admiral Willard did note that it could have an impact on perceptions of China in the region.<sup>28</sup> When the *Varyag* is deployed, it will make China one of only ten countries that operate aircraft carriers, none of which are countries with which China has maritime disputes.\* Possession of an aircraft carrier would allow China to project force throughout the region, especially into the far reaches of the South China Sea, something it currently cannot fully do. Possibly in an attempt to temper regional fears of China's aircraft program, China's state-run news outlet Xinhua wrote, "[t]here should be no excessive worries or paranoid feelings on China's pursuit of an aircraft carrier, as it will not pose a threat to other countries, and other countries should accept and be used to the reality that we are developing the carrier."<sup>29</sup>

Given the complexity of conducting carrier operations, it is expected to be several years before China's aircraft carrier will be fully operational.<sup>30</sup> According to Michael McDevitt, a retired rear admiral in the U.S. Navy, the PLA Navy will face a number of challenges in the coming years integrating carrier and air wing operations.<sup>31</sup> Additionally, as defense analysts Nan Li and Christopher Weuve noted, "An aircraft carrier is not a solo-deploying ship. To be survivable in an intense combat environment, it needs escorts to protect it."<sup>32</sup> China has taken steps to develop such support systems, but their capabilities are uneven. For example, according to the same analysis, "While China has acquired new surface combatants with sophisticated antisurface and antiair capabilities, it continues to lag behind in the area of ASW [anti-submarine warfare]," which could seriously challenge carrier operations in certain scenarios.<sup>33</sup>

### ***The DF-21D antiship ballistic missile***

Over the past year, several developments concerning China's antiship ballistic missile, the DF-21D, have occurred. In December 2010, Admiral Willard described in the following exchange with a reporter how the DF-21D was possibly operational:

*Reporter: Let me go into China's anti-access/area denial (A2/AD) capabilities. What is the current status of China's anti-ship ballistic missile development, and how close is it to actual operational deployment?*

*Admiral Willard: The anti-ship ballistic missile system in China has undergone extensive testing. An analogy using a Western term would be 'initial operational capability,' whereby it has—I think China would perceive that it has—an operational capability now, but they continue to develop it. It will continue to undergo testing, I would imagine, for several more years.*

*Reporter: China has achieved IOC [initial operational capability]?*

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\*The other nine countries currently possessing aircraft carriers are Brazil, France, India, Italy, Russia, Spain, Thailand, the United Kingdom, and the United States. China currently has maritime disputes in the East China Sea with Japan, and in the South China Sea with Brunei, the Philippines, Malaysia, Taiwan, and Vietnam.

*Admiral Willard: You would have to ask China that, but as we see the development of the system, their acknowledging the system in open press reporting and the continued testing of the system, I would gauge it as about the equivalent of a U.S. system that has achieved IOC [initial operational capability].*<sup>34</sup>

In July 2011, Chinese sources officially confirmed the development of the DF-21D for the first time. In an article in China's state-controlled *China Daily* newspaper, PLA Major General Chen Bingde, chief of the General Staff, acknowledged that the PLA is developing the DF-21D. However, Major General Chen dismissed the notion that the missile is currently operational, stating that the DF-21D "is still undergoing experimental testing" and that "it is a high-tech weapon and we face many difficulties in getting funding, advanced technologies and high-quality personnel, which are all underlying reasons why it is hard to develop this." The *China Daily* article further noted that the DF-21D is "a ballistic missile with a maximum range of 2,700 kilometers (km) and the ability to strike moving targets—including aircraft carriers—at sea."<sup>35</sup> Of import, the stated range of this missile is significantly greater than the DOD's estimate of "exceeding 1,500 km."<sup>36</sup> It is unclear what accounts for this discrepancy, although in response to a Commission question, the DoD attributed the differences in stated ranges to possible erroneous reporting by the Chinese press and remained "confident" about the department's original assessment.<sup>37</sup> (For more on the DF-21D and how it could play an integral part in China's efforts to deny U.S. military forces the ability to operate freely in the western Pacific, see chap. 2, sec. 2, of this Report.)

## **Official Statements**

### ***2011 defense budget***

In March 2011, China officially released its defense budget for the year. According to Chinese sources, China's defense budget for 2011 is \$91.5 billion, a 12.7 percent increase over 2010.<sup>38</sup> This represents the 20th increase in as many years. According to the DoD, between 2000 and 2010 "China's officially disclosed military budget grew at an average of 12.1 percent in inflation-adjusted terms," a percentage value that the DoD also notes tracks closely with the growth in China's gross domestic product for the same period.<sup>39</sup> However, western analysts readily discount Chinese figures for its defense budget as inaccurate. Because these statistics do not take into account all defense expenditures, the likely figure is much higher.<sup>40</sup> In testimony to the Commission, Mark Stokes, a former lieutenant colonel in the U.S. Air Force and current executive director of the Project 2049 Institute, stated, "While the PLA deserves credit for greater transparency, key areas of defense expenditure, such as research and development, remain opaque."<sup>41</sup> China's official defense budget also does not include foreign procurement.<sup>42</sup> Abraham Denmark, then fellow at the Center for New American Security, testified to the Commission that "given China's practice of significantly under-reporting defense expenditures, it is safe to estimate China's actual annual spending on its military power to be well over \$150 billion."<sup>43</sup> In its 2011 report to Con-

gress, the DoD noted that China's 2010 defense budget was likely about twice what Beijing reported, at over \$160 billion.<sup>44</sup>

### ***China's 2011 defense white paper***

On March 31, 2011, China released its seventh biannual defense white paper, *China's National Defense in 2010*, an authoritative statement of Beijing's views of China's security environment. This report posits a relatively optimistic picture, noting that "China is still in the period of important strategic opportunities for its development, and the overall security environment for it remains favorable." However, the paper lists several areas that Beijing views as a potential threat to China's stability and security: Taiwan, independence movements in China's Tibet and Xinjiang provinces, China's disputed maritime claims, nontraditional security concerns,\* and growing opposition to China stemming from China's rise. Of import, the white paper singles out the United States (the only nation mentioned by name) in the section on "threats and challenges" because of U.S. arms sales to Taiwan.<sup>45</sup>

As an important piece of China's strategic messaging, the primary audience for China's defense white papers is foreign actors.<sup>46</sup> This iteration in particular appears to be an attempt to allay fears of China's growing military capabilities in the region.<sup>47</sup> According to the Congressional Research Service, "The overall purpose of the defense white paper seems to be to counter what Beijing calls the 'China Threat Theory' and to affirm that the PRC remains a peaceful power pursuing 'Peaceful Development' with a military that is 'defensive in nature.'" <sup>48</sup> CNA China Studies Center, a Washington, DC-based, research institute, described how:

*The main message of the 2010 edition for external audiences is one of reassurance. The message being conveyed . . . is that Beijing has not changed its defensive military posture despite its growing military capabilities and its various extraterritorial military deployments. . . . These messages of assurance come on the heels of a period of about two years during which Chinese foreign policy and security policy initiatives were described by foreign observers as 'assertive' or uncharacteristically muscular. Consequently, one likely objective of this paper is to calm the waters, especially in the Asia-Pacific region.*<sup>49</sup>

Despite the stated goal of providing more transparency on China's military modernization efforts and intentions, the defense white paper falls short.<sup>50</sup> Phillip C. Saunders, director of studies at the Center for Strategic Research at the U.S. National Defense University, asserted that the 2010 white paper is less transparent than previous iterations.<sup>51</sup> The report provides few new details, leaving many critical questions unanswered.<sup>52</sup> For example, Shirley A. Kan, an Asian Defense Security analyst at the Congressional Research Service, noted that China's 2010 defense white paper provided:

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\*The defense white paper lists the following nontraditional security concerns: terrorism, energy resources, financial problems, information security, and natural disasters. Information Office of the State Council, *China's National Defense in 2010* (Beijing, China: March 2011).

*no details on satellites, anti-satellite (ASAT) weapons, space program, aircraft carriers, ships, strategic and other submarines, fighters including the J-20 fighter that was flight tested during Defense Secretary Robert Gates' visit in January 2011, aerial refueling for operations far from China, new nuclear-armed intercontinental ballistic missiles, anti-ship ballistic missiles, land attack cruise missiles, or short-range ballistic missiles threatening Taiwan.*<sup>53</sup>

## **Military Operations**

### ***Antipiracy operations off the Horn of Africa***

In July 2011, the PLA Navy dispatched its ninth task force to conduct escort missions through the pirate-infested waters of the Gulf of Aden.<sup>54</sup> As the Commission noted in its 2009 report, since January 2009, the PLA Navy has assisted United Nations (UN) antipiracy operations around the Horn of Africa.<sup>55</sup> The PLA Navy's current task force consists of a destroyer, a frigate, a replenishment ship, and a small contingent of marines. According to Chinese statistics, to date the task forces have escorted approximately 4,000 Chinese and foreign-flagged cargo vessels in the region.<sup>56</sup> Since early 2010, the task forces have conducted regular monthly port calls for replenishment and overhaul, stopping mainly at three locations: Port of Salalah (Oman), Port of Djibouti (Djibouti), and Port of Aden (Yemen). PLA Navy ships from the task forces have also conducted at least 19 friendly port calls during their deployment in support of the China's military diplomacy efforts. During five of these port visits, the PLA Navy conducted joint maritime drills with the host nation's naval forces.\*<sup>57</sup>

The PLA Navy, similar to vessels from Russia, India, and Japan, primarily conducts antipiracy escort missions of civilian cargo vessels and does not participate in regional counterpiracy operations.† However, the PLA Navy does coordinate its antipiracy activities with the main counterpiracy task force, Combined Task Force 151, through a separate, monthly gathering called Shared Awareness and Deconfliction. China has even expressed an interest in assuming the chairmanship of this latter institution.<sup>58</sup> During a May 2011 visit to the United States, Major General Chen opened the door for the possible participation of Chinese forces in counterpiracy operations, stating that “for counterpiracy campaigns to be effective, we should probably move beyond the ocean and crash their bases on the land.”<sup>59</sup>

### ***Evacuation of Chinese civilians from Libya, February–March 2011***

During the fighting between pro-Qaddafi and anti-Qaddafi forces in Libya in February and March 2011, the Chinese government conducted what it considers to be its “largest and the most complicated overseas evacuation ever” and the first involving the

\* The maritime drills were conducted with the navies of Italy, Pakistan (twice), Singapore, and Tanzania. Open Source Center, “OSC Interactive Map: Chinese PLA Navy Escort Mission Port Calls,” *OSC Summary* (May 2, 2011). OSC ID: FEA20110503017394. <http://www.opensource.gov>.

† Counterpiracy operations are operations that seek actively to suppress piracy, as opposed to antipiracy operations, which are operations to prevent and deter piracy.



PLA.<sup>60</sup> Prior to the conflict, China had approximately 36,000 citizens working in Libya for 75 Chinese companies. As the fighting intensified, China's citizens and company facilities increasingly came under attack.<sup>61</sup> In an effort to ensure their safety, the Chinese government organized a complex evacuation operation that, according to the Chinese Ministry of Foreign Affairs, involved "91 domestic chartered flights, 12 flights by military airplanes, five cargo ferries, one escort ship, as well as 35 rented foreign chartered flights, 11 voyages by foreign passenger liners and some 100 bus runs." After eight days, "all Chinese in Libya who desired to go back and whose whereabouts were known by the foreign ministry—35,860 in number, had been evacuated."<sup>62</sup>

This was the first noncombatant evacuation operation from an active combat zone in which the PLA participated. On February 24, the PLA Navy dispatched the guided missile frigate *Xuzhou*, then participating in antipiracy operations off the Horn of Africa, to assist in the evacuation efforts. Arriving in the Mediterranean, the frigate began escorting chartered civilian ships evacuating Chinese citizens to Greece.<sup>63</sup> In another first, the PLA Air Force also dispatched four IL-76 transport aircraft to assist in the evacuation process. These aircraft, dispatched from China's westernmost province, Xinjiang, on February 28, began evacuating people to Khartoum, Sudan, the next day. According to Chinese reports, the aircraft flew over Pakistan, Oman, Saudi Arabia, and Sudan before landing in Sabha, Libya. During the flight to Libya, the aircraft refueled twice, in Karachi, Pakistan, and Khartoum, Sudan.<sup>64</sup>

## **U.S.-China Military-to-Military Relations**

### ***Secretary of Defense Robert F. Gates' visit to China***

On January 9–12, 2011, then U.S. Secretary of Defense Robert F. Gates visited China, marking the resumption of U.S.-China military-to-military relations that China cut off following the Obama Administration's January 2010 notification to Congress about potential U.S. arms sales to Taiwan. During his visit, Secretary Gates met with Chinese Minister of Defense General Liang Guanglie and General Secretary of the Chinese Communist Party (CCP) and President Hu Jintao and visited the headquarters of the Second Artillery (the PLA's strategic rocket forces). Over the course of the trip, the leaders discussed tensions on the Korean Peninsula, nuclear strategy, and the possible development of joint military exercises in maritime search and rescue, humanitarian assistance, disaster relief, counterpiracy, and counterterrorism, among other things.<sup>65</sup>

The stated goal of Secretary Gates' trip was to initiate a regular, bilateral defense dialogue over contentious issues like nuclear policy, missile defense, cybersecurity, and space security in order to avoid future miscommunication and miscalculation.<sup>66</sup> Observers perceived that this goal was only partially achieved, as General Liang declined to put forth a timetable for such talks, only agreeing that defense exchanges between the two countries would occur in the first half of 2011 and that the PLA was "studying" the proposal for a regular dialogue.<sup>67</sup> After the trip, Secretary Gates stated that he was satisfied with the overall visit, saying that "this is



not an area where you will see dramatic breakthroughs and new headlines, but rather evolutionary growth.”<sup>68</sup>

The unexpected highlight of the trip was the test flight of China’s new J–20 stealth fighter aircraft, which took place hours before Secretary Gates’ meeting with President Hu. When Secretary Gates inquired about the test flight, President Hu claimed to be unaware that it had occurred.<sup>69</sup> A Chinese defense ministry deputy director stated that the test was part of a “normal working schedule” and that it was not related to Secretary Gates’ visit.<sup>70</sup> According to the Commission testimonies of Andrew Scobell, senior political scientist at the RAND Corporation, and Mr. Denmark, it is inconclusive whether or not the test was planned to occur because of the visit.<sup>71</sup> The “surprise” test flight raised concerns that the PLA might be acting independently of China’s civilian leaders. In a speech in Tokyo following his trip to China, Secretary Gates noted that “[o]ver the last several years we have seen some signs of ... a disconnect between the military and the civilian leadership [in China].” He added that he was confident that President Hu and the CCP remained fully in control of the military.<sup>72</sup> Dr. Scobell, however, opined that “[f]undamentally, the J–20 episode underscores the fact that civilian control of the military is underinstitutionalized in 21st Century China.”<sup>73</sup>

### ***PLA Chief of Staff Chen Bingde’s visit to the United States***

China’s pledge to enhance military-to-military exchanges in 2011 was upheld in May when the PLA Chief of General Staff, Major General Chen Bingde, visited the United States. During his trip, Major General Chen toured four military bases;\* delivered a speech at the U.S. National Defense University; and held talks with Secretary Gates, Secretary of State Hillary Rodham Clinton, and Admiral Mike Mullen, then chairman of the Joint Chiefs of Staff. He and his delegation also attended a goodwill concert featuring performances of the official bands of the U.S. Army and the PLA.<sup>74</sup>

A joint statement presented by Admiral Mullen and Major General Chen outlined six bilateral agreements reached from the visit: (1) a consensus that the two sides would work together within the framework agreed by President Hu and President Barack Obama; (2) the establishment of a direct telephone line between the Chinese Ministry of Defense and the U.S. Department of Defense; (3) plans to conduct joint naval exercises in the Gulf of Aden as part of the international antipiracy effort; (4) plans to conduct a humanitarian disaster rescue and relief joint training exercise in 2012; (5) an agreement to exchange medical information and conduct joint medical rescue training exercises; and (6) an invitation from China for the U.S. Army Band and shooting team to visit China.<sup>75</sup>

Although the two sides were able to reach several points of consensus, a number of differences were highlighted. During a press conference, General Chen commented on China’s opposition to sev-

\*General Chen toured Naval Station Norfolk, Virginia; Fort Stewart, Georgia; Nellis Air Force Base, Nevada; and the National Training Center at Fort Irwin, California. Agence France-Presse, “U.S. Rolls Out Red Carpet for China Military Chief,” May 14, 2011. <http://www.defensenews.com/story.php?i=6502345>.

eral U.S. military policies, including arms sales to Taiwan, reconnaissance activities along Chinese coasts by U.S. military aircraft and vessels, and restrictions on U.S. exports of high technologies to China.<sup>76</sup> Of note, some U.S. observers, including Members of Congress, were critical of Major General Chen's visit to U.S. military bases, saying those visits might violate the *2000 National Defense Authorization Act*, which bans Chinese military visitors to the United States from "inappropriate exposure" to information that could be used to enhance the PLA's capacity to conduct combat operations.<sup>77</sup>

### ***Admiral Mullen's visit to China***

Admiral Mullen reciprocated Major General Chen's visit in July 2011. Admiral Mullen and his 39-person delegation visited Beijing as well as Shandong and Zhejiang provinces, where they met with a number of high-level government and military officials, including Vice President (and likely future President and Party Secretary) Xi Jinping. On the trip, Admiral Mullen visited units in the army, navy, air force, and the Second Artillery (strategic rocket forces) and was introduced to several pieces of Chinese military technology, including the Su-27, one of China's most advanced operational fighter jets, and a Type-39A *Yuan*-class diesel-electric submarine.<sup>78</sup> At a joint press conference, Admiral Mullen and Major General Chen announced plans to hold antipiracy maneuvers in the Gulf of Aden by year's end, to hold talks on operational safety in Hawaii and China, and to plan joint humanitarian relief exercises in 2012.<sup>79</sup>

Some divisive issues punctuated the visit. During a press conference, General Chen three times criticized recent joint naval exercises between the United States, Australia, and Japan in the South China Sea. He also raised complaints over controversial non-military issues such as the attitudes of some American politicians toward China and a U.S. visit by the Dalai Lama.<sup>80</sup> Admiral Mullen expressed concern over North Korea's recent provocative comments and actions and encouraged Beijing to use its strong ties with Pyongyang to ensure stability on the Korean Peninsula.<sup>81</sup>

### **Implications for the United States**

As demonstrated above, China has progressed substantially over the past year in its military modernization efforts. These developments show that China is attempting to increase its ability to project power in the region. Developments in China's stealth fighter, aircraft carrier and carrier aircraft, and antiship ballistic missile programs, when completed, will provide the PLA with an increased capacity to exert control over the western Pacific and threaten regional states and U.S. forces operating within the region in the event of a conflict. These developments also embolden China and the PLA in its interactions with other nations, as evidenced during recent U.S.-China military-to-military dialogues.

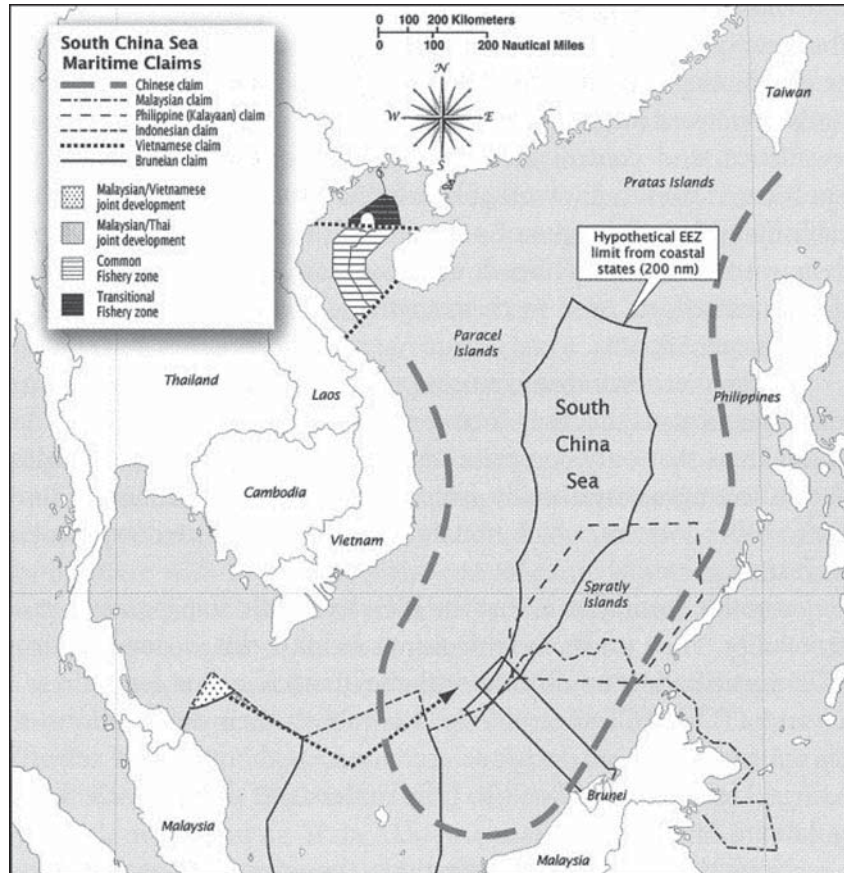
### **Recent Chinese Assertiveness in the South China Sea**

Tension between China and other claimants in the South China Sea territorial disputes [see figure 1, below] has waxed and waned in recent years, with periods of confrontation and intimidation followed by attempts at reconciliation and confidence building.\* China displayed increasing territorial aggression in the spring and summer months of 2011. In June, Ian Storey, fellow at the Institute for Southeast Asian Studies in Singapore, noted that tensions in the disputed seas were at their highest levels since the end of the Cold War.<sup>82</sup> Notwithstanding China's intermittent displays of cooperation, China's expanding military, commercial, and rhetorical assertiveness in the South China Sea indicates that China is unlikely to concede any of its sovereignty claims in the area.<sup>83</sup> Expert witnesses testified to the Commission that China's patterns of assertiveness in the South China Sea call into question its "peaceful rise" as well as its long-term views toward its regional neighbors and the United States.<sup>84</sup>

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\* Brunei, China, Malaysia, the Philippines, Taiwan, and Vietnam are claimants in maritime disputes in the South China Sea. For information on developments in the South China Sea in 2009 and 2010, see U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, 2010), pp. 132–137.

Figure 1: Territorial Disputes in the South China Sea



Source: James Clad, Sean M. McDonald, and Bruce Vaughn, eds., *The Borderlands of South-east Asia* (Washington, DC: National Defense University, 2011), p. 121. Note: Indonesia does not consider itself a claimant to any dispute in the South China Sea, even though its territorial claims in the region overlap with China's. Permanent Mission of the Republic of Indonesia to the United Nations, Circular Note No. 480/POL-703/VII/10, July 8, 2010. [http://www.un.org/Depts/los/cles\\_new/submissions\\_files/mysvnm33\\_09/idn\\_2010re\\_mys\\_vnm\\_e.pdf](http://www.un.org/Depts/los/cles_new/submissions_files/mysvnm33_09/idn_2010re_mys_vnm_e.pdf).

The following are examples of China's assertiveness in the South China Sea in the past year:

*Obstruction of resource exploration activities*—Chinese vessels obstructed resource exploration activities in the claimed territories of other countries at least three times in the first half of 2011. Each of these instances may constitute a violation of the United Nations Convention on the Law of the Sea, which allows any country sovereign rights to conduct economic or resource management activities in an exclusive economic zone (EEZ) up to 200 nautical miles from its shores and to which China is a signatory.<sup>†</sup> In March 2011,

<sup>†</sup> An exclusive economic zone is the maritime territory of a coastal state out to 200 nautical miles, where the coastal state enjoys "sovereign rights for the purpose of exploring and exploit-

Continued

two Chinese patrol boats aggressively approached and chased away a seismic survey vessel conducting an assessment of a gas field in the Philippines' EEZ near the disputed Spratly Islands. The vessel, chartered by the British energy consortium Forum Energy, was conducting work on behalf of the Philippine government.<sup>85</sup> The incident prompted harsh responses from the Philippines in the following months. Philippine President Benigno Aquino III announced plans to take the dispute over the Spratly Islands to the United Nations International Tribunal on the Law of the Sea.<sup>86</sup> He also vowed to bolster the Philippines' military power in order to protect its economic interests in the face of growing Chinese assertiveness. In June, the Philippines announced a \$252 million upgrade for its navy and deployed its largest warship to patrol the South China Sea.<sup>87</sup> In September, the Philippines allocated an additional \$118 million for the purchase of a navy patrol vessel, six helicopters, and other hardware to secure the perimeter of the country's largest gas extraction project, which is located 50 miles from a Philippine island near waters claimed by China.<sup>88</sup> President Aquino also called on the United States, a treaty partner, to help the Philippines stand up to the Chinese.<sup>89</sup>

Vietnamese officials reported that Chinese boats harassed Vietnamese oil and gas surveying ships operating in the South China Sea on two separate occasions in 2011. In the first incident, which occurred in late May, state oil company PetroVietnam alleged that while it was conducting seismic operations, Chinese airplanes harassed the company's ships, and three Chinese marine surveillance vessels subsequently cut the company's survey cables.<sup>90</sup> The second incident occurred in June and involved a Chinese patrol boat cutting the cable of a Vietnamese oil-drilling research vessel.<sup>91</sup> Both incidents occurred in Vietnam's EEZ, less than 200 nautical miles from the Vietnamese coast, and the second of the incidents occurred more than 600 nautical miles from China's island province of Hainan.<sup>92</sup> In previous years, Chinese patrol boats typically only harassed fishermen, not oil and gas vessels.<sup>93</sup>

*Deep sea oil rig stationed in the South China Sea*—China has built an advanced, deep-water oil rig that it plans to use in the South China Sea. Launched in the summer of 2011, the \$1 billion oil rig, owned by the Chinese state-owned oil company China National Offshore Oil Corporation, is China's first deep-water drilling rig and allows China to drill in deeper waters than ever before.<sup>94</sup> The exact location of the rig was unclear at the time of the publication of this Report. The Philippines has expressed concern and has asked China's embassy to clarify the exact location of the planned rig.<sup>95</sup>

*Harassment of Vietnamese and Philippine fishermen*—Vietnamese and Philippine fishermen reported an uptick in harassment by Chinese maritime patrol boats in early 2011, including the threatening of fishermen and the seizure and confiscation of fish

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ing, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the sea-bed and of the sea-bed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds." United Nations, "Exclusive Economic Zones," *United Nations Convention on the Law of the Sea* (New York, New York: December 10, 1982). [http://www.un.org/Depts/los/convention\\_agreements/texts/unclos/part5.htm](http://www.un.org/Depts/los/convention_agreements/texts/unclos/part5.htm).



and equipment from “dozens” of Vietnamese vessels.<sup>96</sup> The increase in harassment coincided with China’s annual unilateral fishing ban in sections of the South China Sea, parts of which are disputed by Vietnam.<sup>97</sup> In June, four Vietnamese fishing boats in waters outside the disputed Spratly Islands reported that Chinese naval ships fired shots into the water near the fishermen’s boats and chased them away.<sup>98</sup> In July, a Chinese vessel threatened a Vietnamese fishing boat near the disputed Paracel Islands. The Vietnamese fishermen reported that ten armed Chinese “soldiers” boarded their boat, punched and kicked the captain, and confiscated one ton of fish.<sup>99</sup> These displays of aggression toward fishermen, as well as the cable cutting, fueled unrest in Vietnam and spurred weekend protests against China in Vietnamese cities throughout the summer.<sup>100</sup> Chinese vessels also harassed Philippine fishermen, despite the fact that claimed Philippine waters are not within the jurisdiction of China’s fishing ban. The authorities in Manila claimed that from February to June 2011, Chinese ships had entered into disputed Philippine territory and harassed local fishermen nine times.<sup>101</sup>

*Deployment of patrol ships in the South China Sea*—China’s increased assertiveness in disputed waters is attributable in part to a strategic increase in maritime patrols in regions considered especially important or sensitive to China. Responsibility for maritime patrolling is shared by five state agencies and several regional governments.<sup>102</sup> One of these agencies, China’s Bureau of Fisheries, announced in December 2010 that China would strengthen fisheries management in “sensitive” waters, including the South China Sea.<sup>103</sup> This pledge was put into practice in September 2011 when an additional fisheries patrol ship was sent to waters around the disputed Paracel Islands in order to “strengthen fishery administration in the waters around Xisha [the Paracel Islands], ensure fishery production order and safety of fishermen, and protect China’s sea sovereignty and fishery interest,” according to an Agriculture Ministry official.<sup>104</sup>

In June, another agency, China’s State Oceanic Administration, announced that China’s regular maritime surveillance would be strengthened in China’s claimed maritime areas in the South China Sea.<sup>105</sup> China Marine Surveillance, which is the main maritime patrolling body under the State Oceanic Administration, plans to significantly increase personnel and patrol vessels and vehicles in the period during the 12th Five-Year Plan (2011–2015).<sup>106</sup> According to Li Mingjiang, assistant professor at S. Rajaratnam School of International Studies in Singapore, this expansion will enable China Marine Surveillance to conduct daily patrols in areas where it currently has the capacity for only one or two patrols each month.<sup>107</sup>

Also in June, the Chinese Maritime Safety Administration ship *Haixun-31* arrived in Singapore on what was noted in the press to be both a goodwill visit and a demonstration of China’s “national rights and sovereignty” in the South China Sea.<sup>108</sup> Singapore does not claim any part of the disputed South China Sea, but one day after *Haixun-31* made its port call, the Singaporean Defense Ministry called on China to clarify its claims in the South China Sea,



saying that ambiguity over China's claimed territory was causing "serious concerns" in the international community.<sup>109</sup>

In late August 2011, the *Financial Times* reported on another apparent instance of Chinese patrolling of disputed waters. The newspaper reported that a Chinese warship "confronted" an Indian navy vessel located 45 nautical miles off the Vietnamese coast on July 22. The vessel was returning from a scheduled port call in the southern Vietnamese port of Nha Trang.<sup>110</sup> India's Foreign Ministry quickly denied the report, noting only that an unseen caller identifying himself as the "Chinese Navy" contacted the Indian ship, the *INS Airavat*, and stated "you are entering Chinese waters," after which the *INS Airavat* proceeded on its journey. Chinese Foreign Affairs spokesman Ma Zhaoxu said that China had received no diplomatic protest from India over any naval incident.<sup>111</sup>

*Military exercises in the South China Sea*—China has conducted at least four series of military exercises in the South China Sea since November 2010.<sup>112</sup> According to testimony from Jim Thomas, vice president for Studies at the Center for Strategic and Budgetary Assessments, and Stacy Pedrozo, a U.S. Navy captain and military fellow at the Council on Foreign Relations, the PLA Navy conducted several significant exercises in 2010, including a November 2010 amphibious assault exercise that demonstrated PLA Navy capabilities to seize islands and project military power beyond mainland shores.<sup>113</sup> In June 2011, the PLA Navy staged similar drills off the coast of Hainan, China's island province in the South China Sea.<sup>114</sup> A PLA exercise took place along the Vietnam-China border in August 2011 as well, fueling media speculation that a large buildup of Chinese troops in the region could be related to South China Sea tensions.<sup>115</sup>

These exercises demonstrate the modernization of China's naval forces and China's will to project force beyond its shores, developments that have been met with considerable unease in the region. According to Mr. Thomas:

*[T]he stakes in the South China Sea could not be higher. . . . In the last year . . . China has made a series of provocative moves that, when coupled with the continuation of its arms buildup and the development of its naval power projection capabilities, have raised concerns throughout the region about its intentions and potential expansionist designs in the East and South China Seas.*<sup>116</sup>

*Construction on the disputed Spratly Islands, South China Sea*—In early June 2011, the Philippines' Department of Foreign Affairs stated that Philippine ships had witnessed a Chinese maritime surveillance vessel and PLA Navy ships unloading building materials and erecting a number of posts and a buoy on Amy Douglas Bank.<sup>117</sup> The bank, a small feature in the Spratly Islands, is located within what both China and the Philippines consider their EEZs.<sup>118</sup> The 2002 *Declaration on the Conduct of Parties in the South China Sea*, a legally nonbinding agreement between China and the Association of Southeast Asian Nations (ASEAN),\* which

\* ASEAN is a regional geopolitical and economic organization comprising the Southeast Asian nations of Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore,

provides guidelines for dealing with disputes in the South China Sea, declares that claimants should refrain from occupying previously uninhabited features in disputed areas.<sup>119</sup> According to Dr. Storey, if these reports are true, “it would be one of the most serious violations of the 2002 *Declaration of Conduct* to date.” Prior to China’s construction on Amy Douglas Bank, no claimant was proven to have begun construction on unclaimed islands and rocks since the declaration was signed.<sup>120</sup>

*Intimidating claimants with harsh rhetoric and closed-door directives*—Even during periods of conciliation and cooperation between China and other claimants, Southeast Asian claimants felt pressured to appease China on issues related to maritime disputes, according to officials and experts whom the Commissioners met during a December 2010 trip to Southeast Asia.<sup>121</sup> For instance, Secretary Clinton’s reference to the South China Sea as a “national interest” of the United States during her speech at the 2010 ASEAN Regional Forum was met with mixed reactions in Southeast Asia.† While some regional powers welcomed Secretary Clinton’s speech as reassurance of U.S. commitment to the region, Commissioners were told that her remarks, and China’s adverse reaction to them, prompted some claimant countries to minimize the territorial disputes publicly so as not to attract China’s ire.<sup>122</sup> For this apparent reason, a joint statement from a U.S.-ASEAN Leaders Meeting in September 2010 in New York City made no mention of the South China Sea, even though an earlier draft of the statement included explicit references to the disputes. According to a Singaporean government official who met with Commissioners, Vietnam’s representative at the New York meeting insisted that all references to the South China Sea be taken out of the statement.<sup>123</sup> Commissioners were also told that China had approached all ASEAN members separately and directed them to refrain from discussing the South China Sea, even among themselves.<sup>124</sup>

China’s insistence that claimants not discuss the disputes among themselves was challenged in September 2011, when ASEAN representatives met for two days to discuss a multilateral dispute resolution proposal offered by the Philippines. Senior Philippine diplomats said that Beijing had protested against the meeting, and a Chinese Defense Ministry spokesman remarked shortly after the gathering that China opposes “any move which is designed to multilateralize or internationalize the South China Sea issue.”<sup>125</sup>

Of import, China’s party-run media outlets have published a number of strongly worded editorials advocating that China use its military might to assert its sovereignty over disputed areas in the South China Sea. One such editorial, published in the party-run publication *Global Times*, asserted that China should “punish”

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Thailand, and Vietnam. The Official Website of the Association for Southeast Asian Nations, “Overview.” [http://www.asean.org/about\\_ASEAN.html](http://www.asean.org/about_ASEAN.html).

† In an address during the 2010 ASEAN Regional Forum, Secretary Clinton asserted that the United States has a strategic interest in the “freedom of navigation, open access to Asia’s maritime commons, and respect for international law in the South China Sea.” She also offered for the United States to play a facilitating role in establishing a binding code of conduct for the claimants. These comments met harsh criticism in China, and China’s Foreign Ministry announced that Secretary Clinton’s remarks were “in effect an attack on China.” U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, 2010), pp. 132–139.

other claimant countries, namely Vietnam and the Philippines, by launching small-scale battles against their forces in the region.<sup>126</sup>

### Implications for the United States

China's intensified rhetoric and expanding presence in the South China Sea carry significant implications for the United States. China's growing maritime power could threaten U.S. interests in the Pacific and could lead to Chinese attempts to limit the freedom of navigation that the United States and other countries enjoy in the region. Mr. Thomas testified that as China develops its antiaccess capabilities and becomes increasingly competent operating in its regional maritime environment, China could possibly create a sea denial network stretching from the East China Sea to the South China Sea, eroding the ability of the United States to operate in the region.<sup>127</sup> (For more information on the PLA's ability to exert control over the western Pacific, see sec. 2 of this chapter.) Such a strategy, according to Captain Pedrozo, aligns with a 1982 Chinese naval maritime plan in which China would replace the United States as the dominant military power in the Pacific and Indian oceans by 2040.<sup>128</sup> Balbina Hwang, visiting professor at Georgetown University, echoed these concerns in her written testimony to the Commission:

*[T]he increasingly assertive Chinese maritime behavior we are witnessing today may be part of a broader strategy to exercise authority over smaller neighbors in the near term by pushing U.S. forces away from its maritime borders to demonstrate rights over the entire South and East China Seas. . . . One necessary concession in China's view will be the reduction of U.S. influence in the region.<sup>129</sup>*

Another implication of China's growing assertiveness, especially its harassment and intimidation of foreign vessels, is a growing risk of escalation due to miscommunication and miscalculation between claimants.<sup>130</sup> Foreign and Chinese analysts agree that China's various maritime enforcement actors often are not sufficiently coordinated with each other.<sup>131</sup> Combined with insufficient mechanisms to report unsafe practices at sea and encourage adherence to international laws and norms, minor incidents could escalate into larger problems. As chances of confrontation grow, issues could be raised for the United States, which has mutual defense obligations with the Philippines and other Asia-Pacific countries including Australia, Japan, New Zealand, South Korea, and Thailand.\*

### Cyber Issues

In continuation of previous practice, China in 2011 conducted and supported a range of malicious cyber activities.† These included

\* For more information on defense obligations between the United States and other countries, see Office of the U.S. Department of State, *Treaties in Force: A List of Treaties and Other International Agreements of the United States In Force on January 1, 2011* (Washington, DC: U.S. Department of State, 2011). <http://www.state.gov/documents/organization/169274.pdf>.

† Recent Commission Reports on the subject include U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, D.C.: U.S. Government Printing Office, November 2009), chapter 2, section 4; and U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, D.C.: U.S. Government Printing Office, November 2010), chapter 5.

network exploitations to facilitate industrial espionage and the compromise of U.S. and foreign government computer systems. Evidence also surfaced that suggests Chinese state-level involvement in targeted cyber attacks. Expert testimony to the Commission explained and contextualized China's strategy for the use of such attacks to achieve military objectives. In parallel to these developments, China asserted a greater level of control on domestic Internet content and engaged in various online surveillance activities.‡

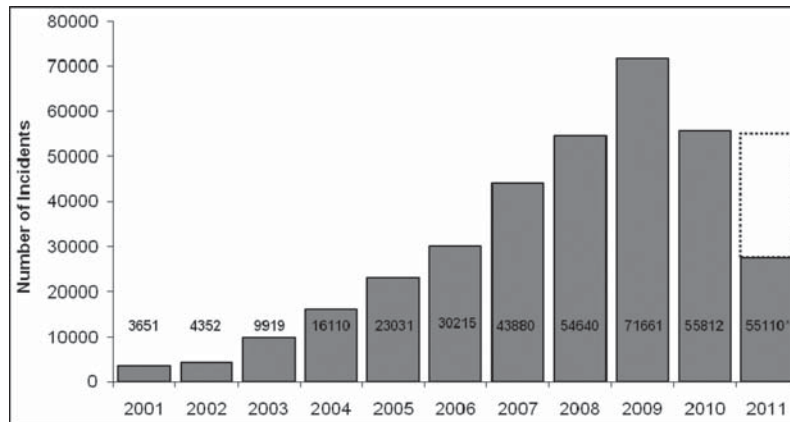
**Malicious Cyber Activities on  
U.S. Department of Defense Networks**

As the Commission reported in 2010, the U.S. government as a whole does not publish comprehensive statistics about malicious cyber activities on its networks. The Commission uses statistics published by the Department of Defense about exploitations and attacks on the department's information systems as one indicator of overall trends in the cybersecurity environment. Figure 2, below, demonstrates changes in the volume of such activities over the past decade. Not all of the incidents depicted below specifically relate to China (the department has not made available that level of detail).

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‡ This subsection's findings follow from numerous studies and reports over the past year that implicate China. Many times, investigators attribute incidents on the basis of technical or operational information, the details of which rarely become public. Other times, conclusions rely on inference. In either case, professional investigators typically offer attribution assessments with a specified degree of confidence. Such qualifications sometimes are inadequately conveyed, especially in secondary reports. Moreover, third parties likely use a variety of measures to make their attacks appear as coming from China in order to conceal their identities. (This model is a reasonable explanation for some penetrations, such as those for intellectual property theft, but less so for others, such as those that target Chinese dissidents.) Still, in the aggregate, the developments described below present compelling evidence of Chinese intrusions in practice.

**Malicious Cyber Activities on  
U.S. Department of Defense Networks—Continued**  
**Figure 2: Department of Defense Reported Incidents of Malicious Cyber  
Activity, 2001–2010, with Projection for 2011**



\*The figure for 2011 represents a projection based on incidents logged from January 1, 2011, to June 30, 2011. The projection assumes a constant rate of malicious activity throughout the year.

Sources: U.S.-China Economic and Security Review Commission, *Hearing on China's Proliferation Practices, and the Development of its Cyber and Space Warfare Capabilities*, testimony of Gary McAlum, May 20, 2008; Name withheld (staff member, U.S. Strategic Command), telephone interview with Commission staff, August 28, 2009; Name withheld (staff member, U.S. Cyber Command), e-mail interview with Commission staff, August 17, 2010; Name withheld (staff member, U.S. Cyber Command), e-mail interview with Commission staff, September 6, 2011.

### Computer network exploitation

In 2011, U.S. and foreign government organizations, defense contractors, commercial entities, and various nongovernmental organizations experienced a substantial volume of network intrusions and attempts with various ties to China. In March, security firm RSA announced that hackers had breached their networks and compromised elements of one of the firm's security products.\* Although the company did not name China specifically, subsequent research demonstrated that components of the attack utilized a tool called "HTran," developed by a well-known member of the hacking group "Honker Union of China."† An error in the tool's configuration revealed that the attackers attempted to obscure their location by routing command instructions from mainland China through serv-

\*The affected product was "SecurID," a two-factor authentication system where a token generates a unique number that users must provide in order to log into a protected account. Art Coviello, "Open Letter to RSA Customers" (Bedford, MA: RSA, March 17, 2011). <http://www.rsa.com/node.aspx?id=3872>.

†Joe Stewart, "HTran and the Advanced Persistent Threat" (Atlanta, GA: Dell SecureWorks, August 3, 2011). <http://www.secureworks.com/research/threats/htran/>. The tool's developer, Lin Yong, who also goes by the name "Lion," recently announced plans to reconstitute the Hacker Union of China after several years of inactivity. See Owen Fletcher, "Patriotic Chinese Hacking Group Reboots," *Wall Street Journal China Real Time Report*, October 5, 2011. <http://blogs.wsj.com/chinarealtime/2011/10/05/patriotic-chinese-hacking-group-reboots/>.

ers in Japan, Taiwan, Europe, and the United States.‡ The perpetrators then used information about the compromised RSA security product in order to target a number of the firm's customers, including at least three prominent entities within the U.S. defense industrial base. Those intrusions and intrusion attempts, according to some reports, also originated in China and appeared to be state sponsored.<sup>132</sup>

Many intrusions linked to China involve numerous victims, sometimes spanning sectors and national borders.<sup>133</sup> When researchers identify and gain access to elements the systems used to effectuate the intrusion, such as servers that maintain contact with compromised systems, it becomes possible to identify related victims. The breadth of victims itself can suggest state involvement if the diversity in targets exceeds any conceivable scope of interest to a lone, subnational actor (or even a coalition of subnational actors).\* Although links to China are speculative and come from secondary reporting, a case study by McAfee, called *Operation Shady RAT* [remote access tool], illustrates this principle.† The 2011 study catalogues a series of penetrations affecting over 70 victim organizations that span numerous sectors, including federal, state, local, and foreign governments; energy and heavy industry; electronics and satellite communications; defense contractors; financial industry; and international sports institutions, think tanks, and nonprofits.<sup>134</sup> In discussing the possible actors behind the penetrations, the report states:

*The [perpetrators'] interest in the information held at the Asian and Western national Olympic Committees, as well as the International Olympic Committee (IOC) and the World Anti-Doping Agency in the lead-up and immediate follow-up to the 2008 Olympics was particularly intriguing and potentially pointed a finger at a state actor behind the intrusions, because there is likely no commercial benefit to be earned from such hacks. The presence of political nonprofits, such as a private western organization focused on promotion of democracy around the globe or a US national security think tank is also quite illuminating. Hacking the United Nations or the Association of Southeast Asian Na-*

‡ The tool is probably available from Chinese websites and chat rooms. Whether the servers in mainland China were the true origin of the command traffic can only be verified with cooperation from China Unicom, a Chinese state-owned firm and the relevant network operator. Joe Stewart, "HTTran and the Advanced Persistent Threat" (Atlanta, GA: Dell SecureWorks, August 3, 2011). <http://www.secureworks.com/research/threats/htran/>; and Gregg Keizer, "Researcher follows RSA hacking trail to China," *Computerworld*, August 4, 2011. [http://www.computerworld.com/s/article/9218857/Researcher\\_follows\\_RSA\\_hacking\\_trail\\_to\\_China](http://www.computerworld.com/s/article/9218857/Researcher_follows_RSA_hacking_trail_to_China).

\* This applies for penetrations that seek to maintain surveillance capabilities or extract information without inherent monetary value. Considerations of target scope do not apply for penetrations targeting personally identifiable or sensitive financial information, along with penetrations that seek to compromise systems for the purposes of creating a botnet.

† For the original report, see Dmitri Alperovitch, *Revealed: Operation Shady RAT* (Santa Clara, CA: McAfee: August 2011). <http://www.mcafee.com/us/resources/white-papers/wp-operation-shady-rat.pdf>. The report itself does not mention China. For suggestions that China may be behind the intrusions, see Ellen Nakashima, "Report on 'Operation Shady RAT' identifies widespread cyber-spying," *Washington Post*, August 3, 2011. [http://www.washingtonpost.com/national-security/report-identifies-widespread-cyber-spying/2011/07/29/gIQAoTUmqI\\_story.html](http://www.washingtonpost.com/national-security/report-identifies-widespread-cyber-spying/2011/07/29/gIQAoTUmqI_story.html); and Mathew J. Schwartz and J. Nicolas Hoover, "China Suspected of Shady RAT Attacks," *InformationWeek*, August 3, 2011. <http://www.informationweek.com/news/security/attacks/231300165>.



*tions (ASEAN) Secretariat is also not likely a motivation of a group interested only in economic gains.*<sup>135</sup>

Cyber penetrations that do not target diverse victims can still indicate state involvement. A February case study, called *Night Dragon*, profiled an exploitation campaign against global companies in the energy and petrochemical sectors. These sectors are of special interest to the Chinese government, which has designated seven “strategic industries” for “absolute state control,” including the power generation and distribution industry, the oil and petrochemicals industry, and the coal industry.<sup>136</sup> (For more information about China’s strategic industries, see chap. 1, sec. 2, of this Report.) In another indication of institutional involvement, the *Night Dragon* study’s authors noted that:

*[A]ll of the identified data exfiltration activity occurred from Beijing-based IP [intellectual property] addresses and operated inside the victim companies weekdays from 9:00 a.m. to 5:00 p.m. Beijing time, which also suggests that the involved individuals were ‘company men’ working on a regular job, rather than freelance or unprofessional hackers.*<sup>137</sup>

While the study’s authors could not definitely identify the perpetrators, an opaque web-hosting company and its Shandong-based operator appeared to be involved.<sup>138</sup> As described below, Shandong Province is connected to several other penetrations over the past several years.

China-based hackers increasingly use indirect approaches to gain access to sensitive information systems. In June, Google announced that it had discovered a widespread but targeted “phishing” campaign that had compromised Google Mail (Gmail) accounts.\* The company disclosed that:

*This campaign, which appears to originate from Jinan, China, affected what seem to be the personal Gmail accounts of hundreds of users including, among others, senior U.S. government officials, Chinese political activists, officials in several Asian countries (predominantly South Korea), military personnel and journalists.*<sup>139</sup>

Aside from Gmail users, the campaign reportedly affected certain U.S. government e-mail accounts at the Department of State, the Department of Defense, and the Defense Intelligence Agency. The perpetrators leveraged access to compromised accounts to perpetuate the campaign by spreading malicious software to the victims’ contacts.† As the Commission reported in 2009, Jinan, Shandong Province, is the home of one of China’s Technical Reconnaissance

\*“Phishing” is “an attempt by an individual or group to solicit personal information from unsuspecting users by employing social engineering techniques. Phishing emails are crafted to appear as if they have been sent from a legitimate organization or known individual. These emails often attempt to entice users to click on a link that will take the user to a fraudulent web site that appears legitimate. The user then may be asked to provide personal information such as account usernames and passwords that can further expose them to future compromises. Additionally, these fraudulent web sites may contain malicious code.” U.S. Computer Emergency Readiness Team (U.S.-CERT), “Report Phishing.” [http://www.us-cert.gov/nav/report\\_phishing.html](http://www.us-cert.gov/nav/report_phishing.html).

† This is called the “man-in-the-mailbox” technique. John Markoff and David Barboza, “F.B.I. to Investigate Gmail Attacks Said to Come From China,” *New York Times*, June 2, 2011. [http://www.nytimes.com/2011/06/03/technology/03google.html?\\_r=1](http://www.nytimes.com/2011/06/03/technology/03google.html?_r=1).

Bureaus. These entities serve as a computer network exploitation arm for the Third Department of the PLA's General Staff Department, which collects signals intelligence.<sup>140</sup> A vocational school linked to the December 2009 Google penetration is also located in Jinan.<sup>141</sup>

During a Commission trip to China in August 2011, representatives of foreign businesses that operate in China placed computer network intrusions alongside mandated technology transfers and invasive technical standards inspection schemes as the most serious threats to their intellectual property. Chinese efforts suggest that, for firms without a physical presence in China, computer network intrusions may pose the most serious threat to intellectual property.

### Computer network attack

Along with the considerable computer network exploitation capabilities described above, the Chinese government has computer network attack capabilities. As the Department of Defense's 2011 annual report to Congress on *Military and Security Developments Involving the People's Republic of China* states, "[t]he PLA has established information warfare units to develop viruses to attack enemy computer systems and networks."<sup>\*</sup> This has implications for military and nonmilitary targets. For example, a 2011 global survey of critical infrastructure operators conducted by McAfee and the Center for Strategic and International Studies identified government-sponsored sabotage as a central cyber threat. The plurality of respondents, 30 percent, identified the Chinese government as the greatest concern.<sup>142</sup> While the survey measured perceptions rather than events, its findings illustrate the concerns of those on the "frontlines" of infrastructure protection.<sup>†</sup>

Perhaps the most compelling evidence that surfaced in 2011 linking the Chinese government to cyber attacks was a July documentary presented on China Central Television 7 (CCTV-7), the government's military and agricultural channel. A brief segment demonstrated what appears to be a PLA "point and click" distributed denial of service attack launched against a Falun Gong-related website hosted on a network at the University of Alabama in Birmingham. Based on Internet Protocol data exposed in the program and information from the school's network administrators, the attack appears to have taken place in 2001 or earlier.<sup>‡</sup> According to the footage, the PLA's Electrical Engineering University developed the software used to launch the attack.<sup>143</sup> Some reports about this

<sup>\*</sup>Parallel developments include "tactics and measures to protect friendly computer systems and networks." Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2011* (Washington, DC: Department of Defense, 2011), p. 37.

<sup>†</sup>China also faces challenges in securing infrastructure. For example, see Paul Roberts, "Glass Dragon: China's Cyber Offense Obscures Woeful Defense," *Threatpost*, April 27, 2011. [http://threatpost.com/en\\_us/blogs/glass-dragon-chinas-cyber-offense-obscures-woeful-defense-042711](http://threatpost.com/en_us/blogs/glass-dragon-chinas-cyber-offense-obscures-woeful-defense-042711). See also Jim Finkle, "Exclusive: China software bug makes infrastructure vulnerable," Reuters, June 16, 2011. <http://www.reuters.com/article/2011/06/17/us-cybersecurity-china-idUSTRE75G0CV20110617>.

<sup>‡</sup>Other attacks have been documented more recently, including in 2011. See, for example, Benjamin Joffe-Walt, "U.S. Congresswoman Condemns Chinese Attack on Change.org," *Change.org Blog*, April 26, 2011. <http://blog.change.org/2011/04/u-s-congresswoman-condemns-chinese-attack-on-change-org/>.

incident suggested that the attack shown was rudimentary, apparently on the basis of the program's graphical user interface and the attack method itself. However, the scope and implications of the attack cannot be determined from the footage.\* Initially posted on the broadcaster's website, the documentary episode was promptly removed by CCTV when international media started to report the story. This measure, along with the offhanded manner by which the show presented the material, led most reports to characterize the footage as an accidental disclosure.<sup>144</sup>

### Military strategies

Like the United States and other nations with modern militaries, China seeks to leverage cyber capabilities to achieve or help achieve military objectives. As the Department of Defense's 2011 annual report to Congress on *Military and Security Developments Involving the People's Republic of China* states, China's military could use cyber warfare "to constrain an adversary's actions or slow response time by targeting network-based logistics, communications, and commercial activities."<sup>145</sup> Expert testimony to the Commission in 2011 provided details about how China would seek to employ such techniques. David A. Deptula, a retired U.S. Air Force lieutenant general, testified that China has "identified the U.S. military's reliance on information systems as a significant vulnerability that, if successfully exploited, could paralyze or degrade U.S. forces to such an extent that victory could be achieved."<sup>146</sup> Specifically, General Deptula categorized cyber attacks on U.S. C4ISR [command, control, communications, computers, intelligence, surveillance, and reconnaissance] assets as a key action that China's military would take "to impede U.S. military access to the Asian theater in the event of a U.S.- China conflict."<sup>147</sup>

Martin C. Libicki, senior management scientist at the RAND Corporation, testified that operational cyber attacks, such as those that would degrade U.S. logistics systems, present a serious challenge to U.S. military forces. As such, the "[U.S.] Department of Defense needs to take the prospect of *operational* cyberwar seriously enough to understand imaginatively and in great detail how it would carry out its missions in the face of a full-fledged attack" (emphasis in original).<sup>148</sup> He characterized *strategic* cyberwar, such as "a cyberattack on the U.S. power grid, throwing the Midwest into the dark," as less likely in the context of a Taiwan contingency, a conceivable backdrop to hostilities between the United States and China. Because China's leadership would likely seek to keep the United States out of such a contingency, a strategic cyber attack on the United States might have the opposite effect and could therefore serve as a "very poor coercive tool."<sup>149</sup> However, this assessment may not hold for other types of contingencies.

\*A graphical user interface could easily be mated with a controller capable of launching a significant distributed denial of service attack. A military organization would likely use such an interface in order to make its computer network operations tool more accessible to its force. With respect to the method of attack itself, computer security experts generally regard distributed denial of service attacks as one of the more manageable threats. However, certain techniques are sophisticated and difficult to mitigate. For a brief discussion of what constitutes a significant distributed denial of service attack, see Craig Labovitz, "The Internet Goes to War" (Chelmsford, MA: Arbor Networks, December 14, 2010). <http://asert.arbornetworks.com/2010/12/the-internet-goes-to-war/>.

### Surveillance and censorship

The Chinese government asserted a greater level of control over domestic Internet access and content in 2011. In May, it created a new State Council-level entity to centralize “online content management,” a euphemism in China for various forms of regulation and censorship.<sup>150</sup> More recently, China’s censors blocked web-based speculation by Chinese citizens about the health and possible death of former Chinese President Jiang Zemin following his failure to appear at a celebration of the 90th anniversary of the CCP’s founding.<sup>151</sup> This year’s social media-assisted demonstrations in the Arab world, sometimes leading to regime change, appear to have intensified the Chinese government’s traditional apprehension about political discourse.<sup>152</sup>

Other new measures appear to be technical outgrowths of existing policies. Fang Binxing, the creator of China’s “great firewall,” acknowledged in February that he personally used six virtual private networks to test whether they could overcome China’s traffic-blocking measures.<sup>153</sup> Subsequently, several times throughout 2011, new Chinese censorship measures disrupted this previously reliable method used to circumvent local restrictions on overseas web content.<sup>154</sup> Chinese authorities also curtailed domestic web content. The Chinese Academy of Social Sciences announced in July that the government shuttered 1.3 million websites throughout 2010.<sup>155</sup> Some percentage of these sites probably hosted malicious software as opposed to content deemed undesirable to the Chinese government (such as pornography or political speech), but the government does not make available figures with that level of specificity.

In at least one instance this year, U.S. Internet traffic improperly transited Chinese networks.<sup>156</sup> Following a series of similar incidents documented in the Commission’s 2010 Annual Report, select U.S.-generated Internet traffic from social networking site Facebook travelled on a route through Chinese state-owned telecommunications firm China Telecom on March 22, 2011.\* The exact path of the diversion could not be reconstructed, but the affected traffic may have traversed networks physically located in China.† Although perhaps accidental, such an incident demonstrates a vulnerability that could be used for exploitation or attack. The capability to initiate or exploit erroneous traffic routes exists for all Internet Service Providers, but state ownership of the entire sector in China (as another “strategic industry”) elevates the risk of systemic abuse, either as an intentional measure directed against external Internet users or a side effect of internal censorship policies.

### Implications for the United States

China appears to use computer network exploitations to conduct espionage against governments and military entities, commercial entities, and nongovernmental organizations. In parallel, the PLA maintains capabilities to execute computer network attacks. These

\*The data also traversed Hanaro Telecom South Korea’s networks.

†Alternatively, the data could have traversed China Telecom networks physically located in North America. BGPmon.net, Untitled, March 26, 2011. <http://bgpmon.net/blog/?p=499>.

practices have myriad implications for the United States. Computer network exploitation directed against government entities jeopardizes their ability to handle sensitive information securely and reliably. Network exploitations and attacks on military entities may compromise large-scale weapons systems, delay deployments, or cause a number of other events that harm U.S. national security and regional stability in Asia. China's exploitations that compromise commercial entities' proprietary information and intellectual property likely bolster Chinese firms' capabilities and erode U.S. businesses' remaining technological advantages. In addition, Chinese penetrations of, and assaults on, nongovernmental organizations' networks complicate their operations and could pose security risks for their members and affiliates.

### Conclusions

- Over the past year, China has demonstrated progress in modernizing the PLA. Recent developments confirm that the PLA seeks to improve its capacity to project force throughout the region.
- Continued improvements in China's civil aviation capabilities, as first noted in the Commission's 2010 Annual Report, enhance Chinese military aviation capabilities because of the close integration of China's commercial and military aviation sectors.
- In an effort to calm regional fears, China attempts to broadcast a benign image of its growing military capabilities. Official statements from Beijing over the past year describe China as a status quo power and downplay its military modernization efforts.
- In 2011, China continued a pattern of provocation in disputed areas of the South China Sea. China's policy in the region appears driven by a desire to intimidate rather than cooperate. Many of China's activities in the region may constitute violations of the *United Nations Convention on the Law of the Sea* and the *Declaration on the Conduct of Parties in the South China Sea*. While China sometimes demonstrates a willingness to cooperate with other claimants to disputed waters in the South China Sea, it is unlikely that China will concede any of its claims.
- China's government or military appeared to sponsor numerous computer network intrusions throughout 2011. Additional evidence also surfaced over the past year that the Chinese military engages in computer network attacks. These developments are consistent with the PLA's known missions and organizational features, as noted by the Commission's *2009 Annual Report to Congress* and contracted research study *Capability of the People's Republic of China to Conduct Cyber Warfare and Computer Network Exploitation*.\*
- China's military strategy envisions the use of computer network exploitation and attack against adversaries, including the United States. These efforts are likely to focus on operational systems, such as command, control, communications, computers, intel-

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\*This report was prepared for the Commission by Northrop Grumman and is available on the Commission's website at [http://www.uscc.gov/researchpapers/2009/NorthropGrumman\\_PRC\\_Cyber\\_Paper\\_FINAL\\_Approved%20Report\\_16Oct2009.pdf](http://www.uscc.gov/researchpapers/2009/NorthropGrumman_PRC_Cyber_Paper_FINAL_Approved%20Report_16Oct2009.pdf).

ligence, surveillance, and reconnaissance assets. This could critically disrupt the U.S. military's ability to deploy and operate during a military contingency. Chinese cyber attacks against strategic targets, such as critical infrastructure, are also possible.



## SECTION 2: CHINA'S "AREA CONTROL MILITARY STRATEGY"

### Introduction

During the 2011 report cycle, the Commission examined China's military strategy. At its core, this strategy provides guidance to the People's Liberation Army (PLA) on how to defeat a technologically superior opponent and can be summarized as having three themes. First, it emphasizes degrading an opponent's technological advances in an effort to level the playing field. Second, it is a military strategy that prioritizes striking first in a conflict to seize the initiative. Third, its geographic focus centers on controlling China's periphery, especially the western Pacific Ocean. Over the past decade, these themes have been reflected in China's military modernization efforts. As a result, it appears that the PLA is acquiring improved capacities to counter U.S. military capabilities and exploit U.S. military weaknesses. Furthermore, because the focus of China's military strategy has expanded beyond just a Taiwan scenario, it increasingly impacts China's neighbors, especially those in the western Pacific Ocean. Finally, the strategy's emphasis on striking first opens the door to the possibility of miscalculations and inadvertent conflict.

As a note of clarification, although China's military strategy is commonly referred to as an "antiaccess" or "area denial" strategy in western writings,<sup>157</sup> this Report will refer to this strategy as an "Area Control Strategy." Referring to China's strategy as an "antiaccess" or "area denial" strategy posits an overly U.S.-centric viewpoint, giving the impression that this strategy is intended solely to prevent U.S. forces from approaching China in the event of a conflict. While deterring, delaying, or denying U.S. forces from operating along China's periphery is still a key PLA goal, the Commission's *2009 Annual Report to Congress* demonstrated that PLA missions have expanded.<sup>158</sup> Additional contingencies now include, for example, the defense of China's disputed territorial claims in the East and South China Seas.\* As such, a continued U.S.-centric approach downplays the point that China's military strategy can be just as effectively used against other militaries throughout East Asia. Conventionally armed missiles that can target U.S. bases and forces in East Asia can just as easily strike Japanese, Philippine, or even Vietnamese bases and forces in the event of a conflict.

Summarizing the Commission's findings from a hearing, fact-finding trips to the U.S. Pacific Command and Asia, and staff research, this section of the Report describes the PLA's Area Control Strategy and the implications for the United States and East Asia.

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\*For more on recent PLA activities in the South and East China Seas, see section 1 of this chapter.

It concludes with summary points and recommendations for Congress.

**Congressional Remarks on  
China's Area Control Military Strategy**

Presenting his views to the Commission on China's Area Control Strategy, Congressman Robert J. Wittman (R-VA) noted that "China's military policies are aimed at translating the nation's growing economic resources into a world-class war fighting organization" and that the rapid pace of its military modernization has "already [put] regional military balances at risks." The congressman also described his view that China's Area Control Strategy could deny the United States the ability to project power into the region, without which "the integrity of U.S. alliances and security partnerships could be called into question, reducing U.S. security and influence and increasing the possibility of conflict." In order to prevent this from occurring, the congressman recommended that the United States needs to focus "on force posture, maintaining alliances, and maintaining the current footprint of strategically located bases in the western Pacific."<sup>159</sup>

Senator Daniel K. Inouye (D-HI) submitted a written statement to the Commission, stating that China has "increased the size of [its] navy, created formidable cyber warfare capabilities, developed new anti-ship and anti-satellite missiles, initiated a new stealth fighter, and begun construction of an aircraft carrier." The senator also expressed his concern that the PLA is "investing so heavily in anti-access weapons, almost certainly to counter our power projection capabilities." However, he also stated that it is important to look at China's military developments through the prism of capabilities the U.S. military is developing and not solely "those we currently possess." In order to maintain stability in the region, Senator Inouye suggested that the United States should continue to reassure its friends and allies in the region, maintain a strong forward military presence, and promote improved ties between the mainland and Taiwan.<sup>160</sup>

**China's Area Control Military Strategy**

At its core, the PLA's Area Control Strategy is a set of guidelines to help the PLA win in a conflict with a technologically superior military.<sup>161</sup> As Roger Cliff, then senior political scientist at the RAND Corporation, concluded, China's military strategy embodies "ways in which a country with less-advanced military capabilities might seek to diminish the advantage enjoyed by a country with greater military capabilities."<sup>162</sup> Cortez A. Cooper, a senior international relations analyst at the RAND Corporation, testified that "[t]he PLA's most authoritative modern work on military strategy, *The Science of Military Strategy*, states that in the current threat environment, preparing for a local war against a technologically superior adversary is 'the center of gravity of strategy'."<sup>163</sup> This influential book continues, noting that China's strategic guidance fo-

cuses on how “to defeat a technically superior enemy equipped with high-tech weaponry in the background of relative [Chinese] lag of military technology” [sic].<sup>164</sup> Official PLA regulations, such as Beijing’s annual training guidance to the PLA, codify the notion of being able to defeat a better-equipped enemy.<sup>165</sup> As Oriana Skylar Mastro, a Ph.D. candidate at Princeton University and a visiting fellow at The George Washington University, testified, China’s strategists believe that “not all wars are won by the strongest side,” a view fueled in part by their belief that China successfully overcame technologically superior U.S. forces during the Korean War.<sup>166</sup>

In an effort to defeat a superior military, China’s Area Control Strategy can be summarized as having three themes:

- It emphasizes degrading a superior opponent’s technological advances;
- It stresses striking first in order to seize the initiative; and
- It centers on controlling China’s periphery, especially the western Pacific Ocean.

Each theme will be discussed in turn below.

#### **Historical Legacy of China’s Military Strategy: The “Active Defense”**

Officially, China refers to its military strategy as the “Active Defense.” This term has evolved from its original usage in a 1936 Mao Zedong article, where Communist Party Chairman Mao severely critiqued the communist forces’ strategy used to fight the then ruling Nationalist Party during China’s civil war. According to Chairman Mao, the communists had been fighting a passive, defensive war against the much better-equipped Nationalist Army, which resulted in frequent and severe losses for the communists. Instead of defensive operations, Chairman Mao urged the communists to take the initiative and bring the fight to the nationalists at a time and place best suited to the communists. This strategy would allow the inferior communist forces to overcome their technological disadvantages when confronting the nationalist forces. He referred to such a strategy as the Active Defense, noting that:

*The active defense is also known as offensive defense, or defense through decisive engagements. Passive defense is also known as purely defensive defense or pure defense. Passive defense is actually a spurious kind of defense, and the only real defense is active defense, defense for the purpose of counter-attacking and taking the offensive.*<sup>167</sup>

#### **Theme 1: It Is a Strategy that Focuses on Degrading an Opponent’s Technological Advantages**

As several expert witnesses described to the Commission, China’s Area Control Strategy heavily emphasizes the necessity of degrading an opponent’s technological advantages.<sup>168</sup> Ms. Mastro noted that in order to hinder a superior military from operating off of

China's periphery, the PLA seeks to employ "an enhanced conventional precision strike system consisting mainly of cruise and ballistic missiles as well as attacks on key enabling capabilities, such as space-based [command, control, and surveillance systems] and computerized networks."<sup>169</sup> The PLA's *The Science of Military Strategy*, for example, instructs senior PLA commanders that:

*In order to win the future local war under high-tech conditions, the PLA must take 'destruction war' or 'paralysis and destruction warfare' as the overall and basic forms of war. The so-called 'destruction warfare' is to employ several kinds of means to disrupt the integrity of the enemy's operational systems and the sequence of his operations, to change the balance of strength in the battlefield by making the enemy lose his combat capabilities as a whole, and to create situation and conditions which are beneficial to preserve ourselves and destroy the enemy. [sic]<sup>170</sup>*

One way the PLA seeks to degrade an opponent's technological advantages is to target the vulnerable, yet important, nodes that undergird the opponent's technologically based combat capabilities.<sup>171</sup> For example, the authoritative PLA textbook on military campaigns, *The Science of Campaigns*, notes that:

*The enemy's combat system depends upon the various systems comprised of high technology equipment, closely linked to each other, whose mutual dependency is strong, thus having a certain weakness. Whenever a key part or key segment is destroyed, this can influence the entire system, even causing the entire system to be paralyzed. Therefore, we need to be good at grasping the key parts of the enemy's combat system and destroying them, like assaulting and destroying the enemy's command and control system, information system, weapons system, and important support system.<sup>172</sup>*

Dr. Cliff provided an example of a target set that Chinese defense writings discuss when mentioning striking an opponent's logistics system. Such targets could include, at a minimum:<sup>173</sup>

- Air bases, especially runways
- Naval ports
- Fuel, munitions, and other storage facilities
- Fuel pipelines
- Support facilities
- Transport and aerial refueling aircraft
- Naval troop transports
- Tankers and underway replenishment ships
- Railroads
- Bridges

### ***Theme 2: It Is a Strategy that Emphasizes Striking First***

Despite Beijing's claim that its military strategy is defensive, the PLA's Area Control Strategy places a high priority on carrying out the first strike against an opponent in a conflict. Officially, China's national security policy is "defensive in nature," and China does not initiate military operations.<sup>174</sup> Instead, China "adheres to the principle of implementing defensive operations, self-defense and gaining mastery by counterattacking" after its interests are at-

tacked.\*<sup>175</sup> However, this claim downplays the offensive nature of the PLA's Area Control Strategy. This is partly due to Beijing's ambiguous views on what it perceives as an infringement on its interests. The DoD in 2010 wrote:

*[T]he authoritative work, The Science of Military Strategy, makes it clear that the definition of an enemy strike is not limited to conventional, kinetic military operations. Rather, an enemy 'strike' may also be defined in political terms. Thus: 'Striking only after the enemy has struck' does not mean waiting for the enemy's strike passively. . . . It doesn't mean to give up the 'advantageous chances' in campaign or tactical operations, for the 'first shot' on the plane of politics must be differentiated from the 'first shot' on that of tactics. [This section continues] if any country or organization violates the other country's sovereignty and territorial integrity, the other side will have the right to 'fire the first shot on the plane of tactics.' [emphasis added]*<sup>176</sup>

Historical PLA military operations reflect this ambiguity. For example, in 1979 China initiated a short, intense border war with Vietnam after Vietnam invaded the then Chinese client state of Cambodia. Although China initiated combat operations, Beijing's view is that this was a defensive operation and officially labels it the "Self-Defense Counter-Attack Against Vietnam."<sup>177</sup> Beijing similarly describes PLA operations during the Korean War (1950–53) and during China's border conflicts with India (1962) and Russia (1969).<sup>178</sup> One well-respected scholar on the PLA referred to China's frequent labeling of offensive military operations as defensive as a "Chinese cult of the defense," where Beijing engages in "offensive military operations as a primary alternative in pursuit of national goals, while simultaneously rationalizing them as being defensive and a last resort."<sup>179</sup>

Regardless of the ambiguity at the political level, once Beijing determines that China's interests have been infringed upon, the strategy takes a clear offensive focus. According to David A. Deptula, U.S. Air Force lieutenant general (retired):

*Once hostilities have begun, the essence of [China's military strategy] is to take the initiative and to annihilate the enemy. Strategically, the guidelines emphasize active defense, in military campaigns the emphasis is placed on taking the initiative in 'active offense.' [emphasis as in original]*<sup>180</sup>

PLA writings stress striking first in order to ensure the advantage of surprise over the opponent.<sup>181</sup> According to Dr. Cliff, one reason why the PLA values the element of surprise is because the PLA sees modern warfare as "one of rapid-paced, short-duration conflicts," where defeat or victory can quickly occur.<sup>182</sup> While the PLA views the U.S. experiences in Afghanistan and Iraq as evidence that some wars may be protracted, in general the PLA focuses on being able to conclude a conflict as rapidly as possible.<sup>183</sup>

\*For more on the political narratives of China's defense policy, see chapter 4 of this Report, "China's Public Diplomacy Initiatives Regarding Foreign and National Security Policy."

Therefore, the PLA maintains the view that it is imperative to seize the initiative from the outset of a conflict.<sup>184</sup> This concept is reflected in *The Science of Military Strategy*, which posits that the PLA “should do all [it] can to dominate the enemy by striking first.”<sup>185</sup>

Of note is the PLA’s predisposition to attack while the opponent is still building up its forces. According to Dr. Cliff:

*Preemption [i.e., striking first] is seen as an excellent way of seizing the initiative as well as of achieving surprise. Preemption also strongly supports the concept of employing access-denial measures as, if an adversary is allowed time to fully build its forces up in theater, the effectiveness of access-denial measures will be greatly reduced. If, on the other hand, a preemptive attack is launched well before the adversary is fully prepared for conflict, then anti-access measures can lengthen the amount of time that the local military advantage preemption provides will last.*<sup>186</sup>

The notion of striking first is extensive throughout Chinese military writings. *The Science of Campaigns* writes, for example, that:

*It is now possible to achieve our operational goals through rapid and sudden activities before the enemy can react. Compared to using concealment to achieve suddenness, rapid actions are not only capable of using firepower damage and troop attack activities to directly weaken the enemy’s combat capabilities, but are also able to catch the enemy unaware, causing psychological fear and awe in the enemy—and thus dominating and destroying the enemy’s will to resist. . . . If the PLA is in combat with a high-tech and strong enemy, then there is a large gap between their weapons and equipment and ours. If we want to achieve operational suddenness, in addition to retaining traditional concealment, camouflage, and deception, we need to stress even more the PLA’s traditional specialties of maneuver warfare and flexible tactics, require the breaking of norms in operational distance, speed, and combat methods; and strike the enemy unprepared through rapid actions and asymmetric methods and means.*<sup>187</sup>

***Theme 3: It Is a Strategy that Stresses the Need to Control China’s Periphery, Especially the Western Pacific Ocean***

China’s Area Control Strategy has a specific geographic focus, seeking to establish a defensive zone of control around China’s territory. The primary focus of this zone of control concentrates on the maritime region off of China’s eastern seaboard, especially within what is referred to as the “First Island Chain” [see figure 1, below].\*<sup>188</sup> For China, there are at least three reasons why control over this region is critical. First, it provides important benefits to China’s economy: China’s most economically developed areas are located along its coast; China’s economy is heavily dependent upon the trade and energy sea lanes that transverse this region; and en-

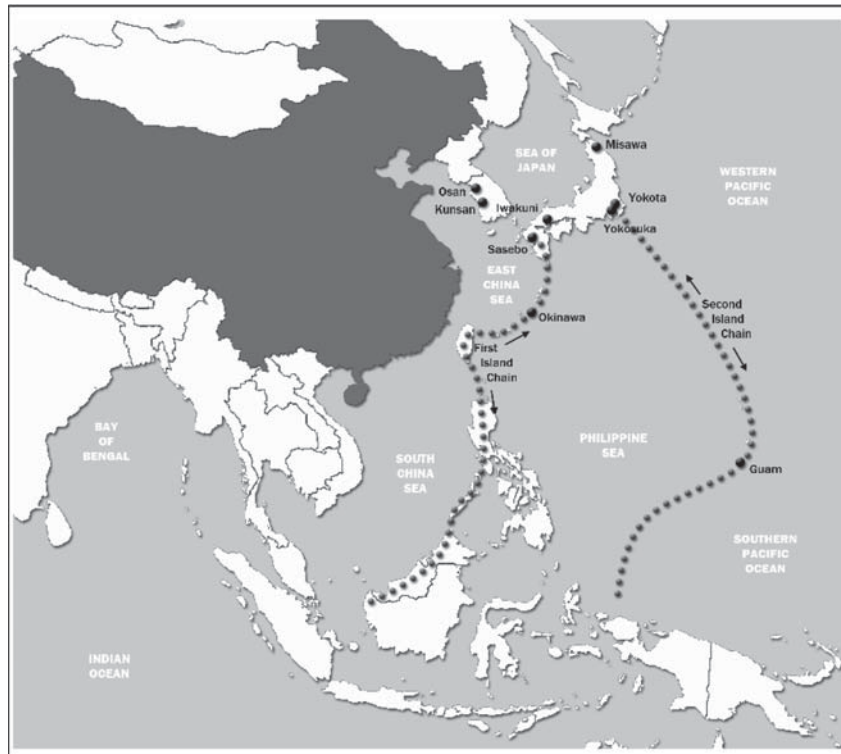
\*The “First Island Chain” represents a line of islands running from Japan, the Senkaku (Diaoyu) Islands, Taiwan, and the west coast of Borneo to Vietnam.



ergy and natural resources in the region are necessary for China's continued economic growth. Second, China has several disputed territorial claims in this region, the most important of which is its sovereignty claim over Taiwan, an island that enjoys de facto, albeit disputed, independence from Beijing.\* Several nations also dispute Beijing's maritime territorial claims, and the accompanying resources, in the South and East China Seas.†<sup>189</sup> Third, China's understanding of modern warfare posits the importance of preventing an enemy from being able to operate freely close to China's territory. According to *The Science of Military Strategy*:

*As long as the battlefield is concerned, we should not passively fight against the enemy in our border regions, coastal regions and related air space. On the contrary, after the launching of the war, we should try our best to fight against the enemy as far away as possible, to lead the war to enemy's operational base, even to his source of war, and to actively strike all the effective strength forming the enemy's war system. [sic]*<sup>190</sup>

**Figure 1: The First and Second Island Chains**



Source: Jan Van Tol et al., *AirSea Battle: A Point of Departure Operational Concept* (Washington, DC: Center for Strategic and Budgetary Assessments, 2010), p. 13.

\*For more on the Sino-Taiwan dispute, see chapter 3, section 3, of this Report.

†In the South China Sea, China has maritime territorial disputes with Taiwan, the Philippines, Malaysia, Brunei, and Vietnam. In the East China Sea, Japan disputes China's claim to the Senkaku/Diaoyutai Islands.

Of import, the PLA's geographic focus is expanding. Over the past five years, the PLA has expanded its mission beyond a Taiwan contingency also to cover potential conflicts in the East and South China Seas.<sup>191</sup> This change was highlighted during Commissioners' discussions with senior Singaporean officials in December 2010.<sup>192</sup> The Commission concluded in both its 2009 and 2010 Reports that the Chinese leadership has tasked the PLA to be capable of conducting operations increasingly farther from China's territory,<sup>193</sup> a point underscored in several of China's defense white papers.<sup>194</sup> The U.S. Department of Defense, in its most recent assessment of the PLA, goes so far as to state that "the PLA has been developing new platforms and capabilities that will extend its operational reach to address other concerns within the East and South China Seas, and possibly to the Indian Ocean and beyond the second island chain in the western Pacific."<sup>195</sup> According to Stacy A. Pedrozo, a captain in the U.S. Navy and military fellow at the Council on Foreign Relations, this expansion reflects the influence of the PLA's strategy to extend its control gradually out past what is often referred to as the "Second Island Chain."\* Said Captain Pedrozo:

*In the first stage, from 2000 to 2010, China was to establish control of waters within the First Island Chain that links Okinawa Prefecture, Taiwan, and the Philippines. In the second stage, from 2010 to 2020, China would seek to establish control of waters within the Second Island Chain that links the Ogasawara Island chain, Guam, and Indonesia. In the final stage, from 2020 until 2040, China would put an end to U.S. military dominance in the Pacific and Indian Oceans, using aircraft carriers as a key component of their military force.*<sup>196</sup>

### **The Implementation of the PLA's Area Control Strategy**

Fueled by decades of strong economic growth, China has been able to ramp up spending on its military modernization efforts (see sec. 1 of this chapter for more on China's military budget). Many of these efforts closely mirror the requirements for China's Area Control Strategy. Below are detailed briefly the PLA's military developments that are most relevant to its Area Control Strategy.

*Submarines:* As noted by General Deptula, "China's submarine force is a key component of their sea denial strategy."<sup>197</sup> Of particular importance are the PLA Navy's diesel-electric attack submarines, which have the requisite stealth capabilities for sea control operations. Although the submarines were originally acquired from Russia, China is now able to produce its own modern diesel-electric submarines.<sup>198</sup> Since 1995, China has deployed 27 modern diesel-electric attack submarines with advanced capabilities. For example, China's most modern submarine, a *Yuan*-class launched in September 2010, is almost as difficult to detect as the most advanced Russian diesel-electric submarine. In addition, this submarine likely employs an air-independent propulsion system, allowing it to stay submerged for longer periods of time.<sup>199</sup>

\*The "Second Island Chain" concept denotes the set of islands that run in a north-south line from Japan, the Bonin (Ogasawara) Islands, the Mariana Islands, and Indonesia.

*Conventional ballistic missiles:* China has the most active missile development program in the world. In its 2010 report, the Commission described in detail the growing capabilities of China's conventional ballistic missile forces, noting that the PLA has over 1,100 short-range ballistic missiles\* as well as over 100 medium-range ballistic missiles, most of which are deployed opposite Taiwan.<sup>200</sup> According to General Deptula, China's ballistic missiles "have a variety of ranges, payloads, and capabilities to strike aircraft carriers, airfields, command and control facilities, logistics nodes, ports, and military bases."<sup>201</sup> Of significance to the PLA's Area Control Strategy is China's antiship ballistic missile, the DF-21D. According to the U.S. Department of Defense's 2011 report to Congress on China's military power, the DF-21D "is intended to provide the PLA [with] the capability to attack ships, including aircraft carriers, in the western Pacific Ocean."<sup>202</sup> When deployed, this missile will provide the PLA with the ability to strike naval targets within all of the First Island Chain and large portions of the Second Island Chain. (For more information on recent developments of the DF-21D, see sec. 1 of this chapter.)

*Conventional land-attack cruise missiles:* The PLA augments its ballistic missile forces with a growing arsenal of conventional land-attack cruise missiles.† In particular is the PLA's DH-10, a land-attack cruise missile, which can be launched by ground or air. When outfitted on a Chinese H-6H medium bomber, the DH-10 provides the PLA with the capability to hit targets up to 3,700 kilometers away, more than sufficient to strike Andersen Air Force Base on the island of Guam.<sup>203</sup> The U.S. Department of Defense writes in its 2011 report to Congress that China currently possesses between 200 and 500 such missiles.<sup>204</sup>

*Naval mine warfare capabilities:* China's growing naval mine warfare capabilities provide a cheap and efficient means for controlling maritime territories around China's periphery.<sup>205</sup> According to Ronald O'Rourke, a naval specialist at the Congressional Research Service, the PLA Navy's mine warfare ships went from zero in 2005 to 40 in 2009.<sup>206</sup> Augmenting China's dedicated mine warfare vessels are surface warships, submarines, aircraft, and converted civilian merchant or fishing vessels that can also deliver naval mines.<sup>207</sup>

*Air strike capabilities:* The Commission's 2010 Report noted that the PLA Air Force is undergoing a major transformation and is currently developing the ability to conduct offensive strikes outside China's territory, a sea change from a decade ago. In recent years,

\* Ballistic missiles are missiles fired from ground launchers or submarines in an arc to its target, usually exiting and reentering the earth's atmosphere along its flight path. Ballistic missiles are usually classified according to their range: short range (<1,000 kilometers [km]), medium range (1,000–3,000 km), intermediate range (3,000–5,500 km) and intercontinental ballistic missiles (>5,500 km). National Air and Space Intelligence Center, *Ballistic and Cruise Missile Threat* (Dayton, OH: Department of the Air Force, April 2009), pp. 6–7.

† Cruise missiles are self-propelled missiles that fly along a direct trajectory to the target and can be fired from an aircraft, ship, submarine, or ground-based launcher. Cruise missiles are classified according to mission: land-attack or antiship cruise missiles. National Air and Space Intelligence Center, *Ballistic and Cruise Missile Threat* (Dayton, OH: Department of the Air Force, April 2010), pp. 26–27.

the PLA Air Force has developed two advanced 4th generation\* fighters, the J-10 and the J-11B. Earlier this year, the PLA Air Force also revealed a developmental 5th generation stealth fighter, the J-20 (For more on China's J-20 stealth fighter, see sec. 1 of this chapter.). These operational fighters (J-10 and J-11B) provide Beijing with both the ability for precision strikes along China's periphery and an advanced capability to defend against an opponent's air attacks.<sup>208</sup>

*Advanced air defense capabilities:* As noted in the Commission's 2010 Annual Report, Beijing has prioritized "strengthening China's air defense capabilities." To that effect, the PLA is constructing a highly capable integrated air defense system, comprised of a growing number of advanced air defense missile launchers deployed in overlapping rings. China has also deployed a national air defense network to integrate these various individual launchers.<sup>209</sup> When coupled with improvements in China's combat fighter capabilities discussed above, China acquires "one of the most sophisticated and densely integrated air defense systems (IADS) in the world,"<sup>210</sup> according to General Deptula.

*Electronic warfare capabilities:* As the U.S. Department of Defense notes, the PLA emphasizes the importance of warfare in the electromagnetic spectrum† for conducting modern military operations. To that end, the PLA seeks to improve its capacity to conduct both defensive and offensive electronic warfare.‡<sup>211</sup> Defensively, the PLA has been hardening its various computer-based systems to withstand an opponent's electronic attacks.<sup>212</sup> For example, China's recent defense white paper notes that the PLA developed a networked communication system that relies more on fiber optical cable rather than on satellite or radio communications, thus weakening a potential opponent's ability to intercept PLA communications.<sup>213</sup> Offensively, the PLA is developing advanced electronic warfare capabilities in order to render a technologically superior opponent "deaf, dumb, and blind."<sup>214</sup> In addition, the PLA increasingly conducts field training exercises that emphasize the use of offensive and defensive electronic operations in order to improve the troops' ability to conduct and withstand electronic warfare operations.<sup>215</sup>

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\* Jet engine combat fighters are generally categorized by generations according to their capabilities: 4th generation fighters (c. 1980s and 1990s) are equipped with sophisticated avionics and weapons systems and emphasize maneuverability over speed; 5th generation fighters (c. 2000) have a combination of advanced capabilities such as stealth, advanced radar, high-capacity data links, and supercruise capability. U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2010), p. 77.

† The electromagnetic spectrum includes radio waves, microwaves, infrared, visible light, ultraviolet light, x-rays, and gamma rays.

‡ Although a precise definition of electronic warfare is elusive, it generally implies any contested military action that involves the use of the electromagnetic spectrum. Electronic warfare is a crucial feature of military operations given the growing reliance of modern militaries on the electromagnetic spectrum for communications with friendly forces and identification, surveillance, and targeting of enemy forces. See, for example, Secretary of the Air Force, *Electronic Warfare*, Air Force Doctrine Document 2-5.1 (Washington, DC: U.S. Air Force, November 5, 2002); and Secretary of the Army, *Electronic Warfare in Operations*, Field Manual 3-36 (Washington, DC: U.S. Army, February 2009).

*Cyber warfare capabilities:* As a Commission-sponsored report previously noted, the PLA has a growing cyber warfare capability fueled in part by a belief that modern militaries, including the U.S. military, are overly reliant on networked computer systems to conduct combat operations. In the PLA's view, this creates an opening to be exploited in an effort to paralyze or degrade a superior opponent's combat capabilities.<sup>216</sup> A recent study by a U.S. think tank, the Center for Strategic and Budgetary Assessments, described how Chinese defense writings emphasize cyber attacks "against U.S. battle networks aimed at disrupting logistics, corrupting [command and control] systems, degrading fire control radars, denying essential services, and degrading U.S. counter-space control, space situational awareness and space ground control stations."<sup>217</sup>

*Counterspace capabilities:* As section 3 of this chapter details, the PLA has sought to develop its abilities to deny the use of space to a technologically superior opponent. Describing the reasoning behind the PLA's drive for counterspace capabilities, General Deptula wrote:

*China recognizes the overwhelming advantage the US has in the space domain and its key role in our ability to collect, analyze and rapidly share data. They understand how dependent U.S. warfighters have become upon space products and services for commanding deployed troops, passing [intelligence, surveillance, and reconnaissance] data, and enabling precision targeting and engagement. China views that reliance as a significant, exploitable vulnerability and has written extensively about the subject in both open source journals and military doctrine. As a result, they are actively pursuing a comprehensive array of space and counterspace programs intended to degrade, disrupt, deny, or destroy our ability to gain and maintain access to the region in the event of a conflict.*<sup>218</sup>

*Joint operations:* According to Mr. Cooper, in 1999 the Chinese Communist Party emphasized that the PLA focuses on acquiring the ability to conduct joint operations\* as a means successfully to counter a more capable enemy.<sup>219</sup> In General Deptula's assessment, the ability successfully to conduct joint operations will strongly improve the PLA's overall combat capacity.<sup>220</sup> Currently, the PLA's ability to conduct joint operations remains a work in progress. However, Mr. Cooper described in detail three ways in which the PLA is currently attempting to improve its ability to do so:

- Deploy a command system that integrates into one networked system the PLA's disparate command and control, communications, electronic warfare, targeting, and logistics systems.

\* Joint operations are a form of military operations that involve two or more separate military services working to conduct highly integrated combat operations where the synthesized combat power is more than the individual capabilities simply added together. A textbook example of a joint operation is Operation Desert Storm (1991), where the U.S. military and coalition forces expelled occupying Iraqi forces from Kuwait. See, for example, Joint Chiefs of Staff, *Joint Military Operations Historical Collection* (Washington, DC: Department of Defense, July 15, 1997), pp. V-1—V-15.



- Implement the necessary organizational changes for joint operations, such as developing a more flexible command and control structure.
- Develop a cohort of military personnel capable of conducting joint operations. For example, in its 12th Five Year Plan (2011–2015), the PLA leadership determined that joint training would be a major goal for the military.<sup>221</sup>

*“Three Warfares” Strategy:* Since 2003, the PLA has been developing the ability to integrate public media, international law, and psychological warfare in support of its Area Control Strategy. Dean Cheng, a research fellow at The Heritage Foundation, described to the Commission how this strategy, collectively referred to in Chinese defense writings as the “Three Warfares,” seeks to undermine the opponent’s will to fight, weaken international support for the opponent’s cause, and reinforce China’s domestic support for military operations. Reflecting the PLA’s emphasis on offensive operations, Mr. Cheng noted that this strategy would likely be deployed prior to the actual outbreak of hostilities.<sup>222</sup> The three individual components of this strategy include the following:

- Psychological warfare, which targets the leadership and population of the opponent, of third parties, and domestically in China;
- Public opinion warfare, where China would use “various mass information channels, including the Internet, television, radio, newspapers, movies, and other forms of media” to guide domestic and international public opinion in a way favorable to Beijing; and
- Legal warfare, which relies on the “use of domestic law, the laws of armed conflict, and international law” to demonstrate that China actions are legal, and the opponent is violating the law.<sup>223</sup>

### **Implications for the United States**

China’s Area Control Strategy has several implications for the United States and the Asia-Pacific Region. First, because the central tenet of the PLA’s Area Control Strategy is to provide a means to defeat a superior military, many of the PLA’s emerging capabilities appear intended directly to counter U.S. and allied military capabilities and exploit an opposing military’s weaknesses. As Ms. Mastro noted:

*China is fielding capabilities designed to deter, deny, disrupt, and delay the deployment of U.S. forces into the theater in the case of a conflict. China seeks to capitalize on U.S. vulnerabilities, specifically the great distances the U.S. needs to travel to engage China militarily as well as U.S. reliance on unimpeded access to and use of ports, airfields, air and sea bases, and littoral waters.*<sup>224</sup>

U.S. military capabilities and military bases long thought to be beyond the PLA’s reach are increasingly vulnerable without proper countermeasures. According to Mr. Cooper, “China’s greatly im-



proved detection, tracking, targeting, and long-range missile systems will soon pose a very real threat to U.S. carrier groups operating to the west of Guam.”<sup>225</sup> Jim Thomas, vice president for Studies, Center for Strategic and Budgetary Assessments, described how “the steady expansion of China’s maritime reconnaissance-strike complex is creating ‘no-go zones’ in the Western Pacific, gradually eroding America’s ability to project military power into a region of longstanding vital interest.”<sup>226</sup> The Commission noted in its 2010 Report that all six U.S. air bases in East Asia are vulnerable to PLA air and missile attacks.\*<sup>227</sup> Summarizing the effects of what improved PLA area control capabilities could mean for U.S. military operations in East Asia, General Deptula provided the following prediction:

*U.S. operations, both air, missile and maritime, from mainland Japan, Okinawa, and the Philippines will be severely impacted. The PLA will likely be able to degrade and/or deny U.S. air- and space-based surveillance and reconnaissance capabilities in the region. Command and control of deployed U.S. forces will likely be disrupted, and it will be more difficult to logistically support operations in the western Pacific. It is also likely that U.S. aircraft carriers will be forced to operate at distances far from the PRC [People’s Republic of China] mainland.*<sup>228</sup>

#### **Example of a Possible PLA Cyber Attack Against the U.S. Military**

In testimony to the Commission, Martin C. Libicki, a senior management analyst at the RAND Corporation and a well-known expert on cyber warfare, described to the Commission a plausible scenario where the PLA undertakes offensive cyber operations against the U.S. military in an attempt to disrupt U.S. deployment of forces to the western Pacific. In his scenario, the Chinese Communist Party decides to retake Taiwan forcefully and anticipates that the United States will intervene on behalf of the island. According to Dr. Libicki:

*China takes steps to complicate and hence delay the U.S. transit of the Pacific, so that by the time the United States does arrive, the war [with Taiwan] will be over, or at least the Chinese will have a secure lodgment on the island. So, [PLA forces] carry out a full-fledged operational cyberattack on the United States military information systems with the hopes of turning data into unusable nonsense.*<sup>229</sup>

\*These bases include Osan and Kunsan Air Bases in South Korea; Kadena, Misawa, and Yokota Air Bases in Japan; and Andersen Air Force Base on Guam. U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2010), p. 90.

**Example of a Possible PLA Cyber Attack  
Against the U.S. Military—Continued**

In particular, he suggested that a prime target for the PLA might be the U.S. military's logistics data system, referred to as the time-phased force and deployment data.<sup>230</sup> Although the data are stored and transmitted over unclassified networks, they "provide detailed information about what gets moved, conveyances, routes, and start and stop times."<sup>231</sup> If the PLA were able to intercept, disrupt, or obstruct these data, it could result in serious implications for U.S. warfighters. However, it is important to note that, according to a Commission-contracted study, the PLA appears to be aware that a cyber attack on the U.S. military's logistics system would not cause the military to be unable to function. Rather, it is seen as one method to slow or hinder the deployment of U.S. forces into the region.<sup>232</sup>

Second, because it posits the need to exert control over a growing area of the western Pacific, the PLA's Area Control Strategy increasingly impacts other regional actors, not just the United States and Taiwan. During the Commission's May 2011 meeting with scholars from the East-West Center in Hawaii, the center's Senior Fellow Denny Roy noted that military threats are one way that China seeks to establish a "sphere of influence" in East Asia, especially Southeast Asia.<sup>233</sup> General Deptula pointed out how improved PLA area control capabilities are:

*a growing threat to the U.S. and other countries in the region. These augmented capabilities can be used in coercive diplomacy and to contest territorial disputes by force, or threat of force. Increasingly, the PRC is focusing on developing capabilities that project power throughout the region, enhancing China's position in Asia and the world military hierarchy.*<sup>234</sup>

Robert F. Willard, commander of the U.S. Pacific Command, echoed this sentiment when he stated in December 2010 that:

*[China's] anti-access/area denial systems, more or less, range countries, archipelagos such as Japan, the Philippines and Vietnam, so there are many countries in the region that are falling within the envelope of this, of an [anti-access/area denial] capability of China. That should be concerning, and we know is concerning, to those countries. While it may be largely designed to assure China of its ability to affect military operations within its regional waters, it is an expanded capability that ranges beyond the first island chain and overlaps countries in the region. For that reason, it is concerning to Southeast Asia, and it remains concerning to the United States.*<sup>235</sup>

Furthermore, were the PLA to have the capacity to control major portions of the western Pacific, it could allow China to exert more influence throughout the region (see figure 2, below). Beijing could use PLA area control capabilities to deny states access to regional

maritime resources, such as underwater oil and natural gas in the South and East China Seas. Beijing could also pressure regional actors by threatening or conducting a blockade of major sea lanes traversing the region. Possession of additional land features outside of China's recognized maritime borders could further extend PLA capabilities to project force throughout the region by allowing the PLA to establish military-relevant platforms, such as sensors and supply depots, deeper into the East and South China Seas. In the event of a conflict, China could also use the military's area control capabilities to deny regional and outside actors the ability to operate in the international bodies of water located within the First Island Chain.

**Figure 2: Portions of the Western Pacific Most Vulnerable to Chinese Area Control Capabilities**



Source: Roger Cliff et al., *Entering the Dragon's Lair: Chinese Anti-Access Strategies and Their Implications for the United States* (Arlington, VA: RAND Corporation, 2007), p. 112.

Finally, the opaque nature of Beijing's views of what constitutes hostilities, coupled with the PLA's inclination toward offensive operations, could result in a serious miscalculation and inadvertent conflict in the region. The crux of this argument centers on the notion of deterrence, which seeks to persuade through the threat of force "a potential enemy that he should in his own interest avoid courses of activity."<sup>236</sup> However, because of the PLA's tendency to strike first, Beijing could cause a conflict to escalate dramatically. For example, General Deptula noted that "Chinese leaders might consider preemptively attacking U.S. forces as they are deploying to a region in what U.S. policymakers intend as an action to *deter* a conflict" [emphasis in original].<sup>237</sup> The 1995–96 Taiwan Strait Crisis, where Beijing attempted to intimidate Taiwan to reject fur-

ther moves toward independence, provides the historical backdrop for an example of how this could play out. Beginning in mid-1995, the PLA conducted a series of military exercises a short distance from Taiwan's territory. Just prior to Taiwan's presidential election in March 1996, the PLA again carried out military exercises, this time a series of live-fire missile tests that targeted the waters just outside of two major Taiwan ports. In response, then President Clinton dispatched two aircraft carriers to the region to demonstrate Washington's resolve to maintain stability. Subsequently, tensions between all sides diminished without the outbreak of conflict.<sup>238</sup> If this scenario were repeated today, however, China's capabilities to respond would be much greater than they were in 1996.

### **Conclusions**

- The PLA's military strategy is best described as an Area Control Strategy. At its core, this strategy seeks to provide guidance to the PLA on how to defeat a technologically superior opponent.
- In order to defeat a superior opponent, the Area Control Strategy emphasizes degrading an opponent's technological advantages; striking first in a conflict; and establishing military control over China's periphery, especially the maritime region off of China's eastern coast.
- Many of the PLA's force modernization efforts reflect China's Area Control Strategy. As a result, the PLA is acquiring capabilities that allow it to conduct surprise attacks aimed at degrading a superior military's advantages and preventing an opponent from effectively operating along China's periphery.
- Many of the PLA's evolving capabilities appear aimed at directly countering U.S. military capabilities or to exploit potential weaknesses in U.S. military operations. In addition, as the PLA expands its force projection capabilities, China's Area Control Strategy and supporting means will increasingly impact regional states. Finally, the heavy focus on offensive operations inherent in the PLA's Area Control Strategy could serve to undermine stability in the region.

## SECTION 3: THE IMPLICATIONS OF CHINA'S CIVIL AND MILITARY SPACE ACTIVITIES

### Introduction

Decades of high prioritization and steady investment from Chinese leaders, coupled with incremental indigenous achievements by Chinese scientists and engineers, place China among the top space powers in the world today.\* Qualitatively, China's space industries now produce state-of-the-art systems for certain applications, such as guided weapons that use space assets for targeting. Quantitatively, numerous active programs continue to increase China's inventory of satellites and other space assets. China's capabilities still generally lag behind those of the United States, Russia, and perhaps other nations by some measures. But of note, particularly as many nations' space programs proceed with relatively modest goals, China's civil and military space programs are in the ascendancy, in some cases on a steep trajectory.

Commission research and hearings held over the past year found that the implications of this trend for the United States and the rest of the world depend considerably on how the Chinese government seeks to use its increasingly robust space capabilities. Official statements emphasize reasonable and nonthreatening goals: prestige, scientific experimentation, exploration, and the attendant commercial and economic benefits. However, the substantial role the People's Liberation Army (PLA) plays in most facets of China's space activities demonstrates their heavily military orientation. Notwithstanding the inherently dual-use nature of many space activities, programmatic decisions such as concerted investment in counterspace technologies also indicate the centrality of military objectives. This raises questions about the Chinese government's willingness to be a responsible actor in the space domain. Threats to space infrastructure, particularly massive, orbital debris-creating events like the PLA's 2007 antisatellite demonstration (discussed below), have the potential to deny the benefits of space activities and technologies to the entire international community.

### Basic Features

China's space capabilities are advancing on several fronts. Information about China's current, space-related infrastructure illus-

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\*Although subjective, space program capabilities and expenditure levels suggest that the term "space powers" would also include the United States, Russia, Japan, and the European Union. For figures, see The Space Foundation, "The Space Report 2011" (Colorado Springs, CO: 2011), p. 42; and Union of Concerned Scientists, "UCS Satellite Database (through 4/30/11)" (Cambridge, MA: 2011). [http://www.ucsusa.org/nuclear\\_weapons\\_and\\_global\\_security/space\\_weapons/technical\\_issues/ucs-satellite-database.html](http://www.ucsusa.org/nuclear_weapons_and_global_security/space_weapons/technical_issues/ucs-satellite-database.html).

trates the depth of China's space programs. Three areas in particular bear mentioning: terrestrial infrastructure, launch vehicles, and satellites.

### ***Terrestrial Infrastructure***

Ground-based infrastructure enables all space operations. China has three active launch sites, located in Jiuquan, Gansu Province; Xichang, Sichuan Province; and Taiyuan, Shanxi Province (see figure 1, below). A fourth site is under construction at Wenchang, Hainan Island, and could become operational by 2013. In addition to these facilities, China operates two mission control centers: the Beijing Aerospace Flight Control Center, used for manned flight and lunar missions; and the Xi'an Satellite Telemetry and Control Center, used for tracking and controlling satellite data. Finally, an overseas tracking station in Swakopmund, Namibia, and four PLA-operated space tracking ships provide greater coverage areas for particular missions.<sup>239</sup>

**Figure 1: China's Operational Terrestrial Space Infrastructure\***



TT&C: Telemetry, Tracking, and Command. (Ship placement is for illustrative purposes only.)  
 Source: Globalsecurity.org, "Chinese Space Facilities," undated. <http://www.globalsecurity.org/space/world/china/facility.htm>.

\*Domestic and maritime infrastructure only.



### **Launch Vehicles**

In 2010, China conducted 15 successful satellite launches, as many as the United States and behind only Russia, according to testimony to the Commission by Clay Moltz, associate professor at the Naval Postgraduate School.<sup>240</sup> China relies primarily on the Chang Zheng (“CZ,” or “Long March”) family of rockets to launch objects into orbit. Although less capable than some American, European, and Russian launch vehicles, the Chang Zheng has amassed an impressive reliability rate.\* A new variant of the vehicle, the CZ-5, could enter service as soon as 2014, according to a Commission-sponsored report on China’s aerospace industry.<sup>241</sup> In contrast to this program, China has experienced substantial setbacks with its next-generation family of rockets, called Kaituozhe (“KT,” or “Pioneer”). Though the Pioneer has been in development since 2000, two out of a possible five tests have failed, and the future of the program remains uncertain.<sup>242</sup>

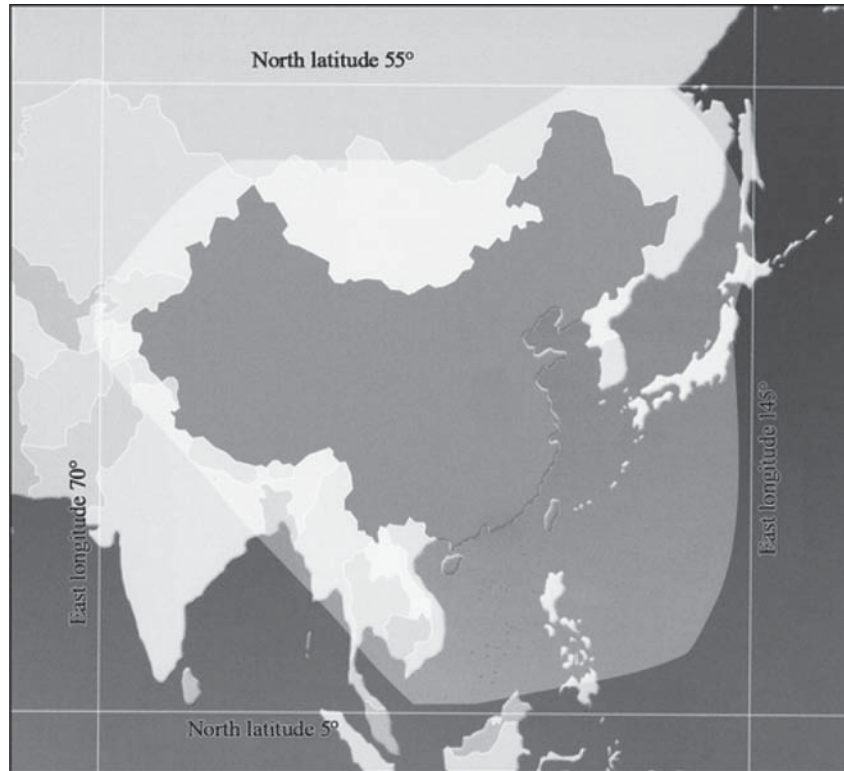
### **Satellites**

China controls approximately 70 satellites.† Chinese civil entities and state-owned enterprises (or commercial entities that involve state-owned enterprises), operate about 13, and other government or military entities control the remainder.<sup>243</sup> China’s satellites fill numerous roles, including a variety of experimental functions; communications and data relay; earth observation; weather; imagery and reconnaissance; synthetic-aperture radar; and potentially signals intelligence or electronic intelligence.<sup>244</sup> In addition, an indigenous satellite navigation capability (similar to the U.S. Global Positioning System) appears to be a high priority for Beijing, which is developing a comparable system called Beidou. Beidou-1, an experimental constellation, currently provides limited coverage (see figure 2, below). Beidou-2, a follow-on system that already includes nine operational satellites, should provide regionwide coverage from 12 satellites by 2012. By 2020, the system intends to provide global coverage with 35 satellites (see table 1, below).<sup>245</sup>

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\* Since a string of failures from 1992 to 1996 (after which American firms offered troubleshooting advice) the CZ has had only two failures: one in 2009 and one in 2011. There are some discrepancies about the CZ’s precise success rate over the life of the program. By one count, there have been 132 CZ-2, -3, and -4 launches since 1974. Of those, only seven, or about 5.3 percent, failed. This includes not just catastrophic failures but also those in which the payload failed to reach its intended orbit (in some cases, a satellite in the wrong orbit can still perform certain functions). For information about the involvement of American firms with the CZ program in the early and mid-1990s, see Shirley A. Kan, “China: Possible Missile Technology Transfers Under U.S. Satellite Export Policy—Actions and Chronology” (Washington, DC: Congressional Research Service, updated October 6, 2003). [http://assets.opencrs.com/rpts/98-485\\_20031006.pdf](http://assets.opencrs.com/rpts/98-485_20031006.pdf). For information about CZ failures in 2009 and 2011, see Stephen Clark, “Chinese rocket fails to orbit experimental satellite,” *Spaceflight Now*, August 18, 2011. <http://spaceflightnow.com/news/n1108/18longmarch/>. For data on the CZ’s success rate, see Ed Kyle, “2011 Space Launch Report,” *Space Launch Report*, September 18, 2011. <http://www.spacelaunchreport.com/log2011.html#rate>.

† By way of comparison, the United States controls over 450 satellites, Russia controls over 100, and Japan controls over 40. See Union of Concerned Scientists, “UCS Satellite Database (through 4/30/11)” (Cambridge, MA: 2011). [http://www.ucsusa.org/nuclear\\_weapons\\_and\\_global\\_security/space\\_weapons/technical\\_issues/ucs-satellite-database.html](http://www.ucsusa.org/nuclear_weapons_and_global_security/space_weapons/technical_issues/ucs-satellite-database.html).

**Figure 2: Representation of Beidou-1's Coverage Area**

Source: Junping Zhao et al., "The Design and Implementation of a Rescue Terminal with Vital Signs Telemonitoring Based on Beidou 1 Navigation Satellite System," *Telemedicine and e-Health* 2:17 (March 2011): 76–79.

**Table 1: Select Chinese Satellites (operational only)**

Type	Series	Quantity
<b>Communications</b>	Dongfanghong 3, 4	6
<b>Weather</b>	Fengyun 1, 2, 3	5
<b>Civilian Earth Observation</b>	China-Brazil Earth Resources 2	1
	Huanjing 1	2
	Haiyang 1	1
<b>Military Reconnaissance</b>	Fanhui Shi Weixing*	—
	Ziyuan	3
	Yaogan 2, 3, 4, 5, 6, 7, 8, 9, 10	9
<b>Satellite Navigation</b>	Beidou 1, 2	11

**Table 1: Select Chinese Satellites (operational only)—Continued**

Type	Series	Quantity
Other	Shijian 6, 7, 11, 12	9
	Beijing 1	1
	Chuangxin 1	1
	Shiyan 1, 2, 3	3
	Naxing 1	1
	Zheda Pixing 1	3
	Xiwang 1	1

\* Five different models exist and are used on a temporary basis. Together, they have flown 22 missions ranging between 18 and 27 days.

Source: Roger Cliff, Chad J.R. Ohlandt, and David Yang, "Ready for Takeoff: China's Advancing Aerospace Industry" (contracted research paper for the U.S.-China Economic and Security Review Commission, 2011). [http://www.uscc.gov/researchpapers/2011/RAND\\_Aerospace\\_Report%5B1%5D.pdf](http://www.uscc.gov/researchpapers/2011/RAND_Aerospace_Report%5B1%5D.pdf). Satellite navigation quantities updated to reflect subsequent launches.

### Civil Space Activities

This subsection provides background information on China's civil space activities. It discusses China's strategic approach to civil space and the space sector's organizational features. It then surveys China's recent developments and accomplishments. Finally, it discusses some apparent limitations.

#### *Strategy*

China's leadership views all space activities through the prism of "comprehensive national power,"<sup>246</sup> a construct that seeks to measure nations' relative strength in politics, economics, military capabilities, science and technology, and foreign affairs.<sup>247</sup> China's most recent official white paper on space, released in 2006, characterizes space development efforts "as a strategic way to enhance" China's standing in these areas.<sup>248</sup> Parallel to its military efforts (described below in the "Military Space Activities" subsection), Beijing has put forward initiatives in each area.

*Politics:* China's space endeavors serve to bolster the nation's standing both at home and abroad. For domestic purposes, "the [Chinese] government is using civil space activities to promote its legitimacy in the eyes of its people," according to Dr. Moltz.<sup>249</sup> Space activities for external consumption have both symbolic and concrete rationales. For example, Scott Pace, director of The George Washington University Space Policy Institute, testified that "Chinese astronauts are helpful to promoting the China 'brand' in promotional videos and international conferences."<sup>250</sup> More directly, "Conspicuous and autonomous achievements in space also reinforce China's great power status and its membership in the elite club of advanced spacefaring countries," according to testimony to the Commission by Alanna Krolikowski, visiting scholar at The George Washington University Space Policy Institute. She continued, "Achieving significant space capabilities ensures that China will have a 'seat at the table' when decisions about space are made."<sup>251</sup>

China's leadership appears to value space exploration's inherent prestige, for both domestic and external audiences, above any potential economic benefits. Ms. Krolikowski testified that:

*The areas of space technology known to generate the most direct and reliable contributions to economic development are those with concrete applications, such as telecommunications satellites and remote-sensing satellites for resource management and weather monitoring. ... In China, over the past two decades, resources devoted to civil space have been concentrated not in these relatively productive areas, but in a costly human spaceflight engineering program of no evident direct benefit to the national economy. The symbolism of human spaceflight has been an important driver of this effort.*<sup>252</sup>

*Economics:* China's economy benefits from the country's national space programs, regardless of certain programmatic decisions that emphasize prestigious accomplishments. Numerous firms, chiefly state-owned conglomerates (described below in the "Organization" subsection), engage in the research and development, design, engineering, production, launch, and maintenance of space and space-related systems. The firms employ over 200,000 people and produce systems with commercial applications. Ms. Krolikowski noted that "China is entering a phase of space-sector development during which even greater emphasis is placed on the commercialization of space technology."<sup>253</sup> Space technology also has spin-off benefits for other industries; for example, "[r]equirements for human space flight are used to improve the quality control of Chinese industries," according to Dr. Pace.<sup>254</sup> Finally, the use of space itself can have economic benefits, according to researchers at the China Institute for International Strategic Studies. During a 2010 Commission trip to China, researchers at the institute explained that China's earth observation satellites can help the agricultural sector understand soil conditions and other environmental factors, which can aid in yielding more productive crops.\*

*Science and technology:* China's leadership recognizes the strategic value of space-related technologies. "High-end manufacturing and information technology, which include satellites and telecommunications, are among the seven new strategic sectors identified in the 2011–2015 [12th] Five Year Plan to receive policy support and public investment," according to Ms. Krolikowski. She testified that "[s]pace-related industries figure in government plans for building a knowledge economy, increasing domestic consumption, especially of high-technology products, fostering indigenous innovation, and building a sophisticated scientific, technical, and industrial base."<sup>255</sup> Beijing views science and technology development as inseparable from economic and defense imperatives (described above and below, respectively).<sup>256</sup>

*Foreign affairs:* China uses space cooperation and diplomacy to fulfill a range of space-related objectives and more general diplo-

\* Researchers also explained that Chinese scientists have found that seeds irradiated via exposure to space produce higher crop yields. (Director of Strategic Studies at the China Institute for International Strategic Studies), presentation to Commission, Beijing, July 28, 2010.

matic and foreign policy goals. China cooperates with other nations on various space projects in order to develop its domestic space capacity. A notable codevelopment project is the China-Brazil Earth Resources Satellite series, which include imagery capabilities sufficient for certain military applications.<sup>257</sup> China has also secured space-related components or systems from Russia, France, the United Kingdom, and Germany.<sup>258</sup> The United States and China have cooperated on space issues during several limited windows over the past 20-plus years.\* Recent discussions at U.S.-China summits and a high-level National Aeronautics and Space Administration delegation to China suggested new momentum.<sup>259</sup> However, Representative Frank Wolf (R-VA) testified to the Commission that recent legislation prohibits any further cooperation.†

A key Chinese foreign policy objective is to secure natural resources.‡ According to Dr. Pace, China's "[o]ffers of space technology to developing countries are used to secure access to needed raw materials for the Chinese economy."<sup>260</sup> Dr. Moltz testified that China's "space deals with Nigeria and Venezuela, for example, were motivated by Chinese interests in long-term energy security."<sup>261</sup> Ms. Krolikowski testified that:

*China's approach to space exports also leverages its firms' and government's unique advantage at operating in developing-world markets. Chinese satellite manufacturers are in a position to offer generous terms to buyers in developing countries, for whom price can be a decisive factor. Offering concessional financing terms, providing development assistance (formally or informally) tied to satellite purchases, and even accepting payment for satellites in barter has made it possible for China to create buyers of satellites where none previously existed.*<sup>262</sup>

Finally, a Chinese diplomatic objective is "to portray itself as a 'purveyor' of space know-how and technology to lesser-developed states in Asia and elsewhere," according to Dr. Moltz.<sup>263</sup> To this end, China founded the Asia-Pacific Multilateral Cooperation in Space Technology and Applications in 1992. In 2008, China led a subset of that group to form the Asia-Pacific Space Cooperation Or-

\*For a brief history of U.S.-China space relations, see Carl E. Behrens, "Space Launch Vehicles: Government Activities, Commercial Competition, and Satellite Exports" (Washington, DC: Congressional Research Service, March 20, 2006 (updated)), pp. 10–14. <http://www.fas.org/sgp/crs/space/IB93062.pdf>.

†The relevant section states that: "None of the funds made available by this division may be used for the National Aeronautics and Space Administration or the Office of Science and Technology Policy to develop, design, plan, promulgate, implement, or execute a bilateral policy, program, order, or contract of any kind to participate, collaborate, or coordinate bilaterally in any way with China or any Chinese-owned company unless such activities are specifically authorized by a law enacted after the date of enactment of this division. (b) The limitation in subsection (a) shall also apply to any funds used to effectuate the hosting of official Chinese visitors at facilities belonging to or utilized by the National Aeronautics and Space Administration." United States Congress, H.R. 1473, Section 1340, 112th Cong., 1st sess.; and U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, testimony of Frank Wolf, May 11, 2011.

‡For examples of the role of natural resources in China's foreign policy, see U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, 2010), pp. 128–30; and U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, 2009), pp. 216–18.

ganization, modeled on the European Space Agency.\* These groups allow China to facilitate its cooperation agenda.

### **Organization**

China's civil space organization includes the PLA, two state-owned conglomerates, and the China National Space Agency.

*People's Liberation Army:* The PLA plays a central role in civil space activities such as exploration. Consequently, "China does not have a fully separate civil space program in the model of NASA [National Aeronautics and Space Administration] and U.S. civil space activities," according to Dr. Pace. Manned space is also an essentially military function. Ms. Krolkowski testified that "[i]n civil space, the [General Armaments Department] acts mainly in and through the Manned Space Engineering Office, the entity responsible for the human spaceflight program." She also testified that individual military services serve certain functions. For example, the PLA Air Force conducts astronaut training and medical activities.<sup>264</sup>

*China National Space Agency:* Created in 1993 under the State Council, the China National Space Agency was intended by Chinese planners to become a National Aeronautics and Space Administration equivalent.<sup>265</sup> However, the China National Space Agency never gained control of many research and development, production, and operations functions executed by the military and defense industry.<sup>266</sup> The agency now mainly facilitates and executes international agreements and other aspects of international cooperation.<sup>267</sup>

*Space industrial base:* China's space industrial base is composed of two primary state-owned conglomerates: the Chinese Aerospace Science and Technology Corporation and the China Aerospace Science and Industry Corporation. The two organizations took their present form in 1999 when Beijing reorganized the space sector to create greater competition, according to a Commission-sponsored report on China's defense industries.<sup>†</sup><sup>268</sup>

- *China Aerospace Science and Technology Corporation.* The formation of this corporation brought together scores of research institutes and production complexes. China's National Medium- to Long-Term Plan for Development of Science and Technology (2005 to 2020) designated the corporation as one of 15 select, state-owned enterprises to receive special policy incentives and extra funds for research and development, accord-

\*Seven dues-paying members compose the Asia-Pacific Space Cooperation Organization: China, Bangladesh, Iran, Mongolia, Pakistan, Peru, and Thailand. According to Dr. Moltz, the group "engages in joint research and data-exchange efforts, as well as formal training courses for scientists and engineers from the Asian-Pacific region in space technology and remote sensing."

†Both China Aerospace Science and Technology Corporation and China Aerospace Science and Industry Corporation (described below) are currently subordinate to the umbrella organization, State Administration for Science, Technology, and Industry for National Defense, which, in turn, is subordinate to the "super"-Ministry of Industry and Information Technology. See U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Clay Moltz, May 11, 2011. Additionally, like other major state-owned enterprises, both entities are administratively subordinate to the State-owned Assets Supervision and Administration Commission of the State Council.



ing to a Commission-sponsored report on China's science programs.<sup>269</sup> The industrial giant primarily focuses on powerful launch vehicles and large satellites.<sup>270</sup> It includes entities such as the China Great Wall Industry Corporation, the organization that markets launch services and satellite systems to international clients, and the China Satellite Communications Corporation, which operates telecommunications satellites.<sup>271</sup>

- *China Aerospace Science and Industry Corporation*: Although smaller than its counterpart, this corporation is composed of 180 enterprises and employs over 100,000 people. It specializes in “tactical ballistic missiles, anti-ship and land attack cruise missiles, air defense missile systems, direct ascent anti-satellite (ASAT) interceptors, small tactical satellites and associated tactical satellite launch vehicles,” according to a report by the Project 2049 Institute. The China Aerospace Science and Industry Corporation appears to be the lead entity behind China's efforts to develop an antiship ballistic missile program, which seeks the ability to target moving vessels at sea.<sup>272</sup> (For more information on the antiship ballistic missile program, see the “Military Space Activities” subsection, below, as well as sec. 1 of this chapter.)

Most of these organizations operate within tightly controlled, vertically structured bureaucracies. Ad hoc steering groups, called “Leading Small Groups,” composed of prominent individuals from the leadership of relevant Chinese Communist Party, Chinese government, and corporate organizations, provide guidance and make decisions.<sup>273</sup> Chinese officials generally do not disclose the existence of such groups or their membership. However, space-specific, leading small groups reportedly exist for “lunar projects, human spaceflight, Earth observation satellites, and heavy-lift launch vehicle development,” according to Ms. Krolkowski.<sup>274</sup>

### ***Notable Developments***

China's civil space activities have progressed at a cautious but steady rate. China's leadership values manned missions and focuses on that area. According to Dr. Pace, “It is not a question of whether China will have a full range of human space flight capabilities, but a question of when and what they intend to do with those capabilities.”<sup>275</sup> After successful manned missions in 2003, 2005, and 2008, the last of which included a space walk, China's space planners have identified a range of increasingly ambitious plans through the mid-2020s. China is currently developing a series of three small space laboratory modules that it plans to launch over the coming decade. The first of the series, “Tiangong-1,” launched in September 2011.<sup>276</sup> These laboratories will conduct research for, among other things, a future permanent space station. Though modest in size and scope in comparison to the International Space Station, China's planned space station will require substantial capabilities to orbit. The station will be composed of three separate modules—slated to launch in 2020, 2021, and 2022—that will need to rendezvous in space.<sup>277</sup> Like other aspects of China's manned space activities, the space station will be run by the PLA.<sup>278</sup>

China's leadership also places a high priority on lunar missions, which it views as perhaps the most visible and prestigious space-related accomplishment. Chinese experts and foreign observers anticipate several breakthroughs in China's lunar exploration activities over the next decade. Chinese planners describe lunar exploration in terms of three discrete stages. Stage one, which lasted from 2002 to 2007, involved orbiting the moon. Stage two, which began in 2008 and is set to conclude in 2014, involves a moon landing and the use of a rover to collect data from the lunar surface. Stage three, scheduled to take place from 2015 to 2020, involves the collection of samples from the lunar surface and their return to Earth.<sup>279</sup> A manned lunar mission (perhaps as "stage 4") may also take place as soon as 2024.<sup>280</sup> Dr. Pace testified that although "China does not publicly have a formal program for sending humans to the moon," they are "making progress toward acquiring the capabilities necessary to conduct such missions."<sup>\*</sup>

### **Limitations**

China's civil space endeavors face various constraints, including substantial bureaucratic and organizational inefficiencies. Chinese planners have yet to complete major systemic reforms, the most recent round of which began in 2008 and sought to "inject greater civilian management and innovation" into China's space industries, according to Dr. Moltz.<sup>281</sup> However, according to China space expert Eric Hagt, China's space industries remain "dispersed, bloated, and located in geographically isolated regions."<sup>282</sup> This is consistent with other Chinese state-run industries that, according to Dr. Moltz, "continue to suffer from legacy inefficiencies of the socialist economy."<sup>283</sup> These characteristics limit the potential for China's space developments to benefit other Chinese industries.<sup>284</sup>

### **The Advantages of State Control**

The numerous reorganizations of China's space sector indicate persistent dissatisfaction with industrial performance. However, state control provides China's space industrial base with certain advantages. For example, the entire sector "has been insulated from many of the pressures affecting the rest of the economy, mainly by its status as a strategic sector and its largely non-market internal relationships," according to Ms. Krolikowski. Benefits of this special status include "direct public investment in research and development; fiscal, tax, and financial policies to support major national [science and technology] projects and indigenous innovation; measures to improve market access; concessional pricing systems for land and utilities; and government oversight of mergers and acquisitions." Finally, benefits extend to predictable procurement trends, which allow China's space industrial base to forecast staffing, investment, and research and development needs. Ms. Krolikowski testified that:

<sup>\*</sup>For example, China's spacesuit "has boots with heels—and other features for walking on a surface as well as floating outside a spacecraft." See U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Scott Pace, May 11, 2011.

### The Advantages of State Control—Continued

*[China's] space industry enjoys stable, predictable demand for its products from government customers and a stable space policy environment. CASC [China Aerospace Science and Technology Corporation] and CASIC's [China Aerospace Science and Industry Corporation] near- and long-term demand expectations are based on the Five-Year Plans and even longer-term national strategies. These companies do not contend with abrupt program changes and fluctuating budgets in the way firms in other countries do.*<sup>285</sup>

With respect to commercial activities, China faces potential obstacles for satellite sales and launch services. Notwithstanding China's efforts to replace a satellite it built for Nigeria, which failed in November 2008, the incident may cause reluctance on the part of future partners. Ms. Krolikowski testified that despite a "string of recent deals, expectations for Chinese satellite exports, especially beyond developing markets, remain modest. China's satellite-manufacturing industry is not yet internationally competitive."<sup>286</sup> China has also experienced setbacks in its launch services. While China's launch tempo increased substantially starting in 2010, failed Chang Zheng launches in August 2009 and August 2011 tarnished somewhat the impressive success rate that vehicle had achieved since the mid-1990s. Future deals based on these systems may be subject to higher insurance rates, which could marginalize the cost benefits of using Chinese systems.\* Higher costs, when combined with persistent delays in China's follow-on launch vehicle, may drive potential customers to look elsewhere for launch services, such as to Russia, Europe, or perhaps the United States.†

China's relative isolation from other major spacefaring nations serves as a further strategic limitation. Export controls, such as International Traffic in Arms Regulations, complicate China's participation in international space markets.‡ This includes foreign technology acquisition as well as China's ability to provide launch services for systems that contain controlled technologies. However, several International Traffic in Arms Regulations-free initiatives are underway or under discussion.§ Another factor that isolates

\* Roger Cliff, Chad J.R. Ohlandt, and David Yang, "Ready for Takeoff: China's Advancing Aerospace Industry," (contracted research paper for the U.S.-China Economic and Security Review Commission, 2011), p. 112. [http://www.uscc.gov/researchpapers/2011/RAND\\_Aerospace\\_Report%5B1%5D.pdf](http://www.uscc.gov/researchpapers/2011/RAND_Aerospace_Report%5B1%5D.pdf). However, representatives of China Great Wall Industry Corporation told the Commission during the Commission's 2011 trip to China that the firm's insurance rates are comparable to those of international competitors.

† Representatives of China Great Wall Industry Corporation also told the Commission that potential international competitors for launch services include firms such as Proton, Ariane, and SpaceX.

‡ The International Traffic in Arms Regulations, administered through the U.S. Department of State, control the permanent and temporary export (and temporary import) of certain defense articles and services. See U.S. Department of State, "The International Traffic in Arms Regulations (ITAR)," (Washington, DC: updated January 21, 2009). [http://www.pmdtc.state.gov/regulations\\_laws/itar.html](http://www.pmdtc.state.gov/regulations_laws/itar.html).

§ For different assessments about the state of (and prospects for) the "ITAR [International Traffic in Arms Regulations]-free" industry, see U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Clay Moltz, May 11, 2011; and U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Alanna Krolikowski, May 11, 2011.

China, according to Dr. Moltz, is the nation's lack of close allies and partners in space endeavors. He testified that "[w]hile [China] cooperates with Russia, the two sides do not share strategic interests, and the bulk of China's cooperative agreements involve developing countries."<sup>287</sup> As a result, China could not necessarily rely on any other country to provide support in the event of a crisis.<sup>288</sup>

### **Military Space Activities**

This subsection describes China's military space activities. It discusses China's strategic approach to military space operations and the Chinese military's organizational features as they relate to space operations. It also describes China's recent developments and initiatives. Finally, it highlights some current limitations on China's military space programs.

#### **Strategy**

Several obstacles prevent outsiders from truly understanding China's military space activities. According to testimony by Bruce MacDonald, senior director of the Nonproliferation and Arms Control Program at the U.S. Institute of Peace, "[a] fundamental problem we face is that China says little at an official level about its military space policy and doctrine."<sup>289</sup> It is clear, however, that China's leadership recognizes the growing importance of space, as well as the domain's military utility. For example, President Hu Jintao in late 2004 issued a new set of missions to the PLA, which included the requirement to protect China's expanding national interests in space.<sup>290</sup> Official operational information is similarly rare. According to testimony to the Commission by Dean Cheng, research fellow at The Heritage Foundation, the lack of available information is so complete that "there is still no indication of whether the PLA has developed a formal space doctrine governing military operations in space."<sup>291</sup>

Authoritative Chinese military publications, however, provide some insight into China's strategic thinking. The book *Military Astronautics*, by Chang Xianqi, a major general in the PLA, serves as a key example. The text explains two critical, space-related "guiding ideas."\* First, China should seek "space supremacy," defined as "the power to control a certain area of space for a certain period of time."† In this context, the PLA would use communications, reconnaissance, and related activities for the purposes of enhancing its ability to conduct operations. Simultaneously, China would conduct offensive and defensive space operations to attack and defend space-based and terrestrial military targets. The text subsequently describes space supremacy as a "precondition to seizing air suprem-

\* Chang Xianqi, *Military Astronautics*, 2nd ed. (Beijing, China: National Defense Industries Press, 2005) OSC ID: CPP20091231572001. The source describes these guiding ideas as "anticipatory in nature." However, China's counterspace programs increasingly provide tools to implement such concepts. For a fuller description of these ideas and their implications, see U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Dean Cheng, May 11, 2011.

† The source alternatively uses the term "space control." Major General Chang characterizes space supremacy as relative, asserting that "the side which has space supremacy usually can only expect that the other side's interference will not undermine its operational plan, but cannot expect that the other side will be completely unable to respond." Chang Xianqi, *Military Astronautics*, 2nd ed. (Beijing, China: National Defense Industries Press, 2005). OSC ID: CPP20091231572001.

acy, sea supremacy, and ground supremacy, and a key to seizing and maintaining the initiative on the battlefield, thus directly affecting the process and outcome of the war.”<sup>292</sup>

Second, China’s military should seek to integrate all available means into military space operations, according to *Military Astronautics*. This idea manifests in numerous ways. For example, with respect to actors, China “should break the boundaries between the military and the civilian, and implement unified planning, unified commanding, and unified coordinating of the military, civil, and commercial space powers.” In addition, it means China should strive to conduct simultaneous and mutually reinforcing offensive and defensive actions.\*

These guiding ideas are supplemented by several “basic principles” for space operations. Notably, these principles advocate that China take the initiative in offensive space operations; attack key points in vulnerable systems; and use stealthy, abrupt actions, among other things. According to analysis by Mr. Cheng, these concepts and principles “suggest that, in the event of a Sino-American confrontation, the PLA would seek to engage American space systems early in the crisis.”<sup>293</sup> Conceptually, these strategies align with China’s larger military imperatives for area control. (For more information, see chap. 2, sec. 1: “China’s Area Control Strategy.”)

### **Organization**

The PLA dominates China’s space activities. According to Mark Stokes, executive director of the Project 2049 Institute, “[w]ithin a broad and fragmented [Chinese Communist Party] and government policy framework, the PLA plays a central role in coordinating, defining, and managing national space requirements.”<sup>294</sup> On an operational level, “[c]ritical space infrastructure, including existing launch facilities, and the day-to-day management of civil space operations, especially in the human spaceflight program, are the responsibility of PLA organs,” according to Ms. Krolikowski.<sup>295</sup> Select PLA administrative (“headquarters-level”) entities and service-level entities play a role in China’s space programs.

*Headquarters-level entities:* The PLA headquarters organization consists of four components: the General Staff Department, the General Political Department, the General Logistics Department, and the General Armaments Department. Specifically, the General Staff Department and the General Armaments Department have space interests. According to Mr. Stokes, “[f]unctional offices within the [General Staff Department] shape operational requirements for militarily relevant space-based sensors, aerospace surveillance systems, and communications satellites.”<sup>296</sup> In addition, “[t]he PLA’s [General Armaments Department] oversees the development and acquisition of technical solutions to satisfy [General Staff Department] operational requirements, and manages launch, tracking, and control of civilian and military satellites and other orbital systems.”<sup>297</sup> Ms. Krolikowski testified that “[w]ithin the PLA, the

\*Note that in Chinese usage, the terms “offensive” and “defensive” describe mission types rather than specific means. For example, both types of missions might leverage reconnaissance assets or antisatellite weapons. This differs from typical western usage, which considers most counterspace weapons to be offensive tools.



[General Armaments Department] plays the most important role in space activities.”<sup>298</sup>

*Service-level entities:* The PLA Air Force, the Second Artillery,\* and the PLA Navy are primary customers of space-based systems.<sup>299</sup> Although they do not currently control China’s space assets, the PLA Air Force and Second Artillery in particular appear to seek some degree of operational control over military space activities. Roger Cliff, senior political scientist at the RAND Corporation, testified in 2010 that while “[t]he ultimate outcome of this bureaucratic contest is difficult to predict,” any change could alter the balance of space-related responsibilities within the PLA.<sup>300</sup>

#### **Congressional Remarks on China’s Space Programs**

In testimony to the Commission, Representative Frank Wolf (R–VA) discussed the importance of space and the character of China’s space programs. He stated that:

*Space is the ultimate ‘high ground’ that has provided the U.S. with countless security and economic advantages. . . . It should not be surprising that many countries have taken notice of the tremendous benefits that the American space program has yielded. It is clear that we are now entering an era of much greater civil, defense and commercial competition in space. Most countries expanding their space programs are strong U.S. allies that are primarily interested in advancing science research or building a commercial space industry. The Chinese [space programs], however, do not fall into this category.*

*What concerns me most about the Chinese space program is that . . . it is being led by the People’s Liberation Army (PLA). There is no reason to believe that the PLA’s space program will be any more benign than the PLA’s recent military posture.*<sup>301</sup>

#### **Notable Developments**

China’s military space-related activities appear focused on two areas: using space assets and other advanced sensors for guided weapons applications (“reconnaissance-strike complexes”) and using various means to disrupt, degrade, deny, and destroy adversary space assets (“counterspace” weapons). In each area, China’s military has demonstrated substantial improvements in the past several years.

*Reconnaissance-strike complexes.* China is developing combinations of advanced sensors and guided weapons to form systems commonly referred to as “reconnaissance-strike complexes.”† Spe-

\*Also known as the “Strategic Rocket Forces,” the Second Artillery is a service-level entity under the direct control of China’s Central Military Commission.

†U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China’s Military and Civil Space Programs*, written testimony of Barry D. Watts, May 11, 2011. For a more thorough explanation, see Barry D. Watts, “Six Decades of Guided Munitions and Battle Networks: Progress And Prospects” (Washington, DC: Center for Strategic and Budgetary



cifically, China’s military is working to “fuse data from an extensive and diverse sensor network,” according to testimony by Wayne A. Ulman, China issue manager at the U.S. Air Force National Air and Space Intelligence Center.<sup>302</sup> This sensor network appears to include layers of systems: over-the-horizon radars, unmanned aerial vehicles, and remote-sensing satellites.\* Chinese analyses envision that satellites will play an important role in this architecture, as they would cue, or direct, other sensors in the network. Data from each layer, particularly once integrated, could be used to provide targeting data to guided weapons.<sup>303</sup>

Although the United States has the world’s only combat-proven global precision strike capability, China is “the country that appears to be making the greatest strides toward fielding regional [reconnaissance-strike complexes],” according to Barry D. Watts, senior fellow at the Center for Strategic and Budgetary Assessments. Space plays a key role in this effort. For example, Mr. Watts testified that “to provide accurate, real-time target information for the . . . antiship ballistic missile (ASBM), the Chinese [military has] been considering the integration of data from a variety of space-based sensors, including electro-optical (EO), synthetic-aperture radar (SAR), electronic reconnaissance, and ocean surveillance satellites” (see table 2, below).<sup>304</sup> China seeks to use data inputs from these systems, combined with data from other platforms within its sensor architecture, to correct antiship ballistic missiles’ course after launch in order to target moving ships at sea. This system appears to be operational.†

**Table 2: Select Chinese Satellites with Potential Capabilities for Reconnaissance-strike Integration**

Satellite function	Explanation	Potential examples (quantity) type
<b>Electro-optical</b>	Collects imagery. Different platforms have different capabilities, but the Yaogan type may have a resolution of up to 0.8 meters.	(5) Yaogan (1) Shijian (1) CBERS <sup>1</sup>
<b>Synthetic-aperture radar</b>	Uses a microwave transmission to image objects. Effective on land or maritime targets day or night and in all-weather conditions. Can image ship wakes to determine speed and heading.	(4) Yaogan
<b>Electronic reconnaissance</b>	Potentially collects electromagnetic, acoustic, infrared, and/or radar signatures. Can be used to identify ships on that basis.	(6) Shijian <sup>2</sup> (1) Yaogan

Assessments, March 2007). <http://www.csbaonline.org/wp-content/uploads/2011/06/2007.03.01-Six-Decades-Of-Guided-Weapons.pdf>.

\* Unmanned aerial vehicles would include “conventional” platforms, perhaps on the model of the U.S. Global Hawk, as well as a separate class of promising high-altitude, long-endurance airships optimized for reconnaissance functions. See Mark Stokes, untitled draft research paper (prepared by the Project 2049 Institute for the U.S.-China Economic and Security Review Commission, forthcoming.)

† For more on China’s antiship ballistic missile, see section 1 of this chapter.

**Table 2: Select Chinese Satellites with Potential Capabilities for Reconnaissance-strike Integration—Continued**

Satellite function	Explanation	Potential examples (quantity) type
<b>Ocean reconnaissance</b>	Also detects electronic emissions. Utilizes a combination of infrared sensors and collection antennas. The use of three satellites could locate an emitter based on triangulation.	(1) Yaogan (includes two subsatellites)

Note: This table is an attempt to assemble, collate, and analyze the limited available information on these platforms. Satellite types recur when different series within a given type are thought to host different sensors. Some of these satellites may host multiple types of sensors.

<sup>1</sup>This satellite is nominally under civilian control, but one electro-optical sensor has a high enough resolution to be militarily useful.

<sup>2</sup>Some of these satellites may have signals intelligence functions.

Sources: Roger Cliff, Chad J.R. Ohlandt, and David Yang, “Ready for Takeoff: China’s Advancing Aerospace Industry,” (contracted research paper for the U.S.-China Economic and Security Review Commission, 2011). [http://www.uscc.gov/researchpapers/2011/RAND\\_Aerospace\\_Report%5B1%5D.pdf](http://www.uscc.gov/researchpapers/2011/RAND_Aerospace_Report%5B1%5D.pdf); Mark Stokes, untitled draft research paper (prepared by the Project 2049 Institute for the U.S.-China Economic and Security Review Commission, forthcoming.)

*Counterspace activities.* China seeks the capabilities to attack an adversary’s space systems in the event of conflict. In written testimony to the Commission, United States Air Force Lieutenant General (Retired) David A. Deptula described the rationale for this trend:

*China’s leaders probably view [antisatellite weapons] and offensive counterspace systems as force multipliers. As one Chinese defense analyst noted: ‘For countries that can never win a war with the United States by using the method of tanks and planes, attacking the US space system may be an irresistible and most tempting choice.’<sup>305</sup>*

To this end, the Chinese military has initiated numerous counterspace systems. On the basis of several tests over the past decade, some of the programs appear to be currently operational (see text box, below).

#### **China’s Antisatellite Capability Demonstrations**

*September 2005:* Media reports indicate that China has conducted satellite jamming tests.<sup>306</sup>

*August–September 2006:* China used a laser to temporarily blind (or “dazzle”) U.S. reconnaissance satellites, according to media reports.\* More recently, China dazzled French satellites, according to a European Space Agency official.<sup>307</sup>

\* For the original source, see Muradian Vago, “China Attempted To Blind U.S. Satellites With Laser,” *Defense News*, September 28, 2006. For an alternative interpretation, see Union of Concerned Scientists, “Satellite Laser Ranging in China” (Cambridge, MA: UCS Working Paper, January 8, 2007). [http://www.ucsusa.org/nuclear\\_weapons\\_and\\_global\\_security/space\\_weapons/technical\\_issues/chinese-lasers-and-us.html](http://www.ucsusa.org/nuclear_weapons_and_global_security/space_weapons/technical_issues/chinese-lasers-and-us.html). Note that even satellite laser ranging activities have counterspace applications.

**China's Antisatellite Capability Demonstrations—  
Continued**

*January 2007:* China conducted a direct-ascent antisatellite demonstration that used a ballistic missile to destroy an obsolete Chinese weather satellite, creating thousands of pieces of space debris. In April 2011, a piece of this debris came so close to the International Space Station that its occupants, concerned about the possibility of a collision, needed to take shelter in an escape capsule.<sup>308</sup>

*January 2010:* China conducted a kinetic energy (also called “hit-to-kill”) ballistic missile intercept. More difficult to execute than an antisatellite attack, this technology has clear antisatellite applications and “strategic implications for U.S. security interests,” according to Mr. MacDonald.<sup>309</sup>

*June–August 2010:* Two Chinese satellites conducted a series of orbital rendezvous maneuvers that appear to have included “bumping’ into each other,” according to Mr. Cheng.<sup>310</sup> In describing this incident, General Deptula testified that “China could conceivably want to experiment with close space maneuvers, given its plans to build a space station. . . . However, the lack of official Chinese information about the maneuvers has allowed room for speculation” that China actually demonstrated a coorbital antisatellite capability.\*<sup>311</sup>

None of these incidents involved prior notification or announcement,<sup>312</sup> and several have not been acknowledged officially.

Chinese military theorists take a holistic view of counterspace operations. They advocate for the use of both “soft” kill (i.e., informational, temporary, or reversible) attacks and “hard” kill (i.e., destructive or permanently disabling) attacks against every aspect of space power: ground-based systems, space-based systems, and communications links.<sup>313</sup>

*Ground-based systems:* According to *Military Astronautics*, “[d]estroying the enemy on the ground is the most effective way of seizing space supremacy.” This can be accomplished in several ways. “Hard” kill attacks could include air raids, missile attacks, or sabotage by special operations forces.<sup>314</sup> “Soft” kill attacks could include computer network exploitations or attacks directed against key ground facilities that interact with space-based assets (see text box, below).<sup>315</sup> The text identifies several key aspects to target, such as launch systems and command and control facilities.<sup>316</sup>

*Space-based systems:* *Military Astronautics* identifies two key methods to attack satellites: kinetic attacks and directed energy attacks. Kinetic attacks could include direct ascent antisatellite

\* However, it bears mentioning that western space firms are developing their own rendezvous capabilities in order to service satellites in orbit. Barry Watts testified that “these capabilities could also be used to neutralize satellites, thereby opening the door to the de facto weaponization of space.” U.S.-China Economic and Security Review Commission, *Hearing on the Implications of China's Military and Civil Space Programs*, written testimony of Barry Watts, May 11, 2011.

weapons or coorbital satellite weapons. Such “hard” kill attacks, while effective, are immediately evident, easy to attribute, and create harmful debris. Therefore, the text identifies a preference for directed energy attacks, including various laser, microwave, particle beam, and low-power electromagnetic pulse weapons.<sup>317</sup> These attacks could take the form of either “hard” or “soft” kill, depending on the attack method and target. Key targets include power sources (e.g., batteries and solar panels), communications systems (e.g., transmission antennae), and sensors.<sup>318</sup>

*Communications links:* Critical information passes between ground- and space-based systems through electronic links, which are subject to electronic manipulation. This could take the form of either jamming or deception. Jamming includes different types of electronic interference or signals that flood communications channels, whereas deception involves the interception or forgery of transmissions to or from adversary space systems. Most of these attacks would fall into the “soft” kill category. However, deception allows the possibility for “hard” kills through self-destruction commands or measures designed to cause terminal loss of control.<sup>319</sup> Key targets for communications link attacks are the satellite uplink (which transmits information from ground stations to the satellite) and, more importantly from the Chinese perspective, the satellite downlink (which transmits information from the satellite to the ground station).<sup>320</sup>

### **Malicious Cyber Activities Directed Against U.S. Satellites**

Malicious actors can use cyber activities to compromise, disrupt, deny, degrade, deceive, or destroy space systems. Exploitations or attacks could target ground-based infrastructure, space-based systems, or the communications links between the two.\* As noted above, authoritative Chinese military writings advocate for such activities, particularly as they relate to ground-based space infrastructure, such as satellite control facilities.

Satellites from several U.S. government space programs utilize commercially operated satellite ground stations outside the United States, some of which rely on the public Internet for “data access and file transfers,” according to a 2008 National Aeronautics and Space Administration quarterly report.† The use of the Internet to perform certain communications functions presents potential opportunities for malicious actors to gain access to restricted networks.

\* For an informed description of several potential vulnerabilities in space-related networks, see Stephen Farrell and Vinny Cahill, “Security Considerations in Space and Delay Tolerant Networks” (paper presented to the 2nd IEEE [Institute of Integrated Electrical Engineers] International Conference on Space Mission Challenges for Information Technology, 2006, esp. sec. 5).

† Sunny Tsiao, “The Enduring Legacy of the ‘Invisible Network’” (Washington, DC: NASA History Division, *News and Notes*, August 2008), p. 4. <http://history.nasa.gov/nltr25-3.pdf>.

**Malicious Cyber Activities  
Directed Against U.S. Satellites—Continued**

Notably, at least two U.S. government satellites have each experienced at least two separate instances of interference apparently consistent with cyber activities against their command and control systems:\*

- On October 20, 2007, Landsat-7, a U.S. earth observation satellite jointly managed by the National Aeronautics and Space Administration and the U.S. Geological Survey, experienced 12 or more minutes of interference. This interference was only discovered following a similar event in July 2008 (see below).†
- On June 20, 2008, Terra EOS [earth observation system] AM-1, a National Aeronautics and Space Administration-managed program for earth observation, experienced two or more minutes of interference.‡ The responsible party achieved all steps required to command the satellite but did not issue commands.
- On July 23, 2008, Landsat-7 experienced 12 or more minutes of interference. The responsible party did not achieve all steps required to command the satellite.
- On October 22, 2008, Terra EOS AM-1 experienced nine or more minutes of interference. The responsible party achieved all steps required to command the satellite but did not issue commands.

The National Aeronautics and Space Administration confirmed two suspicious events related to the Terra EOS satellite in 2008 and the U.S. Geological Survey confirmed two anomalous events related to the Landsat-7 satellite in 2007 and 2008.§

If executed successfully, such interference has the potential to pose numerous threats, particularly if achieved against satellites with more sensitive functions. For example, access to a satellite's controls could allow an attacker to damage or destroy the satellite. The attacker could also deny or degrade as well as forge or otherwise manipulate the satellite's transmission. A high level of access could reveal the satellite's capabilities or information, such as imagery, gained through its sensors. Opportunities may also exist to reconnoiter or compromise other terrestrial or space-based networks used by the satellite.

\*Unless otherwise noted, the following information is derived from a briefing the U.S. Air Force provided to the Commission on May 12, 2011.

†For information on the Landsat program, see James R. Irons, "The Landsat Program" (Washington, DC: National Aeronautics and Space Administration, updated September 20, 2011). <http://landsat.gsfc.nasa.gov/>.

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§Name withheld (staff member, National Aeronautics and Space Administration), email interview with Commission staff, November 8, 2011; and Name withheld (staff member, U.S. Geological Survey), email interview with Commission staff, November 8, 2011.

**Malicious Cyber Activities  
Directed Against U.S. Satellites—Continued**

These events are described here not on the basis of specific attribution information but rather because the techniques appear consistent with authoritative Chinese military writings. For example, according to *Military Astronautics*, attacks on space systems “generate tremors in the structure of space power of the enemy, cause it to suffer from chain effects, and finally lose, or partly lose, its combat effectiveness.” One tactic is “implanting computer virus and logic bombs into the enemy’s space information network so as to paralyze the enemy’s space information system.”<sup>321</sup>

**Limitations**

Despite pockets of considerable capabilities, China has weak or moderate military space capabilities in other areas. China has few communications satellites available for military purposes, even assuming that the PLA would appropriate Chinese government-controlled assets during a crisis. Many PLA military platforms have modest bandwidth requirements, which, when combined with the PLA’s heavy reliance on buried fiber-optic military communications networks, may offset this disadvantage in the context of a potential, near-term U.S.-China contingency on China’s periphery. However, naval forces at sea and ground forces operating outside the Chinese mainland (even as close as Taiwan) would still require secure, mobile communications for military functions such as command and control.<sup>322</sup> New communications satellites or some functional equivalent, like unmanned aerial vehicles, could potentially fill this gap in coming years, depending on PLA investment priorities.

China has limited capabilities in other areas. It operates few weather satellites, which could pose a problem for Chinese military operations, particularly in the absence of information from other nations. China still lacks comprehensive satellite navigation capabilities, even within its own region, though the Beidou system is poised to close this gap over the next several years. China’s optical imagery satellites, while sufficient for many military applications, still offer lower resolution imagery than is available in commercial markets. Finally, several satellite and launch failures over the past few years have led to various program delays.<sup>323</sup>

**Implications for the United States**

The U.S. Department of Defense’s current approach to space, according to testimony by Gregory L. Schulte, deputy assistant secretary of Defense for space policy, “is designed to confront the ‘three C’s’—a space environment that is increasingly congested, contested, and competitive. China has contributed to all three.”<sup>324</sup>

**Congested**

Space, particularly low Earth orbit, is beset with natural and manmade objects. Quantities of manmade objects, including debris,



have increased dramatically over the past five years, beginning with China's 2007 antisatellite test. According to Ambassador Schulte, that test produced 14 percent of the approximately 22,000 manmade objects in orbit tracked by the U.S. Strategic Command, the entity responsible for U.S. space situational awareness. Strategic Command issues "conjunction warnings," or notices about potential collisions between these objects, to numerous commercial entities and foreign governments. Of the 1,983 conjunction warnings issued in 2010, approximately 700 related to potential collisions with debris from China's 2007 antisatellite test.<sup>325</sup> Even absent further kinetic antisatellite tests, China's increased space activities will continue to add to the congested nature of space. Launches leave behind rocket bodies, and satellites have finite life spans. These items can clutter useful orbits long after their operational lives.

### ***Contested***

Space is a domain of warfare in its own right and bolsters operational capacity in all other domains of warfare: land, air, sea, and cyberspace. In this context, China's advancements in military space functions present two primary implications for the United States. First, China increasingly leverages space assets for the purposes of force enhancement. As Mr. Cheng testified, "With each passing year, China's satellite constellations will provide better information to military users."<sup>326</sup> This information will benefit most aspects of China's military capabilities but will enhance in particular China's communications as well as intelligence, surveillance, and reconnaissance activities. As a corollary, China's reconnaissance-strike complexes, already advanced in some areas, appear poised to improve. This will lead not only to greater accuracy and reliability but also to the ability to attack a geographically extended range of targets. According to Mr. Stokes, "In a future contingency requiring U.S. intervention, space-enabled long-range precision strike assets could seek to suppress U.S. operations from forward bases in Japan, from U.S. aircraft battle groups operating in the Western Pacific, and perhaps over the next five to 10 years from U.S. bases on Guam."<sup>327</sup>

Second, China's counterspace programs seek the capability to compromise, disrupt, deny, degrade, deceive, or destroy U.S. space assets. These efforts could prevent the U.S. military's use of space for functions such as communications; intelligence, surveillance, and reconnaissance; and guided weapons applications. Notwithstanding China's increasing reliance on space for military and civil purposes, Chinese military planners still view space assets as an attractive target. Ambassador Schulte testified that with "geography the way it is, we are probably always going to find ourselves more reliant on space than [China] . . . so for the foreseeable future, that's an asymmetry they're going to look to exploit as they pursue an antiaccess/area denial approach."<sup>328</sup> According to General Deptula, "Continued Chinese investment in the design, development, deployment and employment of space and counterspace systems will increasingly challenge our traditional space dominance and could dramatically reduce our freedom of action in the event of a conflict in the region."<sup>329</sup>

### **Competitive**

According to Ambassador Schulte, “China’s nascent commercial space ambitions and increasing outreach to emerging spacefaring nations is a part of the more competitive nature of space.”<sup>330</sup> Additionally, China has several substantial goals for the mid-2020s. Some characterize as too modest U.S. plans over the same period. For example, Dr. Pace testified that:

*The United States appears to have forgotten the strategic value of a national human space flight program regardless of the existence of successful private endeavors. This may not have a near-term economic impact on the United States, as a robust range of unmanned programs will continue. However, the lack of visible U.S. leadership in human space flight may have serious foreign policy and international security impacts. It is a long-standing truism that the rules of international relations in new domains are created by those who show up and not by those who stay home.*<sup>331</sup>

Additionally, as noted above, China’s initiatives for the political, economic, science and technology-related, and diplomatic aspects of space yield a comprehensive view of the space domain and its prospects. For this reason, Dr. Moltz testified that:

*[V]iewing China’s space program solely from the perspective of its military activities is misleading. While China is active in the military sector and is seeking to check current U.S. advantages in the area, China’s challenge to the United States in space may eventually be equally significant in the civil space sector, where China’s expanding infrastructure, growing cadre of space scientists and engineers, and active international outreach puts it in a favorable position for long-term competition.*<sup>332</sup>

### **Conclusions**

- China is one of the top space powers in the world today. The nation’s capabilities, which are state of the art in some areas, follow from decades of substantial investment and high prioritization by China’s top leaders. The prestige of space exploration and the national security benefits of space systems serve as primary motivators for Chinese decisionmakers.
- China views all space activities in the context of “comprehensive national power.” This concept includes many dimensions, but military aspects are fundamental. The PLA’s primacy in all of China’s space programs, including nominally civil activities, illustrates this emphasis.
- China’s civil space programs have made impressive achievements over the past several decades. If Chinese projections hold, these programs are poised for continued accomplishments over the next ten to 15 years, such as the development of a space laboratory and eventually a space station. As part of an active lunar exploration program, China may attempt to land a man on the moon by the mid-2020s.

- China seeks new opportunities to sell satellites as well as satellite and launch services in international commercial space markets. Chinese firms' prospects for greater success in this field remain uncertain over the near term. However, China's international space-related diplomatic initiatives and their firms' ability to offer flexible terms on sales to developing countries may provide additional opportunities.
- In the military sphere, China appears to seek "space supremacy." The PLA aims to implement this policy through two tracks. First, they increasingly utilize space for the purposes of force enhancement. The best example is China's integration of space-based sensors and guided weapons. Second, they seek the capabilities to deny an adversary the use of space in the event of a conflict. To this end, China has numerous, active, counterspace weapons programs with demonstrated capabilities. China's military space and counterspace activities are part of a larger strategy for area control.

## RECOMMENDATIONS

### *China's "Area Control Military Strategy"*

The Commission recommends that:

- The relevant Congressional committees investigate the adequacy of security for the Department of Defense's logistics data system, the time-phased force deployment data system, to ensure that the data therein are secure from a cyberattack.
- Congress assess the adequacy of Department of Defense capabilities to conduct major operations in a degraded command, control, communications, computer, intelligence, surveillance, and reconnaissance environment for an extended period of time.
- Congress direct the Government Accountability Office to evaluate the Department of Defense's early warning systems to ensure that the department will have sufficient timely warning of a PLA attack in the event of a conflict.
- Congress require that the Department of Defense conduct periodic peaceful naval and air exercises in the East Asian maritime region to demonstrate the U.S. commitment to freedom of navigation.
- Congress assess the adequacy of funding for Department of Defense programs that ensure the military's ability to operate effectively against China's Area Control Strategy measures. Such programs could include, at a minimum, robust theater ballistic missile defense, antisubmarine warfare, advanced air-to-air combat, command and control, and electronic warfare capabilities.
- Congress encourage the administration to continue to work diplomatically and militarily with regional allies and friends to improve their capacity to resist China's Area Control Strategy capabilities.

### *The Implications of China's Civil and Military Space Activities*

The Commission recommends that:

- Congress mandate that the Department of Defense (and other government space operators, as appropriate) assess and report upon their preparedness for potential Chinese counterspace activities. To the extent that commercial entities provide essential services, assessments should also cover their systems.

- Congress assess the adequacy and regularity of U.S. military exercises and training activities that simulate the destruction, denial, degradation, or manipulation of U.S. space assets. In addition, Congress should periodically evaluate whether the Department of Defense is taking sufficient measures to diversify its traditionally space-oriented capabilities, such as in navigation, communications, intelligence, surveillance, and reconnaissance.

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# CHAPTER 3

## CHINA'S FOREIGN POLICY

### SECTION 1: AN OVERVIEW OF CHINA'S RELATIONS WITH NORTH KOREA AND IRAN

#### **Introduction**

Despite Beijing's stated claim to be a responsible major power, China continues to place its national interests ahead of regional stability by providing economic and diplomatic support to countries that undermine international security. In particular, China continues to have strong relations with two countries that have the most potential to destabilize their regions of the world, North Korea and Iran. Despite Pyongyang's growing isolation as the result of its recent provocative actions, Beijing continues to defend its long-time ally and provide it with much-needed economic support. China also continues to invest in and trade with Iran, despite Iran's support for international terrorism and pursuit of weapons of mass destruction. China's support for these regimes provides the two countries with resources that could be used to defy international sanctions and threaten the stability of the region. This section of the Annual Report provides an overview of China's relations with these nations in recent years.

#### **China's Support for North Korea**

Over the past year and a half, the Democratic People's Republic of Korea (or North Korea) has acted in a destabilizing fashion, increasing the chances for conflict on the Korean Peninsula. In 2010, North Korea attacked and sank a South Korean naval vessel, revealed a previously unknown uranium enrichment facility, and shelled a South Korean island. In response, most of the international community increasingly distanced itself economically and diplomatically from North Korea. China, however, has taken a different approach and instead continues to support its neighbor and ally, all the while refusing to criticize publicly the North for its actions.\* China's continued support for North Korea reflects Beijing's

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\*It should be noted that in the past, China has pressured North Korea behind the scenes to refrain from overly destabilizing activities. For example, in 2006, media reports claimed that China shipped no oil to North Korea for an entire month. Although there was no formal announcement that China's action was an attempt to pressure North Korea, the embargo did occur one month after North Korea's October 2006 nuclear test. Although one Japanese expert claimed China cut off oil supplies to North Korea after North Korea shelled a South Korean island, Commission staff were unable to discover any confirmation of the oil embargo. Furthermore, a review of China's exports to North Korea showed that while China's oil exports to North Korea did drop in the third and fourth quarter of 2010, the decline is similar to previous declines in China's oil exports to North Korea in the latter half of 2006 through 2009. Joseph Kahn, "China

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desire to prevent the collapse of the North Korean regime and the negative impact this could have on China's economic and social stability. As a result, China is of its own volition in a "mutual hostage situation" where it feels forced to continue to support North Korea despite, and increasingly due to, the North's destabilizing activities.

### ***China's diplomatic support for North Korea***

Throughout 2010 and into 2011, China continued to support and defend North Korea against international pressure despite North Korean activities that had the potential to cause a war in North-east Asia. After North Korea torpedoed a South Korean naval vessel in March 2010, killing 46 sailors,\* China refrained from condemning the attack or implicating North Korean involvement.<sup>1</sup> Instead, China waited a month to respond publicly to the sinking, at which time China simply referred to the incident as a "tragedy."<sup>2</sup> When a multinational report concluded a few months later that North Korea was indeed responsible, China refused to accept the findings and instead continued to call the incident a "mysterious naval tragedy."<sup>3</sup> Beijing also used its position as a member of the United Nations (UN) Security Council to dilute a UN statement that would have condemned North Korea for the attack.<sup>4</sup> †

In late 2010, China again defended North Korea from international criticism despite the North's provocative actions. On November 20, 2010, Pyongyang revealed a previously unknown nuclear enrichment facility, developed in defiance of UN sanctions.‡ In response to the revelation, Chinese Foreign Ministry Spokes-

cut off exports of oil to North Korea—Asia—Pacific—International Herald Tribune," *New York Times*, October 30, 2006. <http://www.nytimes.com/2006/10/30/world/asia/30iht-oil.3334398.html>; Sunny Lee, "China cut off oil to stop N. Korea from retaliating against South," *Korea Times*, January 19, 2011. [http://www.koreatimes.co.kr/www/news/nation/2011/01/113\\_79966.html](http://www.koreatimes.co.kr/www/news/nation/2011/01/113_79966.html); and International Trade Centre, "Trade Map" (Geneva, Switzerland: September 30, 2011). [http://www.trademap.org/light/Bilateral\\_TS.aspx](http://www.trademap.org/light/Bilateral_TS.aspx).

\* On March 26, 2010, North Korea torpedoed a South Korean corvette, the *Cheonan*, killing 46 sailors. Although not immediately identified as the perpetrator of the attack, a North Korean minisubmarine was implicated as the attacker by a multinational study released a few months later. International Crisis Group, "China and Inter-Korean Clashes in the Yellow Sea," *Asia Report 200* (Brussels, Belgium: January 21, 2011): 2–5.

† Beijing did protest loudly, however, when the United States and South Korea announced joint naval exercises, partially in response to North Korea's sinking of the *Cheonan*. Reacting to these exercises, China's Ministry of Foreign Affairs stated that "we firmly oppose foreign warships and military aircraft carrying out activities in the Yellow Sea and other Chinese coastal waters that affect China's security interests." China also subsequently held its own military exercises in the Yellow, East China, and South China seas. International Crisis Group, "China and Inter-Korean Clashes in the Yellow Sea," *Asia Report 200* (Brussels, Belgium: January 21, 2011): 1; Qin Gang, spokesperson for the Chinese Ministry of Foreign Affairs, July 9, 2010, cited in Bonnie Glaser and Brittany Billingsley, "US–China Relations: Tensions Rise and Fall, Once Again," *Comparative Connections* 12:3 (October 2010); and Chris Buckley, "China denies military exercise aimed at U.S.," Reuters, June 29, 2010. <http://www.reuters.com/article/2010/06/29/us-china-military-idUSTRE65S1YU20100629>.

‡ On November 20, 2010, North Korea surprised the international community by revealing a previously unknown uranium enrichment facility at the Yongbyon Nuclear Complex. According to North Korean engineers, this facility produces low enriched uranium for fuel in a still-under-construction nuclear power reactor. However, Siegfried S. Hecker, codirector of Stanford University's Center for International Security and Cooperation and the first outsider invited to visit the facility, stated that the facility could produce either fuel for the nuclear reactor or, with modifications, weapons-grade uranium. Both the newly revealed facility and the future nuclear power reactor violate UN sanctions. Siegfried S. Hecker, "A Return Trip to North Korea's Yongbyon Nuclear Complex" (Stanford, CA: Stanford University, Center for International Security and Cooperation, November 20, 2010), p. 1. <http://iis-db.stanford.edu/pubs/23035/HeckerYongbyon.pdf>; International Crisis Group, "China and Inter-Korean Clashes in the Yellow Sea," *Asia Report 200* (Brussels, Belgium: January 21, 2011): 11; and David E. Sanger, "North Koreans Unveil New Plant for Nuclear Use," *New York Times*, November 20, 2011. <http://www.nytimes.com/2010/11/21/world/asia/21intel.html>.

woman Jiang Yu simply expressed “that all sides should exercise calm and restraint, and maintain a responsible attitude to prevent tensions from escalating, playing a positive role in preserving the peace and stability of the peninsula.”<sup>5</sup> China’s first official statement expressing concern over North Korea’s new enrichment facility occurred two months later, during Chinese President and Communist Party Secretary Hu Jintao’s January 2011 visit to the United States. The joint statement from that visit noted that “the United States and China expressed concern regarding the DPRK’s [North Korea’s] claimed uranium enrichment program.”<sup>6</sup> Despite this statement, in the following month China maneuvered within the UN Security Council to block an expert report about the revelation of the new facility.<sup>7</sup> Less than a week after revealing the nuclear enrichment facility, China again blocked international pressure on North Korea when the North Korean military shelled a South Korean island, killing four South Koreans.\* Following the attack, China declined to criticize the North publicly and instead called for “emergency talks” between North Korea and South Korea.<sup>8</sup> China also maneuvered within the UN Security Council to successfully block a statement condemning the shelling.<sup>9</sup>

China has also sought to protect North Korea in light of its continued proliferation attempts over the past year. Over the course of the past year, several accounts of North Korean attempts to defy international sanctions have come to light. According to a 2010 report from an expert panel established by the United Nations, North Korea may be involved in “nuclear and ballistic missile related activities in certain countries including Iran, Syria and Myanmar.”<sup>10</sup> *The New York Times* reported that in defiance of UN Security Council Resolution 1874 North Korea smuggled, possibly through China, at least 19 intermediate-range ballistic missiles to Iran.<sup>11</sup> However, when the United Nations established an expert panel to investigate North Korea’s continued attempts to proliferate weapons of mass destruction, Beijing lobbied to delay the report’s release.<sup>12</sup> Ultimately unsuccessful, Beijing then switched tactics and attacked the authority of the report itself, stating that “[t]his does not represent the position of the Security Council, and nor [sic] does it represent the position of the relevant Security Council sanctions committee.”<sup>13</sup>

Besides defending North Korea against international pressure, Beijing also has sought publicly to portray its relationship with North Korea as strong and getting stronger. According to experts Scott Snyder, director of the Center for U.S.-Korea Policy at the Asia Foundation, and See-won Byun, a research associate at the same institute:

\* On November 23, 2010, the North Korean military shelled South Korea’s Yeonpyeong Island, killing two South Korean civilians and two South Korean marines. This was the first artillery attack on South Korean territory since the end of the Korean War in 1953. On August 10, 2011, North Korea again fired live artillery rounds into South Korea, this time in the maritime territory around the same island. John M. Ghionna and Jung-yoon Choi, “North, South Korea Exchange Fire Along Tense Western Sea Border,” *LA Times*, August 10, 2011. <http://articles.latimes.com/2011/aug/10/world/la-fgw-koreas-exchange-fire-20110810>; and Peter Foster, “North Korean attack on Yeonpyeong Island is worst against civilians in 20 years,” *Telegraph* (United Kingdom), November 23, 2010. <http://www.telegraph.co.uk/news/worldnews/asia/southkorea/8153100/North-Korean-attack-on-Yeonpyeong-Island-is-worst-against-civilians-in-20-years.html>.

*China and North Korea took unprecedented steps to consolidate political ties through historic high-level party and military exchanges in October [2010] commemorating the 65th anniversary of the founding of the WPK [the Workers Party of Korea, North Korea's Communist Party] and the 60th anniversary of the entry of the Chinese People's Volunteers (CPV) into the Korean War.*<sup>14</sup>

During the 65th anniversary of the founding of North Korea's Communist Party, Zhou Yongkang, a member of the Standing Committee of the Politburo, led a delegation to China to meet North Korean leader Kim Jong Il.<sup>15</sup> Later that same month, President Hu and Chinese Vice President (and likely future President and Communist Party leader) Xi Jinping celebrated the 60th anniversary of China's entry into the Korean War, noting that "[t]he Chinese people will never forget the friendship—established in battle—with the DPRK's [North Korea] people and army."<sup>16</sup> In July 2011, at the 50th anniversary of the signing of the *Treaty of Friendship, Cooperation and Mutual Assistance between China and North Korea*, President Hu noted that "[i]t is the firm and unwavering strategic policy of the Chinese Party and Government to continue to strengthen and develop the traditional China-DPRK [North Korea] friendly and cooperative relations [and] boost high-level visits and exchanges and expand economic cooperation."<sup>17</sup>

Further demonstrating the heightened relationship despite North Korea's provocative activities is the number of high-level meetings between the two countries. For example, since May 2010, Kim Jong Il has made an unprecedented four trips to China.\* In addition, the past year has seen a large number of exchanges between the Chinese and the North Korean governments. Table 1, below, lists some of the major exchanges.

**Table 1: Timeline of Sino-North Korean Diplomatic Exchanges since the Attack on the *Cheonan***

Date	Event
Mar. 30–Apr. 3, 2010	An Yonggi, director of the North Korean military's Foreign Affairs Department, visits Beijing and meets with Xu Caihou, vice chairman of the People's Republic of China (PRC) Central Military Commission
Apr. 29–May 1, 2010	Kim Yong Nam, North Korean legislator and president of the Presidium of the Supreme People's Assembly, visits Shanghai for the World Expo and meets with PRC President Hu Jintao
Aug. 16–18, 2010	Wu Dawei, PRC envoy on Korean Peninsula Affairs, visits North Korea and meets Kim Jong Il and Foreign Minister Pak Ui-chun

\*Mr. Kim's trips to China occurred in May and August 2010 and in May and August 2011. See Se Young Lee, "China Confirms Visit by North Korea's Kim," *Wall Street Journal*, May 22, 2011. <http://online.wsj.com/article/SB10001424052702304520804576339052444645420.html>; Evan Ramstad, "China, North Korea Tout Ties as Kim Exits," *Wall Street Journal*, August 30, 2010. <http://online.wsj.com/article/SB10001424052748703369704575461162930482200.html>; *Chosun Ilbo* (South Korea), "Cracks Open in N. Korea-China Ties," June 7, 2011. [http://english.chosun.com/site/data/html\\_dir/2011/06/07/2011060701031.html](http://english.chosun.com/site/data/html_dir/2011/06/07/2011060701031.html); and Mansur Mirovalev, "Kim Jong Il, North Korea Leader, Visits China," Associated Press, August 25, 2011. [http://www.huffingtonpost.com/2011/08/25/kim-jong-il-china\\_n\\_936054.html](http://www.huffingtonpost.com/2011/08/25/kim-jong-il-china_n_936054.html).

**Table 1: Timeline of Sino-North Korean Diplomatic Exchanges since the Attack on the *Cheonan*—Continued**

Date	Event
Sept. 30–Oct. 2, 2010	Choe Thae Bok, secretary of the Worker's Party of Korea Central Committee and chairman of the Supreme People's Assembly, leads delegation to China and meets with PRC President Hu Jintao
Oct. 9–11, 2010	Zhou Yongkang, member of the Chinese Communist Party's (CCP) Standing Committee, leads a delegation to North Korea and meets with Kim Jong Il
Oct. 14, 2010	Pyon In Son, vice minister of North Korea's People's Armed Forces, leads a military delegation to Beijing and meets with PRC Defense Minister General Liang Guanglie
Oct. 25, 2010	General Guo Boxiang, PRC vice chairman of the Central Military Commission, visits Pyongyang and meets with North Korean Premier Choe Yong-rim
Nov. 30–Dec. 4, 2010	Choe Tae Bok, chairman of the Supreme People's Assembly, visits Beijing and Jilin and holds talks with PRC State Councilors Wu Bangguo and Chen Zhili
Dec. 8–9, 2010	Dai Bingguo, PRC vice minister of foreign affairs, visits North Korea and meets with Kim Jong Il
Feb. 13–14, 2011	Meng Jianzhu, PRC state councilor and minister of Public Security, visits North Korea and meets with Kim Jong Il
Apr. 12, 2011	Zhang Mingqi, vice president of the All-China Federation of Trade Unions, visits North Korea and meets with Choe Ryong Hae, secretary of the Central Committee of the Worker's Party of Korea
Apr. 13, 2011	North Korea's first vice foreign minister, Kim Kye Gwan, visits China and meets with PRC Vice Foreign Minister Zhang Zhijun, Foreign Minister Yang Jiechi, and Special Representative for Korean Peninsula Affairs Wu Dawei
May 16–20, 2011	A delegation of the Chinese People's Political Consultative Conference (CPPCC) led by Chen Zongxing, vice chairman of the CPPCC National Committee, visits North Korea and meets Kim Yong Nam, president of the Presidium of the Supreme People's Assembly
June 9, 2011	Chen Deming, PRC minister of Commerce, visits North Korea and meets with Jang Song Taek, vice chairman of the DPRK National Defense Commission
June 10–14, 2011	A delegation led by Li Yuanchao, head of the CCP Organization Department, visits North Korea for a "strategic dialogue" with DPRK counterparts, meeting Kim Yong Nam, president of the Presidium of the Supreme People's National Assembly; Choe Thae Bok, chairman of the Supreme People's Assembly; and Kim Jong Il
June 24–28, 2011	Chen Zhenggao, deputy secretary of the Liaoning Provincial Party Committee and governor of Liaoning Province, leads a delegation to North Korea and meets North Korean Premier Choe Yong Rim in Pyongyang
July 9–12, 2011	Yang Hyong Sop, vice president of the Presidium of North Korea's Supreme People's Assembly, leads a delegation to China and attends a reception on July 10 hosted by Ji Jae Ryong, North Korea's ambassador to China, and attended by PRC State Councilor Dai Binguo

**Table 1: Timeline of Sino-North Korean Diplomatic Exchanges since the Attack on the *Cheonan*—Continued**

Date	Event
July 11–14, 2011	Zheng Dejiang, PRC politburo member and vice premier, travels to North Korea in celebration of the 50th anniversary of the Sino-North Korean mutual assistance treaty
July 9–12, 2011	Yang Hyong Sop, vice president of the Presidium of North Korea's Supreme People's Assembly, leads a delegation to China and attends a reception on July 10 hosted by Ji Jae Ryong, North Korea's ambassador to China, and attended by PRC State Councilor Dai Binguo
July 22, 2011	Foreign Minister Yang Jiechi and North Korean counterpart Pak Ui Chun hold talks on the sidelines of the Asian Regional Forum in Bali. The PRC Foreign Ministry spokesperson expresses support for bilateral talks held on the sidelines between ROK (South Korea) and North Korean envoys of the Six-Party Talks Wi Sung-lac and Ri Yong-ho
Aug. 4–7, 2011	Chinese Navy fleet visits Wonsan, North Korea, where Vice Admiral Tian Zong, commander of China's northern fleet, is received by North Korean Rear Admiral Kim Myong Sik
Aug. 25–26, 2011	Jon Chang Bok, chief of the General Logistics Bureau of the Korean People's Army Armed Forces Department, leads a Korean People's Army delegation to China and meets Liao Xilong, chief of the PLA General Logistics Department, and Defense Minister Liang Guanglie

Sources: Scott Snyder and See-won Byun, "China-Korea Relations," *Comparative Connections* 12: 4 (Honolulu, HI: January 2011): 112–16; Scott Snyder and See-won Byun, "China-Korea Relations," *Comparative Connections* 13: 1 (Honolulu, HI: May 2011): 116–18; and Scott Snyder and See-won Byun, "China-Korea Relations: A Fragile China-ROK [Republic of Korea, or South Korea] Strategic Partnership," *Comparative Connections* 13: 2 (Honolulu, HI: September 2011): 106–10.

### ***China's economic support for North Korea***

In addition to diplomatic support, Beijing also continues to provide Pyongyang with economic support that North Korea increasingly needs due to its growing international isolation. As the Congressional Research Service noted, "China, with its huge economy and rapid rate of growth, is the lifeline that keeps [North Korea] alive."<sup>18</sup> Drew Thompson, former director of China Studies at the Center for the National Interest, wrote that:

*Chinese aid, trade, and investment are critical to North Korea's social stability and economic productivity and a key source of technology and hard currency. Presumably, without this trade and investment, Kim Jong Il would lack the means to secure the allegiance of elites that support his rule, making trade and investment with China particularly important for ensuring the regime's survival.*<sup>19</sup>

China is North Korea's largest trading partner.\*<sup>20</sup> Although accurate trade values for Sino-North Korean trade are unavailable,

\* In 2010, the top five importers of North Korean goods were (in order): China, South Korea, Egypt, South Africa, and the Russian Federation. The top five exporters to North Korea in 2010 were China, South Korea, Brazil, the Netherlands, and Egypt. International Trade Centre, "Trade Map" (Geneva, Switzerland: August 12, 2011). <http://www.trademap.org/light/Bilat->



international data estimate bilateral trade between China and North Korea in 2010 reached \$3.46 billion, an increase of 29 percent over 2009.<sup>21</sup> In 2010, China exported to North Korea \$2.3 billion worth of goods and imported \$1.2 billion. China's top five imports from the North in 2010 included coal (33 percent of total imports); mineral ores (21 percent of total imports); apparels (14 percent of total imports); finished iron and steel (9 percent of total imports); and fish and seafood products (5 percent of total imports).<sup>22</sup> China's primary exports to North Korea in 2010 were mineral fuels and oils (21 percent of total exports), followed by machinery (11 percent of total exports); electronics (8 percent of total exports); vehicles (7 percent of total exports); and plastics (4 percent of total exports).<sup>23</sup>

Despite the large trade deficit with China, North Korea gains more from the trade, since it is desperately dependent upon Chinese imports. In 2010, 52 percent of North Korea's imports came from China, more than double the amount imported from South Korea, the North's second-largest import source.<sup>24</sup> Jayshree Bajoria, a senior staff writer at the Council on Foreign Relations, estimated that China may provide an estimated 90 percent of North Korea's energy, 80 percent of its consumer goods, and 40 to 45 percent of its food.<sup>25</sup> In contrast, bilateral trade with North Korea constituted less than 0.2 percent of China's 2010 total global trade.<sup>26</sup> North Korea's dependency on China likely has increased over the past year, since South Korea, the North's other main trade partner, began curtailing trade with the North after last year's sinking of the *Cheonan*.<sup>27</sup> In May 2010, South Korea took the unprecedented step of banning all inter-Korean trade, except for items produced at North Korea's Kaesong Industrial Complex, a North Korean-South Korean joint industrial park. As a result of the partial ban, inter-Korean trade, from imposition of the ban to May 2011, decreased by 54 percent, down to \$118 million (excluding Kaesong Industrial Complex trade).\*

China also provides North Korea with much-needed foreign direct investment. China's investments in North Korea are concentrated in a few sectors. According to the Open Source Center, 43 percent of publicly listed Chinese-North Korean joint ventures were involved in some facet of natural resource production.<sup>28</sup> The two countries have established three joint special economic zones, all located in North Korea near the border with China.<sup>†</sup><sup>29</sup> Chinese entities have also pledged to invest in several infrastructure projects. China's Shangdi Guanqun Investment Company, for example, is renovating North Korea's Rason port.<sup>30</sup> Of note, the announcement of the port project came just one month after North Korea's shelling of Yeonpyeong Island and the revelation of a sec-

*eral TS.aspx*; and United Nations, "United Nations Commodity Trade Statistics Database." <http://comtrade.un.org/db/>.

\*Of import, trade through the Kaesong Industrial Complex actually grew for the same period, reaching \$1.44 billion in 2010, a growth of \$103 million (54 percent) over 2009. Evan Ramstad, "Strong Kaesong Boosts Inter-Korean Trade," *Wall Street Journal*, May 27, 2011. <http://blogs.wsj.com/korearealtime/2011/05/27/strong-kaesong-boosts-inter-korean-trade/>.

†The zones are in the North Korean cities of Rason and Sinuiju and on the North Korean islands of Hwanggu'mp'yo'ng and Wihwa. Xinhua, "China, DPRK [Democratic People's Republic of Korea] to develop two economic zones," June 9, 2011. [http://www1.chinadaily.com.cn/china/2011-06/09/content\\_12667570.htm](http://www1.chinadaily.com.cn/china/2011-06/09/content_12667570.htm); and Jay Solomon and Jeremy Page, "Chinese Firm to Invest in North Korea," *Wall Street Journal*, January 19, 2011. <http://online.wsj.com/article/SB10001424052748704678004576090270026745368.html>.



ond uranium enrichment facility. Undisclosed Chinese companies are also investing in the construction of a highway from the port to the border with China and building a new bridge over the Yalu River, which separates China from North Korea.<sup>31</sup> Other Chinese joint venture investments include mineral and metal extraction and processing and low-end manufacturing facilities.<sup>32</sup>

Unlike in many other countries where China invests, the majority of Chinese investors operating in North Korea are not national state-owned enterprises but rather “privately owned companies and provincial, prefecture, and municipal-owned [state-owned enterprises],” according to Mr. Thompson.<sup>33</sup> Only four out of 138 known Chinese companies engaging in joint ventures in North Korea were national-level state-owned enterprises, and only two of the companies rank among China’s top 100.<sup>34</sup> According to an Open Source Center report, of 86 Chinese joint ventures in North Korea, approximately 65 percent originated from China’s northeastern provinces Heilongjiang, Liaoning, and Jilin, which border North Korea.<sup>35</sup> Explanations for the apparent lack of national-level investments are not clear, but it may provide China’s northeast provinces with some influence over China’s foreign policy (see sec. 2 of this chapter for more on provinces as foreign policy actors).

Unfortunately, accurate data on the amount of China’s investments in North Korea are unavailable. According to China’s Ministry of Commerce, China’s officially reported 2010 investments in North Korea totaled \$12.1 million, a 52 percent increase over 2009. China’s total investment in North Korea since 2004 equaled \$109.3 million.<sup>36</sup> Yet recent activities by China cast doubt upon these statistics or point to a recent radical uptick in investments. For example, a Chinese Foreign Ministry spokesperson stated that total investment in one of the special economic zones will be between \$300 million and \$500 million.<sup>37</sup> China’s funding for the Yalu bridge project is estimated at \$260 million.<sup>38</sup> The *Wall Street Journal* reported that China’s investment in the Rason port project is estimated at \$2 billion.<sup>39</sup> If the estimate is accurate, and the project is seen to completion, this will be China’s single largest investment in North Korea and nearly 20 times the size of China’s claimed 2004 to 2009 total investments in North Korea.

Although precise data are unavailable, China’s foreign direct investment in North Korea is substantial and provides the North with vital resources. Currently, excluding South Korea’s investment in the Kaesong Industrial Complex, China is North Korea’s largest foreign direct investor.<sup>40</sup> While figures for 2009 and 2010 are unknown, estimates indicate that in 2008 China provided 94 percent of all investments in North Korea.<sup>41</sup> \* Furthermore, while many nations are decreasing their investments in North Korea on account of its recent provocations,<sup>42</sup> China appears to be increasing its investment in North Korea as the large high-profile projects detailed above demonstrate.

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\* By way of comparison, North Korea only receives a miniscule portion of China’s overall foreign direct investments: only .02 percent in 2010, according to China’s official statistics. Ministry of Commerce, People’s Republic of China, “2010 Niandu Zhongguo Duiwai Zhijie Touzi Tongji Gongbao” (Statistical Bulletin on China’s Outward Direct Investment, 2010) (Beijing, China: 2011), p. 82.

China also provides economic support to North Korea by only loosely implementing international sanctions against North Korea. According to a Congressional Research Service study, despite China's publicly strong support for UN sanctions against North Korea for its nuclear program, China takes a "minimalist approach" to enforcing those sanctions. The study continues, noting that China persists in allowing North Korea trade and financial transactions to transit Chinese territory without rigorous inspections, contrary to UN sanctions.<sup>43</sup> According to media reports, China has also been complicit in allowing North Korea's continued support of Iran's nuclear program by permitting cargo to transit through China unchecked and failing to act on U.S.-provided intelligence toward this end.<sup>44</sup> In addition, China continues to allow luxury goods, banned by UN sanctions, to flow unobstructed to North Korea.<sup>45</sup>

#### **UN Sanctions against North Korea**

Currently, the United Nations has two main sets of reinforcing sanctions against North Korea for Pyongyang's illicit weapons of mass destruction programs: UN Security Council Resolution 1718 and UN Security Council Resolution 1874.

*UN Security Council Resolution 1718*: passed in 2006 in response to North Korea's October 9, 2006, nuclear weapons test. This resolution called upon member states to refrain from purchasing or transferring to, or procuring from, North Korea large military platforms (such as tanks and aircraft), nuclear and ballistic missile components, and luxury items (undefined).<sup>46</sup>

*UN Security Council Resolution 1874*: passed in response to North Korea's May 12, 2009, nuclear weapons test, this resolution sought to tighten previous sanctions against North Korea. In particular, it called for expanding the arms embargo to all weapons except small arms, the active inspection of all goods traveling to and from North Korea, and the curtailing of economic transactions with North Korea except when in support of humanitarian or denuclearization purposes. This resolution also established an expert panel to assess current efforts of implementing sanctions on North Korea.<sup>47</sup>

#### ***China's military support for North Korea***

Despite active measures to support the North Korean regime both economically and diplomatically, China appears to be providing North Korea with only minimal military support. David F. Helvey, principal director for East Asia Policy, Office of the Secretary of Defense, described to the Commission how Beijing still has a mutual defense agreement with Pyongyang, the only mutual defense agreement to which China is still obligated.<sup>48</sup> In previous years, Beijing has provided military arms to North Korea but appears to have refrained at least publicly from such activities since

2009, the year of tightened UN sanctions.\* The two countries have also conducted several high-level military exchanges in recent years, including an October 2010 visit to North Korea by General Guo Boxiong, vice chairman of the Central Military Commission.<sup>49</sup> Furthermore, despite the Chinese military's growing international interactions,<sup>†</sup> Commission staff research turned up no confirmed reports of joint military exercises involving Chinese and North Korean troops in the past ten years. A Congressional Research Service report notes that although China supplied ballistic missile components to North Korea in the past, it is unclear whether China continues this support today.<sup>50</sup>

### ***Reasons behind China's support for North Korea***

The overarching goal of China's North Korea policy is to maintain stability in North Korea. A Commission-sponsored research report describes how China's policies toward North Korea revolve around preventing the collapse of the North Korean regime:

*[North Korea's] sinking of the South Korean naval ship Cheonan, the shelling of [South Korea's] Yeonpyeong Island, as well as the seemingly never-ending stand-off over North Korea's nuclear program and proliferation practices provide China with ample opportunity to play a constructive role. But all of China's actions or inactions have served to simply demonstrate that the overriding Chinese interest on the Korean Peninsula is to prevent any increased pressure on the North Korean regime that could potentially lead to an implosion.*<sup>51</sup>

Victor Cha, director of Asian Studies at Georgetown University, testified to the Commission that Beijing has decided to support the North "unconditionally" in order to preserve "a minimum amount of stability in North Korea . . . even if it means acquiescing to North Korean provocation."<sup>52</sup>

Beijing fears a North Korean collapse for several reasons. Should the regime implode, it is likely that a large number of refugees, possibly in the hundreds of thousands, would attempt to flee the dire situation in North Korea by migrating across the border to China. Regional geography plays a major role in ensuring that any chaos in North Korea is likely to bleed over into China's northeast provinces of Liaoning, Heilongjiang, and Jilin. The China-North Korean border is 1,400 kilometers long, sparsely guarded, and very porous.<sup>53</sup> In contrast, North Korea's border with South Korea is heavily mined on both sides.<sup>54</sup> Furthermore, the majority of North Koreans reside along the border with China.<sup>55</sup> Therefore, according to the International Crisis Group, Beijing fears the "threat of an unsustainable flood of hundreds of thousands of refugees, bringing social, criminal and political problems with them."<sup>56</sup> The resulting

\* In 2009, the Stockholm International Peace Research Institute reported that China supplied over \$4 million in small arms sales, the last such report. Stockholm International Peace Research Institute, "Arms Transfer Database" (Stockholm, Sweden: September 6, 2011). <http://www.sipri.org/research/armaments/transfers/transparency/databases/armstransfers>.

† For more on the Chinese military's growing international activities, see the Commission's *2009 Annual Report to Congress*. U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2009), pp. 113–127. [http://www.uscc.gov/annual\\_report/2009/09\\_annual\\_report.php](http://www.uscc.gov/annual_report/2009/09_annual_report.php).

economic and social strains would seriously impact China's already economically weak northeast, commonly referred to as China's "rust belt."<sup>57</sup>

Beijing also fears that a North Korean political and economic collapse could result in the unification of the peninsula under South Korea, an U.S. ally. Dr. Cha testified that "North Korea is a strategic piece of territory for China, not in the sense that it is intrinsically valuable, but in the sense that Beijing can never allow it to fall in the hands of the South or the U.S."<sup>58</sup> As Selig Harrison, director of the Asia Program at the Center for International Policy, described, "China does not want Korea to be reunified under a South Korean regime allied militarily with the United States, and therefore wants the survival of a pro-Beijing regime in Pyongyang."<sup>59</sup> By keeping a nominally friendly state on its border, China gains the benefit of a buffer state between it and South Korea and, more importantly, U.S. forces stationed in South Korea.<sup>60</sup> Having a buffer state on its borders has been a long-standing interest for Beijing, as demonstrated by its decision to intervene in the Korean War in 1950.<sup>61</sup> China's desire for a buffer state on its borders has grown since the United States declared that it was increasing its focus on East Asia in 2010.<sup>62</sup>

The collapse of the North's government and economy would also negatively impact China's economic interests in North Korea. As mentioned above, North Korea is not a major trade partner of China. However, it does possess natural resources that are valuable to China's continued economic development (see table 2, below). Natural resources accounted for roughly 40 percent (\$465 million) of China's total imports from North Korea in 2010.<sup>63</sup> Chaos within North Korea would inhibit China's ability to extract these resources. In addition, North Korea's collapse would also impact China's goal of developing its economically weak northeast region, which constitutes the bulk of Chinese investment in North Korea.<sup>64</sup> The chaos that would ensue from an implosion of the North Korean regime would also prohibit China from capitalizing on its growing infrastructure investments in North Korea.<sup>65</sup>

**Table 2: North Korea's Estimated Natural Resource Reserves**

<b>Resource</b>	<b>Estimated North Korean Reserves (tons)</b>
Anthracite coal	4,500,000,000
Asbestos	1,300
Barite	210,000
Copper	290,000
Fluorspar	50,000
Gold	200
Iron	5,000,000,000

**Table 2: North Korea's Estimated Natural Resource Reserves—Continued**

Resource	Estimated North Korean Reserves (tons)
Kaolinite	200,000
Lead	1,060,000
Lignite	16,000,000,000
Limestone	100,000,000,000
Magnesite	6,000,000
Molybdenum	5,400
Rosette graphite	200,000
Silver	300–500
Talcum	70,000
Tungsten trioxide	24,600
Uranium ore	400,000
Zinc	2,100,000,000

Source: Adapted from Goohoon Kwon, "A United Korea? Reassessing North Korea Risks (Part I)," (New York, NY: Goldman Sachs and Co., *Global Economics Paper No: 188*, September 21, 2009), p. 10.

Because China's primary goal vis-à-vis North Korea is to prevent North Korea's collapse, coupled with North Korea's need for Chinese support, the two nations find themselves in what Dr. Cha has referred to as a "mutual hostage" situation. Testified Dr. Cha:

*In the end, [China's] support [for North Korea] derives less from some anachronistic communist allegiance, and more from the fact the two are mutual hostages: North Korea needs China to survive. It hates this fact of life and resists all Chinese advice to change its ways. China needs North Korea not to collapse. It hates this fact. And as the only patron supporting the decrepit regime today, it is, ironically, powerless more than it is omnipotent because the regime's livelihood is entirely in Chinese hands. It must therefore countenance [North Korean] bad behavior because any punishment could destabilize the regime.<sup>66</sup>*

### **China's Support for Iran**

China's relationship with Iran is characterized by the prioritization of national interests over international stability. In recent years, while a growing number of states are divesting themselves of investments in Iran's petroleum industry, China has sought to take advantage of these new investment opportunities. China also continues to provide Iran with refined petroleum products, such as gasoline, despite U.S. attempts to embargo this product. Furthermore, open source reporting notes that China may be selling Iran advanced conventional weapons, which would provide Tehran with a growing capacity to threaten U.S. interests in the region.

### ***U.S. sanctions against third-party involvement in Iran***

Over the past several decades, the United States has imposed a series of sanctions on Iran to deter it from supporting international terrorism, pursuing weapons of mass destruction, and abusing human rights. While most of the laws target U.S. companies interacting with Iran, several U.S. laws specifically target foreign companies dealing with Iran.\* These acts mandate that the U.S. government impose three or more of a possible set of nine sanctions upon a foreign entity that is found to violate one of the provisions of the sanctions. Violations include investing in Iran's petroleum industry, supplying it with refined petroleum products, and providing it with technology or know-how related to weapons of mass destruction or advanced conventional weapons. Corresponding penalties include such actions as denying Export-Import Bank loans and export licenses of U.S. military technology to the offending entity, barring the entity from winning U.S. government procurement contracts, and prohibiting the entity from importing goods to the United States or acquiring any U.S.-based property. The various acts also allow the U.S. president to waive the sanctions should it be in the national interest of the United States, or if the foreign entity's home country is cooperating to prevent Iran from acquiring weapons of mass destruction or destabilizing numbers and types of conventional weapons.<sup>67</sup>

### ***China's views on U.S. sanctions***

Beijing views Washington's attempts to punish foreign firms dealing with Iran as the extraterritorial application of U.S. domestic law and thus as an infringement of another state's sovereignty. In response to the December 2005 announcement by the Bush Administration that the United States was sanctioning six Chinese firms † under *The Iran Sanctions Act*, China's Ministry of Foreign Affairs quickly noted its disagreement with the legality of the U.S. law:

*The United States has expressed dissatisfaction with the export of certain items by Chinese enterprises, and has implemented sanctions against these Chinese enterprises under [U.S.] domestic law, to which we indicate our opposition. The reason is simple. The U.S.-imposed sanctions on these Chinese enterprises are not in accordance with international law, nor are they in accordance with international requirements on non-proliferation. Instead they are in accordance with their domestic law. We demand that the U.S. stop the relevant sanctions in order to facilitate the healthy development of Sino-U.S. economic and trade relations on the basis of equality and mutual benefit. At the same time*

\*These laws, collectively referred to as *The Iran Sanctions Act*, include the *Iran Sanctions Act of 1996*, the *Iran Nonproliferation Act of 2000*, the *Iran Nonproliferation Amendment Act of 2005*, the *North Korea Nonproliferation Act of 2006*, the *Iran Freedom Support Act of 2006*, and the *Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010*.

†The six companies were China Aero-Technology Import and Export Corporation (CATIC), China North Industries Corporation (Norinco), Hongdu Aviation Industry Group, Limmt Metallurgy and Minerals Company, Ounion (Asia) International Economic and Technical Cooperation Ltd., and Zibo Chemet Equipment Company. David E. Sanger, "U.S. to Punish 9 Companies Said to Help Iran on Arms," *New York Times*, December 28, 2005. <http://www.nytimes.com/2005/12/28/international/asia/28china.html>.



*we also clearly express, that if we find that Chinese enterprises have truly acted in violation of Chinese government laws and regulations, we will earnestly pursue the issue and punish in accordance with the law.*<sup>68</sup>

China also opposed the 2010 passage of *The Comprehensive Iran Sanctions, Accountability, and Divestment Act*. Following this law's enactment, a spokesperson for the Chinese Ministry of Foreign Affairs stated that:

*China has already noted the U.S. and other parties' announcements to implement unilateral sanctions against Iran. Not long ago, the U.N. Security Council approved Resolution 1929 concerning Iran's nuclear issue. China believes that all nations should fully, seriously, and correctly enforce this Security Council resolution, and avoid interpreting it as one pleases in order to expand the Security Council's sanctions.*<sup>69</sup>

Because Beijing disputes the legality of the U.S. laws, China is generally unwilling to comply with U.S. sanctions regarding Iran. According to John W. Garver, professor of International Relations at the Georgia Institute of Technology:

*Beijing was less willing than the European countries and Japan to follow U.S. policy advice on Iran or to bow before U.S. unilateral actions penalizing non-U.S. firms for involvement in Iran's energy sector. Beijing's greater independence from Washington served China's interest in penetrating Iran's energy sector. China's support for Iran over the nuclear issue and against U.S. pressure also inclined Tehran to see China as a relatively reliable and like-minded partner.*<sup>70</sup>

### ***China's investments in Iran's petroleum industry and provision of refined petroleum products***

While the fear of U.S. sanctions has caused many businesses to limit or cease operations in Iran, Chinese firms have seen these sanctions as an opportunity for expansion. According to a 2011 report by the Government Accountability Office, 20 of the 38 non-Chinese foreign companies with investments in Iran's petroleum industry prior to 2010 have divested (or are in the process of divesting). As these companies leave, however, Chinese (and Indian) companies use the openings to expand their investment in Iran.<sup>71</sup> Dr. Garver testified that by 2009, China and Iran were major energy partners, particularly since 2009, when "Chinese firms entered into eight new energy deals, many of which had been abandoned by Western firms under fear of U.S. sanctions."<sup>72</sup> Robert J. Einhorn, special advisor for nonproliferation and arms control at the U.S. Department of State, referred to China's practice of taking over other countries' contracts when they divest from Iran as "backfilling," which he criticized as "taking advantage of the responsible restraint of other countries."<sup>73</sup> An example of China's backfilling of divested western investments is exemplified by China National Petroleum Corporation, which expanded its investment in

Iran's South Pars Gas Field after several foreign gas companies pulled out of the project.<sup>74</sup>

There is mixed evidence on whether China may be quietly tapering off its investments in Iran's petroleum industry. In April 2011, Mr. Helvey testified to the Commission that the United States had "not seen evidence of new PRC investments in Iran's energy sector." He continued, noting, however, that China still maintains its old investments and that it is continuing to invest in Iran's other extractive resources, such as aluminum, copper, and coal.<sup>75</sup> Erica S. Downs, a fellow at The Brookings Institution, testified to the Commission in April 2011 that "recently, China's national oil companies appear to be following Washington's warning not to backfill projects abandoned by European oil companies and other firms in Iran."<sup>76</sup> According to a September 2011 Reuters article, a Chinese slowdown in further investments in Iran's petroleum industry may reflect "Beijing's efforts to appease Washington and avoid U.S. sanctions on its big energy firms."<sup>77</sup> Table 3, below, lists known Chinese investments in Iran's petroleum industry.

**Table 3: Chinese investments in Iran's Petroleum Industry, 2005-present**

Chinese Company	Activity	Status	Commercial activity
China National Off-shore Oil Cooperation (CNOOC)	Development of the North Pars natural gas field and construction of a liquefied natural gas plant	Initial agreement reached 2006–2007; final agreement signed 2009; expected completion in 2015.	Project valued at \$16 billion; CNOOC to receive 50 percent share of liquid natural gas product
China National Petroleum Corporation (CNPC)	Oil exploration and development project in Masjed-i-Suleiman oil field	Progress stalled since 2010, and the February 2011 deadline was missed	CNPC has a 75 percent holding in project
	Development of Block 3 oil field in the Zagros Basin	Second exploration well started in December 2007	unknown
	Development of the North Azadegan oil field	Equipment procurement problems likely to delay production	Providing 90 percent of the financing under a buyback contract, a \$2+ billion investment
	Development of the South Pars phase 11 natural gas project (replacing France's Total SA)	Contract signed June 2009; deal finalized in February 2010	12.5 percent share of project valued at more than \$4.7 billion
Sinopec	Development of the Yadavaran oil field	Production scheduled to begin in next 1–2 years	Contract valued between \$2 and \$3.6 billion
	Expansion and upgrade of the Arak refinery	As of 2008, estimated completion date was 2011	Contract valued at \$2.8 billion.

**Table 3: Chinese investments in Iran's Petroleum Industry, 2005-present—Continued**

Chinese Company	Activity	Status	Commercial activity
	Development of additional refinery capability	Memorandum of Understanding signed in November 2009; possibly finalized in February 2010	Contract valued at \$6.5 billion

Source: U.S. Government Accountability Office, "Iran's Oil, Gas, and Petrochemical Sectors" (Washington, DC: March 23, 2010), pp. 12–17; U.S. Government Accountability Office, "Firms Reported in Open Sources as Having Commercial Activity in Iran's Oil, Gas, and Petrochemical Sectors" (Washington, DC: August 3, 2011), pp. 16–18; and Foundation for Defense of Democracies, "Iran Energy Project" (Washington, DC: September 7, 2011). <http://www.defend-democracy.org/project/iran-energy-project/>.

However, other reports provide a different picture. In August 2011, a Reuters article noted that Sinopec Engineering Inc., an arm of the state-owned Sinopec, started up a refining unit in Iran's Arak refinery.<sup>78</sup> Although the actual value of this last investment is unknown, an earlier media report noted that Sinopec had signed a Memorandum of Understanding with Iran in November 2009 to invest \$6.5 billion in Iran's oil refineries.<sup>79</sup> In addition, in September 2011, Iran's state-controlled Pars Oil and Gas Company announced that China National Petroleum Company will resume work on Iran's South Pars Gas Field, on hold since 2009.<sup>80</sup> In addition, the U.S. Government Accountability Office in its August 2011 report listed Chinese investment projects in Iran as currently still active.<sup>81</sup>

China is also one of the few countries still willing to sell Iran refined petroleum products.<sup>82</sup> According to the Congressional Research Service, as of mid-2010, China was supplying Iran with about half of Iran's total gasoline imports.<sup>83</sup> Dr. Garver testified that as western companies began tapering off their sales of gasoline to Iran, "China was stepping in to help Iran off-set that Western pressure."<sup>84</sup> Five Chinese companies, each a state-owned enterprise, shipped gasoline to Iran in 2010. ChinaOil, a subsidiary of China National Petroleum Corporation, shipped 600,000 barrels of gasoline to Iran, valued at \$55 million. Sinopec and its subsidiary, Unipet, both shipped a total of 850,000 barrels of gasoline to Iran in 2010 for an undisclosed amount.<sup>85</sup> Two other state-owned enterprises, Zhuhai Zhenrong and Zhenhua Oil, also reportedly supplied Iran with gasoline in 2010.<sup>86</sup>

Despite China's investments in Iran's petroleum industry, and the provision of refined oil products to Iran, the U.S. government has not sanctioned any Chinese state-owned oil company. Noting this fact, Dr. Garver asserted:

*Between 2002 and 2009, nearly 40 Chinese entities were sanctioned 74 times by the United States under U.S. legislation and Executive Orders. Interestingly, however, none of China's oil majors were among the Chinese firms sanctioned in spite of those firms' vigorous entry into Iran's energy sector in the late 2000s and in spite of the apparent applicability of U.S. sanctions laws to those firms' investment in Iran's energy sector.*<sup>87</sup>

When asked by Commissioners about this discrepancy during a hearing in 2011, Daniel Kritenbrink, then acting deputy assistant secretary for East Asian and Pacific Affairs at the U.S. State Department, replied:

*We have made very clear to China that we expect them to show restraint in investments in the energy sector, and this is both in line with U.N. Security resolutions and with U.S. law. China has voted in favor of these Security Council resolutions, and stated that it shares our goal in fully implementing them. And we watch this very carefully and will continue to do so. If we find instances of where Chinese firms have violated those obligations, I can assure you we're going to look at that very carefully and engage with the Chinese very seriously.*<sup>88</sup>

#### ***China's provision of arms and weapons of mass destruction-related materials to Iran***

According to open source reporting, China continues to provide Iran with advanced conventional weapons, an act that could be in violation of U.S. sanctions against Iran.<sup>89</sup> The Stockholm International Peace Research Institute, which tracks open source reporting of international arms sales, notes that over the past five years, China has sold \$312 million worth of arms to Iran, second only to Russia, which supplied Iran with \$684 million worth of arms.<sup>90</sup> Furthermore, since Russia began decreasing its arms sales to Iran in 2008, China has become Iran's largest arms supplier.\*<sup>91</sup> As shown in table 4 below, China's arms sales since 2006 have consisted almost entirely of antiship cruise missiles. In addition to direct sales, there have been media reports that China constructed a missile plant in Iran in 2010 to produce the Nasr-1 antiship cruise missile.<sup>92</sup> In response to a query from the Commission, the U.S. Department of State noted that if these reports are true, the provision of these cruise missiles would be "potentially sanctionable."<sup>93</sup>

**Table 4: Partial List of China's Arms Sales to Iran, 2006–2010**

Item	Quantity	Date Delivered	Range
C-802 antiship cruise missile	340	1994–2010	120 kilometers (km)
FL-6 antiship cruise missile	225	1999–2010	32 km
TL-10/FL-8 antiship cruise missile	120	2004–2010	c. 20 km

\* For example, in September 2010, Russia withdrew from a \$1 billion sale to Iran of Russia's advanced air defense systems, the S-300. United Press International, "Russia ending S-300 Iran deal costs \$1B," September 29, 2010. [http://www.upi.com/Business\\_News/Security-Industry/2010/09/29/Russia-ending-S-300-Iran-deal-costs-1B/UPI-59401285794692/#ixzz1ZLj7ANAk](http://www.upi.com/Business_News/Security-Industry/2010/09/29/Russia-ending-S-300-Iran-deal-costs-1B/UPI-59401285794692/#ixzz1ZLj7ANAk).

**Table 4: Partial List of China's Arms Sales to Iran, 2006–2010—Continued**

Item	Quantity	Date Delivered	Range
C-704 antiship cruise missile	25	2010	c. 35 km
C-801 antiship cruise missile	25	2006–2010	40–80 km
QW-11 man-portable surface-to-air missile	500	2006–2010	5 km

Source: Stockholm International Peace Research Institute, "Arms Transfer Database" (Stockholm, Sweden: September 6, 2011). <http://www.sipri.org/databases/armstransfers>; Global Security.org, "Chinese Missiles." [www.globalsecurity.org/military/world/china/missile.htm](http://www.globalsecurity.org/military/world/china/missile.htm).

Although officially China ended all assistance for Iran's nuclear program in 1997 due to international pressure, there has been speculation that China, or Chinese entities, have quietly continued to provide some support for Iran's pursuit of weapons of mass destruction and ballistic missile capabilities.<sup>94</sup> Chinese companies were accused in March 2009 and 2010 of providing sensitive materials to Iran for its nuclear program.<sup>95</sup> In April 2009, a New York grand jury indicted the Chinese firm LIMMT Economic and Trade Co. for covertly using U.S. banks to finance the sale of restricted high-strength metals with military applications to subsidiaries of an Iranian military agency, potentially supporting Tehran's ballistic missile and nuclear weapons programs.<sup>96</sup> Secretary of State Hillary Rodham Clinton noted during President Hu's January 2011 visit to the United States that "we think that there are some entities within China that we have brought to the attention of the Chinese leadership that are still not, shall we say, as in compliance as we would like them to be" with international efforts to not provide Iran with nuclear technology and know-how.<sup>97</sup> In late spring 2011, a UN report posited that Iran had acquired ballistic missile technology from North Korea by transshipping the technology through "a neighboring third country," alleged to be China.<sup>98</sup> In May 2011, the U.S. State Department sanctioned three Chinese companies and one Chinese citizen for their role in weapons proliferation involving Iran under *The Iran, North Korea, and Syria Nonproliferation Act*.<sup>99</sup> It is unclear from reports, however, what items were proliferated and what was sent specifically to Iran, as opposed to Syria or North Korea.

### **Implications for the United States**

China's continued support for Iran and North Korea have several implications for the United States. By continuing to defend Iran and North Korea in international fora, China undermines international efforts to compel these countries to discontinue pursuing agendas and programs that destabilize their respective regions. China's tactics to weaken and delay international resolutions and reports provide both North Korea and Iran with valuable time to develop their respective nuclear programs. Knowing that they can rely on China to defend them from international criticism creates

\*The individuals and entities sanctioned were Karl Lee, Dalian Sunny Industries, Dalian Zhongbang Chemical Industries Company, and Xian Junyun Electronic.

Office of the Spokesperson, "Fact Sheet: Iran, North Korea and Syria Nonproliferation Act" (Washington, DC: U.S. Department of State, May 24, 2011). <http://www.state.gov/r/pa/prs/ps/2011/05/164129.htm>.

moral hazard in Pyongyang and Tehran where China's support insulates North Korea and, to a lesser extent, Iran, from the risk of their actions. As a consequence, China's diplomatic defense could embolden these nations, particularly North Korea, to undertake further destabilizing actions.

China's economic relationships with North Korea and Iran undermine international attempts to dissuade sanctioned activities by providing these regimes with a means to acquire much-needed capital. Chinese investments and infrastructure deals provide hard currency that can be diverted to finance questionable programs. By providing valuable commodities, such as refined petroleum, to Iran, China allows the North Korean and Iranian elites to maintain their hold on these countries. Furthermore, China's lax implementation of international sanctions allows these countries to continue to both acquire and proliferate sanctioned items.

Finally, if reports of China's arms sales to Iran are true, China's willingness to continue to sell to Iran advanced conventional arms and dual-use technology would enhance Iran's conventional military capabilities, thus providing Iran with a growing capacity to threaten the region. A study from the Center for Strategic and Budgetary Assessments notes that, like China, "Iran seems determined to continue developing more formidable A2/AD [antiaccess and area denial] capabilities." To this end, China-supplied ballistic and cruise missiles "could be used not only to target Persian Gulf shipping, but also to hold at risk the oil and natural gas production facilities (to include overland pipelines) of other Gulf states."<sup>100</sup> Even minimal physical damage, for example, to Saudi Arabian production, refinement, or overland transport capacity would disproportionately affect energy markets and surge prices.<sup>101</sup> With respect to shipping, China's provision of antiship cruise missiles to Iran could allow Iran to target, among other things, oil tankers transiting the Strait of Hormuz. According to one analysis of this threat, "[e]xtended closure of the strait would remove roughly a quarter of the world's oil from the market, causing a supply shock of the type not seen since the glory days of OPEC [Organization of Petroleum Exporting Countries]."\* Even relatively limited or ineffectual attacks could cause tanker operations in the area to cease or would at least increase insurance rates.<sup>102</sup>

### Conclusions

- China has continued over the past year to support North Korea despite North Korea's destabilizing actions. Diplomatically, China shields North Korea from pressure in international fora. China also continues to trade with and invest in North Korea, providing it with an economic lifeline in the face of growing international ostracism. Beijing's continued support for Pyongyang is primarily driven by its fear of a collapse of the North Korean regime and the consequences this would have for

\*This analysis also reviews Iranian mine warfare and missile warfare capabilities. It concludes that, between mines and missiles, "[i]t does not take much imagination to suggest that the traffic in the Strait of Hormuz could be impeded for weeks or longer, with major air and naval operations required to restore the full flow of traffic." See Caitlin Talmadge, "Closing Time: Assessing the Iranian Threat to the Strait of Hormuz," *International Security* 33: 1 (Cambridge, MA: Summer 2008): 82.



China's economic, social, and security interests; as well as the fear of the loss of a buffer state on its border.

- Despite U.S. efforts to sanction Iran for its support of international terrorism and pursuit of weapons of mass destruction, China remains a large investor in Iran's petroleum industry and a major provider of refined oil products. China may also be supplying Iran with advanced conventional weapons, such as cruise missiles. China's investments in Iran's petroleum industry, and its continued provision of gasoline and advanced conventional weapons, may be at odds with U.S. laws.
- Continued Chinese support for North Korea and Iran demonstrates China's willingness to place its national interests ahead of regional stability by providing economic and diplomatic support to countries that undermine international security.

## SECTION 2: ACTORS IN CHINA'S FOREIGN POLICY

### Introduction

Through a combination of hearings, two fact-finding trips to East Asia, and research over the past year, the Commission investigated the changing dynamics of China's foreign policy-making. Overall, the Chinese Communist Party (CCP) elite, the party's Politburo Standing Committee, continue to exert overarching control of China's foreign policy-making. Other party and government entities, such as the Ministry of Foreign Affairs, the People's Liberation Army (PLA), and provincial actors, influence and implement China's foreign policies. However, as China has expanded its overseas interests, the number of voices affecting Chinese foreign policy also has increased. Chinese state-owned enterprises (SOEs) and banks, and think tanks and academic institutions have increasing influence on China's foreign policies. In addition, private citizens may have a modicum of ability to influence foreign policies through the use of the Internet. As a result of the growing number of players influencing China's foreign policy-making process, coordination among the various actors is more difficult for Beijing. The following section will describe the actors creating, implementing, and influencing Chinese foreign policy and what implications the proliferation of voices could have for the United States.

### Official Chinese Foreign Policy Actors

China's official foreign policy actors include individuals and organizations in the CCP apparatus and in the Chinese government under the State Council. The most influential actors are the Politburo Standing Committee, the Foreign Affairs Leading Small Group, the Ministry of Foreign Affairs, the PLA, and on a smaller scale, provincial governments.

### *Politburo Standing Committee of the CCP*

Comprising the top nine members of the CCP, the Politburo Standing Committee is the ultimate body that approves foreign policy decisions. Although it does not publicize its agenda, the Politburo Standing Committee reportedly meets every seven to ten days and operates on a consensus basis; no one member has exclusive say over foreign policy decisions.<sup>103</sup> In testimony to the Commission, Susan Lawrence, an analyst at the Congressional Research Service, stated that the two members of the Politburo Standing Committee who have the greatest involvement in foreign policy are current President and Party Chairman Hu Jintao and Vice President Xi Jinping (who is likely to become president and party chairman in 2012).<sup>104</sup> However, as a Commission-sponsored report

noted, 2012 may herald changes to the foreign policy-making dynamics on the Politburo Standing Committee as new leaders attempt to jockey for power during China's leadership transition.<sup>105</sup>

### ***Foreign Affairs Leading Small Group of the CCP***

The party's Foreign Affairs Leading Small Group\* is a coordinating body comprised of representatives from party leadership organs, the government, and the military. Although China does not publicize the membership of the Foreign Affairs Leading Small Group, reports suggest that its members include the state councilor (see text box below); the head of the CCP's International Department;† the ministers of foreign affairs, commerce, defense, state security, and public security; leading officials in charge of propaganda, Taiwan policy, and Hong Kong and Macau affairs; and a deputy chief of the PLA's General Staff Department.‡<sup>106</sup> The role of the group is to analyze major foreign policy issues and make recommendations to the Politburo Standing Committee on policy decisions. However, Ms. Lawrence testified that several analysts believe that the Foreign Affairs Leading Small Group has not met as a full body for almost two years. She stated that this suggests that President Hu and Vice President Xi "feel comfortable running foreign policy without regular input from the full membership."<sup>107</sup>

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\*Leading small groups in China are ad hoc policy and coordination working groups, the membership of which consists of Chinese political elites. The creation of such groups of high-level officials allows the Chinese government to focus efforts and resources from various ministries and departments on issues or projects that the central government feels are important. U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2010), p. 98.

†The International Department is a body within the CCP that maintains and builds links with foreign political parties, including noncommunist parties such as the Democratic and Republican parties in the United States. It also facilitates contacts with think tanks and non-governmental organizations worldwide. David Shambaugh, "China's 'Quiet Diplomacy': The International Department of the CCP," *China: An International Journal* 5:1 (March 2007): 26–54.

‡The PLA General Staff Department is the military command headquarters for the PLA. Its duties include planning, organizing, and directing military operations; and conducting staff work for the top leadership of the PLA to assist them in decision-making. David Finkelstein, "The General Staff Department of the Chinese People's Liberation Army: Organization, Roles and Missions," in James Mulvenon, *The People's Liberation Army as Organization* (Arlington, VA: RAND Corporation, 2002), pp.122–123. [http://www.rand.org/pubs/conf\\_proceedings/CF182/CF182.ch4.pdf](http://www.rand.org/pubs/conf_proceedings/CF182/CF182.ch4.pdf).

**State Councilor Dai Bingguo**

China's State Councilor Dai Bingguo advises the premier and vice premier of the State Council of the Chinese government (currently Wen Jiabao and Li Keqiang, respectively) and outranks the ministers of foreign affairs and commerce. In addition to his position in the Chinese government, State Councilor Dai also has influence among the CCP leadership as a full member of the CCP Central Committee\* and as the former head of the CCP International Department and the former party secretary of the Ministry of Foreign Affairs.<sup>108</sup> In his role as state councilor, State Councilor Dai is often considered China's top diplomat and serves as U.S. Secretary of State Hillary Rodham Clinton's counterpart in important bilateral meetings, such as the annual U.S.-China Strategic and Economic Dialogue.<sup>109</sup>

Unlike the U.S. State Department, which is instrumental in formulating and implementing foreign policy, China's Ministry of Foreign Affairs primarily implements foreign policies that have been approved by the Politburo Standing Committee and the Foreign Affairs Leading Small Group. For example, Chinese ambassadors, who serve under the Ministry of Foreign Affairs, generally neither approve nor direct policy; they can only make recommendations to higher-ups. In states deemed less vital to China's national interests, the ministry enjoys more leeway in determining policies.<sup>110</sup> In testimony to the Commission, Daniel Kritenbrink, then acting deputy assistant secretary of State in the Bureau of East Asian and Pacific Affairs, explained the challenges of liaising with China's Ministry of Foreign Affairs due to its limited role in foreign policy-making:

*The [Chinese] Ministry of Foreign Affairs, while being the [U.S.] State Department's primary counterpart, [is] one of several voices and institutions involved in the making of Chinese foreign policy. . . . Given the structure of the Communist Party and the Chinese government, the ultimate decisions are made at a much higher level.*<sup>111</sup>

According to several witnesses who testified to the Commission, the role of the Ministry of Foreign Affairs in foreign policy-making has diminished over the past decade.<sup>112</sup> David Lampton, director of China Studies at The Johns Hopkins School of Advanced International Studies, testified that "no longer do [China's Ministry of] Foreign Affairs offices control the gateways to the outside world as they once did."<sup>113</sup> Some analysts assert that the reasons for the decline in influence include the Ministry of Foreign Affairs' increasing reliance on other agencies for expertise and its competition with a multitude of other actors advancing their interests overseas.<sup>114</sup> For

\*The full CCP Central Committee, elected by the National Congress of the Communist Party of China, is composed of 371 top Chinese leaders from the party, state, and army. The body nominally elects members of the Politburo (25 members), which appoints the Politburo Standing Committee (nine members). However, most analysts agree that the Central Committee as a full body does not have much real power in Beijing and merely serves as a rubber stamp for decisions already made by the Politburo and the Politburo Standing Committee. Nevertheless, departments within the body can be very influential. Kenneth Lieberthal, *Governing China: From Revolution Through Reform* (New York, NY: W.W. Norton & Company, Inc., 1995), pp. 78-79; Xinhua, "New CPC [Communist Party of China] central committee elected," October 21, 2007. [http://news.xinhuanet.com/english/2007-10/21/content\\_6917379.htm](http://news.xinhuanet.com/english/2007-10/21/content_6917379.htm).

example, according to Ms. Lawrence, many of the Chinese players in Africa, including SOEs, banks, and private entrepreneurs, do not necessarily feel compelled to coordinate their activities with the Ministry of Foreign Affairs because they have their own connections and expertise on the ground in African countries.<sup>115</sup> In addition, the Ministry of Foreign Affairs must compete for influence with other organizations, such as the Ministry of Commerce, which holds jurisdiction over foreign trade, and the National Development and Reform Commission (NDRC), which has major influence over China's economic development, specifically in the energy sector.<sup>116</sup>

### ***People's Liberation Army***

The PLA historically was much more involved in China's foreign policy-making process, with prominent military officers holding powerful positions on the Politburo Standing Committee. Today, no uniformed member of the PLA sits on the Politburo Standing Committee, and thus the military officially does not have a direct voice in Chinese foreign policy. However, President Hu and Vice President Xi currently preside over the Central Military Commission, the military's supreme decision-making body, ensuring that the interests of the military are represented on the Politburo Standing Committee, albeit unofficially. In addition, because of the PLA's expertise on defense-related issues, it can influence the policy-making process. In testimony to the Commission, David Helvey, principal director for East Asia for Asia Pacific Security Affairs at the Department of Defense, stated, "[a]s China's interests have expanded, there is a greater intersection between China's defense and foreign policies, giving the PLA a greater role in shaping debates—particularly public debate—on foreign and security policy."<sup>117</sup> Linda Jakobson and Dean Knox explain the PLA's foreign policy role in a study by the Stockholm International Peace Research Institute:

*The PLA shares authority with government and commercial entities on decisions pertaining to arms control and non-proliferation—spheres with direct foreign policy implications over which the PLA formerly exercised nearly unquestioned authority. The PLA still holds sway in these and other defence-related foreign policy issues, particularly with respect to policies related to strategic arms, territorial disputes and national security towards countries such as India, Japan, North Korea, Pakistan, Russia and the USA. In particular, the PLA is a staunch advocate of a hard line towards Taiwan and perceived US interference in cross-Strait relations.*<sup>118</sup>

In recent years, the PLA appears to have grown more assertive in expressing its views. Yu-Wen Julie Chen, visiting scholar at the University of Virginia, testified to the Commission that the PLA has apparently "trespassed on the Foreign Ministry's conventional role as the mouthpiece of foreign affairs" and has been more willing to publicly express opinions that differ from those of the senior civilian leadership.<sup>119</sup> A representative from Singapore's Ministry of Defense told the Commission that this shift began to surface immediately following the global financial crisis as many of the PLA's hard-line leaders grew more confident in China's relatively un-

scathed economy relative to its western counterparts.<sup>120</sup> Some of the means that the PLA has used publicly to assert its views on foreign policy are military publications and op-eds penned by senior military officials in prominent newspapers.<sup>121</sup>

This deviation from official policy has led several observers to assert that the PLA is actually becoming more autonomous. They point to the 2007 Chinese antisatellite test\* and the January 2011 test of the J-20 stealth fighter jet during then U.S. Secretary of Defense Robert Gates' visit to Beijing as evidence that the military is acting without approval from President Hu and the rest of the Politburo Standing Committee.†<sup>122</sup> However, others argue that these incidents merely display a lack of coordination among Chinese foreign policymakers, particularly between the PLA and the Ministry of Foreign Affairs, and do not represent a fundamental change in who creates China's foreign policy.<sup>123</sup> Others believe that the civilian leadership in China strategically allows the PLA publicly to voice more extreme views and then distances itself from those opinions so as to add a degree of uncertainty to its interactions with other countries.<sup>124</sup> Because of the opacity that surrounds civil-military relations in China, it is unclear which of these theories, or combinations of them, are correct. As Alan Wachman, professor at Tufts University, testified to the Commission, "[e]ven though it is a widespread perception that the PLA is resurgent and the Ministry of Foreign Affairs is in a diminished state of influence, I don't think any of us really is in a position to say that we know that to be the case."<sup>125</sup>

### ***Chinese Provinces ‡***

Although China's management of foreign affairs is highly centralized, Chinese provinces sometimes act as agents of the central government or as partners with the central government in creating and implementing foreign policies related to trade and security.<sup>126</sup> This is especially the case with China's border provinces, which often act as China's "front line" of engagement with its neighbors.<sup>127</sup> The provincial foreign policy-making bureaucracy both reflects and complements that of the central government: Governors and provincial party secretaries are the top decisionmakers and have the same status as ministers in the central government. These individuals usually lead provincial foreign affairs leading

\* On January 11, 2007, China conducted its first successful antisatellite weapon test, during which it shot down an aging weather satellite with a ballistic missile. However, the Ministry of Foreign Affairs did not release an official statement about the test until 12 days later, leading analysts to question whether President Hu Jintao and other leaders in the Chinese government knew about the PLA's intentions prior to conducting the test. Shirley A. Kan, "China's Anti-Satellite Weapon Test" (Washington, DC: Congressional Research Service, April 23, 2007), p. 4. <http://www.fas.org/sgp/crs/row/RS22652.pdf>.

† During Secretary Gates' January 2011 trip to Beijing, the PLA conducted a test of its J-20 stealth fighter jet. When Secretary Gates asked President Hu about the test, the Chinese leader said he was not aware that it had taken place, leading some western analysts to question whether the military deliberately did not inform President Hu. For more information on the J-20 and its test flight, see chapter 2, section 1, of this Report. Jeremy Page and Julian Barnes, "China Shows its Growing Might: Stealth Jet Upstages Gates, Hu," *Wall Street Journal*, January 12, 2011. <http://online.wsj.com/article/SB10001424052748704428004576075042571461586.html>.

‡ For the purposes of this section, the term "provinces" will refer to provincial-level entities in China, including provinces, autonomous regions, municipalities, and special administrative regions.



small groups to coordinate and direct local foreign relations.‡<sup>128</sup> Many provincial leaders also are powerful actors in the central government, and currently provincial leaders hold two of the nine seats on the Politburo Standing Committee and ten of 25 Politburo seats.§

Under the stewardship of central government ministries, Chinese provinces are empowered to be economic liaisons and international dealmakers, fulfilling China's "going out" strategy\* and creating economic growth locally. Provincial leaders are responsible for creating and implementing local foreign trade strategies and managing provincial SOEs.<sup>129</sup> Border provinces such as Jilin and Liaoning (opposite North Korea), and Yunnan (opposite Burma, Laos, and Vietnam) create and implement policies to foster economic engagement across their borders, often with heavy political and financial support from the central government. Jilin is a leading actor in support of China's engagement policy toward North Korea. The province invests in open border cities, economic cooperation zones, joint ventures, and cross-border infrastructure and aims to advance national policies to secure resources, create wealth, and promote economic stability across the border.†<sup>130</sup> Yunnan Province has similar trade-liberalizing policies along its border with Vietnam and Burma.<sup>131</sup> Reflecting on Yunnan's role as an integral link to China's southern neighbors, President Hu toured Yunnan in 2009 and declared the province a "bridgehead" for China's relations with South and Southeast Asia, a pronouncement that inspired widespread investments in infrastructure and commerce under the banner of a new "bridgehead strategy."<sup>132</sup>

The provinces also are agents of China's foreign policies related to security and defense, pursuing regional security goals, and maintaining internal and external stability along China's borders. This is especially the case in regard to North Korea, which could create a problem for China in the event of a human security disaster (including the possibility of refugees flooding into China). In such a case, provincial and local officials would be responsible for the

‡ Provincial-level management of foreign relations under governors and provincial party secretaries is conducted by provincial Foreign Affairs Offices and Foreign Trade and Economic Cooperation Commissions, which manage foreign diplomatic relations and foreign trade relations, respectively. Chen Zhimin, "Coastal Provinces and China's Foreign Policy-making," in Yifan Hao and Lin Su, eds., *China's Foreign Policy Making: Societal Force and Chinese American Policy* (Aldershot, UK: Ashgate Publishing Limited, 2005), pp. 11–12. <http://www.cewp.fudan.edu.cn/attachments/article/68/Chen%20Zhimin,%20Coastal%20Provinces%20and%20China%27s%20Foreign%20Policy%20Making.pdf>.

§ Liaoning and Shanghai are represented in the Politburo Standing Committee; Beijing, Tianjin, Jiangsu, Hubei, Guangdong, Xinjiang, and Chongqing are represented in the Politburo. Linda Jakobson and Dean Knox, *New Foreign Policy Actors in China* (Stockholm, Sweden: Stockholm International Peace Research Institute (SIPRI), Policy Paper 26, September 2010), p. 32. <http://books.sipri.org/files/PP/SIPRIPP26.pdf>.

\* China's "going out" strategy was formally enunciated in 2002 by then Chinese President Jiang Zemin as a strategy to help China open up to the world, economically and diplomatically. U.S.–China Economic and Security Review Commission, *2008 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2, 2008), p. 236.

† Jilin represents 38 percent of China's accumulated foreign direct investment (FDI) to North Korea since 2000, and North Korea is the province's fourth-largest trading partner. While this heavy investment has contributed to economic growth in Jilin, it also makes Jilin particularly vulnerable to North Korea's unpredictable suspensions of cross-border trade. Bloomberg News, "Dead Border' Is Price of China Support for North Korea Regime," June 14, 2010. <http://www.bloomberg.com/news/2010-06-14/dead-border-thwarts-growth-as-chinese-pay-price-for-backing-north-korea.html>; Carla Freeman and Drew Thompson, *China on the Edge: China's Border Provinces and Chinese Security Policy* (Washington, DC: The Center for the National Interest and The Johns Hopkins School for Advanced International Studies, April 2011), pp. 36–39. [http://www.cftni.org/China\\_on\\_the\\_Edge\\_April\\_2011.pdf](http://www.cftni.org/China_on_the_Edge_April_2011.pdf).

management of border control, fire fighting, internal security, managing displaced persons, and operating refugee camps, *inter alia*.<sup>133</sup> (For more information on China's security polices related to North Korea, see chap. 3, sec. 1, of this Report.) Similarly, in China's westernmost province of Xinjiang, the quasi-military Xinjiang Production and Construction Corps plays a multifaceted role in China's political relationship with its Central Asian neighbors by managing border defense and meeting with foreign leaders.<sup>134</sup> Provincial leaders and law enforcement personnel also are the primary actors dealing with transnational threats like human and drug trafficking, the spread of HIV/AIDS, and political crises in bordering countries.\* Coastal provinces also have provincial maritime law enforcement programs, which add to China's already robust maritime presence.<sup>135</sup> (For more information on China's maritime policies in the South China Sea, see chap. 2, sec. 1, of this Report.)

### **Nontraditional Chinese Foreign Policy Actors**

Aside from the official Chinese actors that are responsible for creating and implementing Chinese foreign policy, a number of nontraditional actors are increasing in importance. SOEs and state-owned banks, Chinese academics and think tanks, and a growing number of Internet users are all beginning to have a voice in foreign affairs and are seeking ways to become more influential in the policy-making process.

#### ***State-owned Enterprises***

As China's SOEs have expanded their global reach, their influence in China's foreign policy-making has grown as well. Large SOEs dominate strategic industries, such as the energy and telecommunications sectors, providing them with many connections to Beijing's political elites. These companies influence foreign policy by virtue of their leaders' access to official policy-making bodies, their expertise in national strategic industries, and their employment of Chinese workers and provision of capital for Beijing.<sup>136</sup> (For more information on China's SOEs, see chap. 1, sec. 2, of this Report.)

Executives of SOEs, especially those in strategic sectors like petroleum, minerals, nuclear, and defense, often have membership in or access to official decision-making bodies in China. Heads of all major SOEs under the central government are appointed by the party's Organization Department and Ministry of Personnel, and some of these individuals hold ministerial or vice-ministerial rank or serve as alternate members of the CCP Central Committee (for example, the general managers of China's three largest state-owned oil companies are vice ministers).<sup>137</sup> While these official positions do not give companies power to make important foreign pol-

\* Yunnan and Guangxi provinces also work to resolve transnational security problems through participation in the Greater Mekong Subregion, a cooperation organization in which these provinces and five Southeast Asian nations work with the Asian Development Bank and other partners to enhance cooperation in nine security, economic, cultural, technological, and environmental sectors. Asian Development Bank, "Greater Mekong Subregion" (Manila, Philippines: July 22, 2011). <http://www.adb.org/gms/>; Carla Freeman and Drew Thompson, *China on the Edge: China's Border Provinces and Chinese Security Policy* (Washington, DC: The Center for the National Interest and The Johns Hopkins School for Advanced International Studies, April 2011), pp. 71–73. [http://www.cftni.org/China\\_on\\_the\\_Edge\\_April\\_2011.pdf](http://www.cftni.org/China_on_the_Edge_April_2011.pdf).

icy decisions directly, they enable state-owned company executives to take part in implementing and debating policies that come from higher up.<sup>138</sup> Business executives also maintain close ties to high-ranking officials. According to a Stockholm International Peace Research Institute report, Fu Chengyu, chief executive officer of China National Offshore Oil Corporation, is said to have access to Foreign Minister Yang Jiechi “any time he wants.”<sup>139</sup>

Moreover, there is a “revolving door” of political and industrial appointments through which highly ranked personnel in government bodies and state-owned companies are promoted from one sector to the other, enabling business executives and government officials to take their expertise and professional networks from the government to the business sector, or vice versa. For example, former heads of large companies have become members of the Politburo Standing Committee or the CCP Central Committee or have become governors or provincial party secretaries.<sup>140</sup> This revolving door particularly applies to China’s oil industry, which is known to undergo occasional personnel “shake-ups” during which oil executives are moved from company to company or from a company to a powerful government position.<sup>141</sup> This system facilitates tied interests between the energy sector and the government and ensures that the governing elites always have a hand in this strategic industry.<sup>142</sup> For example, Zhou Yongkang, a current member of the Politburo Standing Committee, is the former head of China National Petroleum Corporation, one of China’s largest state-owned oil companies. Erica Downs, fellow at The Brookings Institution, testified to the Commission that some analysts assert that Mr. Zhou has used his position on the Politburo Standing Committee to liaise with and promote the interests of the national oil companies.<sup>143</sup>

SOEs also provide valuable expertise to policymakers. Dr. Chen testified to the Commission that SOEs are able “to provide ... detailed and expert knowledge on certain vital issues [which] increases their value for decision-makers.” Because these companies have extensive, on-the-ground experience in numerous countries, their managers often are experts on the foreign countries’ government structures and market conditions. Chinese leaders often rely on this knowledge to inform their foreign policy-making decisions.<sup>144</sup>

SOEs operating overseas are important contributors to China’s economic growth and its ability to employ its burgeoning work force. National SOEs provide the government with massive revenues and employ 6.8 million Chinese workers, most of whom work overseas.<sup>145</sup> As more workers go abroad to work for these SOEs, the Chinese government must find ways to protect them if the country in which they are working becomes destabilized or is victim to a terrorist attack or natural disaster. For example, after the turmoil began in Libya this past year, the PLA and the Ministry of Foreign Affairs worked to evacuate almost 36,000 Chinese citizens from the country, making it one of the largest and most complicated overseas evacuations of Chinese citizens in the history of the People’s Republic of China (PRC).<sup>146</sup> (For more information about the Libya evacuation, see chap. 2, sec. 1, of this Report.) Because the decisions taken by these companies can directly affect

China's economic growth and the livelihood of Chinese workers, leaders are apt to incorporate the companies into the policy-making process, whether it be foreign policy or otherwise.<sup>147</sup>

SOEs often advance China's national "going out" policy to secure resources to fuel China's economic growth and broaden China's global footprint. Their myriad global economic interests sometimes can be at odds with China's wider foreign policy goals.<sup>148</sup> For instance, state-owned oil companies operating in unstable or "rogue" countries like Sudan and Iran have attracted the ire of the international community.\*<sup>149</sup> In the case of Sudan, the NDRC removed the country from a list of preferred destinations for Chinese oil investments in 2007, but two state-owned oil companies ignored the NDRC's guidance and continued to purchase Sudanese oil assets.<sup>150</sup> Dr. Downs testified that the state-owned oil companies rarely coordinate their overseas activities with government ministries and that some Chinese scholars think that the national oil companies are "hijacking the foreign policy process" in Sudan and Iran.<sup>151</sup>

### ***State-owned Banks***

Two of China's state-owned banks are responsible for supporting government policy objectives abroad: China Development Bank and the Export-Import Bank of China. Both banks operate under the State Council, and China Development Bank has full ministerial rank.<sup>152</sup> China Development Bank and the Export-Import Bank of China play a key role in the financing of China's foreign economic activities. China Development Bank has facilitated several billion dollars' worth of Chinese companies' investments abroad, making it a key player in China's "going out" strategy, especially when it comes to acquiring energy resources. The Export-Import Bank of China is responsible for facilitating foreign trade and allocating China's foreign aid.<sup>153</sup>

Many of China Development Bank's loans require a high degree of cooperation between the central government and business, with the bank acting as the main coordinating body between the two.<sup>154</sup> Government entities often are at the forefront of China's high-profile strategic energy deals overseas; however, China Development Bank sometimes plays the leading role in identifying investment opportunities and coordinating deals.<sup>155</sup> Such was the case for a \$10 billion oil-backed loan to Brazil's national oil company, Petrobras, in 2009. China Development Bank, which had been conducting market research in Brazil since 2000, proposed the loan, which Beijing later supported as a diplomatic deliverable for upcoming state visits with Brazil. Dr. Downs writes of the deal in "Inside China Inc.: China Development Bank's Cross-Border Energy Deals":

*The coincidence of the negotiations between [China Development Bank] and Petrobras with the preparation for the two sets of meetings between Chinese and Brazilian leaders prompted the Chinese government to embrace the deal as a*

\*Sudan and Iran constituted the fourth- and fifth-largest sources of China's crude oil imports for January 2011. ChinaOilWeb.com, "China's Crude Oil Imports Data for January 2011." <http://www.chinaoilweb.com/UploadFile/docs/Attachment/2010-3-169132990.pdf>.

*symbol of the growing economic ties between China and Brazil. According to Chen Yuan [governor of China Development Bank], 'once the Ministry of Foreign Affairs, Ministry of Commerce, the National Development and Reform Commission and the State Council realized this coincidence, they provided their active support. As a result, this project became a national project.'*<sup>156</sup>

### **Academics and Think Tanks**

As China's foreign policy becomes more complex, its leaders increasingly are turning to academics and think tanks to inform their debates about policies related to international affairs. Think tanks and universities operate under varying degrees of official administration, with many think tanks funded entirely by the government and major universities overseen by party officials. For this reason, some doubt the independence and the reliability of the information these institutions are providing to policymakers. A study by the Brussels Institute of Contemporary China Studies characterizes Chinese think tanks as:

*[P]ermanent, policy oriented structures with their own research staff who regularly publish and communicate the results of their studies to officials and to the public, albeit to a lesser extent than their Western counterparts. They all strive to achieve greater freedom of research and to contribute to the public good, although these orientations are of course bound by the red lines set by the government and by the need to respect the primacy of the CCP in their policy solutions.*<sup>157</sup>

Chinese scholars influence foreign policymakers through formal channels and informal connections to top leaders.<sup>158</sup> For example, think tanks often submit reports to their affiliated government organizations, and academics are sought out by government officials to participate in meetings or conferences on foreign policy issues.<sup>159</sup> Their opinions often differ, and at times debates between scholars are made public in the media. An example of this type of debate took place in December 2009 when the Chinese newspaper *Global Times* published a debate between two scholars about whether China should intervene militarily in Afghanistan.<sup>160</sup> However, on particularly sensitive core issues for the CCP, such as Taiwan and Tibet, leaders allow little leeway for scholarly debate in public fora.<sup>161</sup>

#### **Major Chinese foreign policy research institutions and their affiliations**<sup>162</sup>

<b>Institution</b>	<b>Administering organization</b>
<i>Communist Party</i> International Strategy Research Institute	Central Party School
<i>People's Liberation Army</i> Academy of Military Sciences	Central Military Commission
National Defence University	Central Military Commission
China Institute for International Strategic Studies	PLA General Staff Department
China Foundation for International Strategic Studies	PLA General Staff Department



**Major Chinese foreign policy research institutions and their affiliations—Continued**

<i>Government</i>	
Development Research Centre	State Council
Chinese Academy of Social Sciences	State Council
China Institute of International Studies	Ministry of Foreign Affairs
China Institutes of Contemporary International Relations	Ministry of State Security
China Center for International Economic Exchanges	National Development and Reform Commission
<i>Local Government</i>	
Shanghai Institutes for International Studies	Shanghai City Government
<i>Academic*</i>	
Institute of International Relations	China Foreign Affairs University
Strategy and Conflict Research Center	China Foreign Affairs University
Institute of International Studies	Fudan University
School of International Studies	Peking University
School of International Studies	Renmin University
Institute of International Studies	Tsinghua University
Institute of International Strategy and Development	Tsinghua University

Chinese leaders often use think tanks and academia not only as a resource but also as a platform for testing potentially controversial foreign policies and gauging the response. Ms. Lawrence testified to the Commission that Beijing uses “semi-official actors” from scholarly institutions to float ideas, and that:

*[There is an] interesting relationship between scholars and the government. On the one hand, they sometimes will present themselves as being independent analysts of the situation, and yet there are classes of scholars who are cleared by the government to essentially speak for it and also to run with certain kinds of ideas and see what kind of response they get from them.<sup>163</sup>*

### **Public Opinion and Internet Users**

While not nearly as influential as some of the above-listed groups, public opinion and Internet users are growing increasingly influential in foreign policy-making as Internet use becomes more prevalent in China. There are over 500 million Internet users in China, 195 million of which are active bloggers, many of whom utilize the Internet as a forum for the discussion of politics, governance, and foreign affairs, among other things.<sup>164</sup> The Commission’s 2010 *Annual Report to Congress* notes:

*China’s leadership, at all levels of the government, increasingly uses the Internet to interact with the Chinese people. This practice, interwoven with strict censorship controls, affords the government the ability to allow a controlled online debate about certain issues ... The government then*

\*Most Chinese university-affiliated research institutes are administered by the Ministry of Education and lack substantial links to foreign policymakers in China. However, some experts from these institutions are well known and have influence on foreign policy-making. Thomas J. Bickford and Kristen Gunness, *China’s International Relations Think Tanks: Structure, Roles, and Change* (Alexandria, VA: The CNA Corporation, September 2007), p. 5.



*leverages what it learns from following this debate to construct policies that aim to undercut the most serious irritants to domestic stability.*<sup>165</sup>

In addition to monitoring the debate on domestic issues, the Chinese government uses the Internet and public opinion to gauge the opinions of Internet users on China's foreign policy decisions. While the government largely censors the Internet in China, it also is sensitive to the reactions of the Chinese people. David Shambaugh, professor at The George Washington University, notes:

*The Chinese government is quite sensitive to this body of public opinion, as much of it is hyper-nationalistic and critical of the government for being 'weak' or 'soft' in the face of foreign pressures and indignities. Foreign Ministry officials are quick to point out that this is a constituency they must constantly consider, react to, and attempt to control.*<sup>166</sup>

The ability of Internet users to mobilize en masse around a foreign policy issue was evident in 2005 when 40 million Chinese signed an Internet petition opposing Japanese attempts to become a permanent member of the United Nations (UN) Security Council.<sup>167</sup> In a more current example of Chinese Internet users' influence over the way China relays its foreign policy, Dr. Downs testified about the prominent news and Internet coverage of the recent Chinese evacuation of its citizens from Libya. The Chinese response to the crisis in Libya contrasted greatly with China's response to the kidnapping and murder of Chinese citizens in Ethiopia in 2007, which elicited sharp criticism of the government from Chinese Internet users for not coming to the aid of Chinese citizens. Dr. Downs asserted that the reason for the enhanced coverage of the Libya evacuation was to prevent the same type of backlash from Chinese Internet users that arose in 2007.<sup>168</sup>

Nevertheless, these voices are severely limited by China's propaganda apparatus, which aggressively censors online material that is deemed inappropriate. As a result, often the only voices that are left on the Internet are those that already coincide with the opinions of Beijing's elite. Dr. Chen testified:

*It is hard to establish a link between online pressure and the government's foreign policy. It is more appropriate to say that policymaking elites can entertain online expression of interests, picking and choosing the ones they see as being most beneficial for the execution or conduct of foreign affairs.*<sup>169</sup>

### **Coordination of Foreign Policy Actors under the CCP**

The proliferation of voices in Chinese foreign policy has made coordination among actors difficult in recent years. Often, in any given country, Beijing must manage the activities of the ministries of Foreign Affairs, Commerce, Finance, Agriculture, Health, and the Export Import Bank of China and China Development Bank. On top of that, companies, provincial governments, and research institutions are launching their own relationships with specific nations. Ms. Lawrence noted, "[m]any of the Chinese players ... now

do not answer to the Foreign Ministry, and do not necessarily feel compelled to coordinate their activities with it.”<sup>170</sup> Difficulties can arise when two ministries conflict with one another in carrying out China’s foreign policy, because they are both seated at the same bureaucratic level.<sup>171</sup>

In some cases, a lack of coordination among China’s various foreign policy actors threatens to upset Beijing’s foreign policy goals. For example, in the South and East China Seas, there are at least six distinct official actors operating, including China’s five civilian maritime administration and security agencies and the PLA Navy. In testimony to the Commission, Stacy A. Pedrozo, a U.S. Navy captain and military fellow at the Council on Foreign Relations, noted that China’s various maritime actors are insufficiently coordinated, posing a threat to the peaceful resolution of disputes in the region.<sup>172</sup> Chinese officials acknowledge this problem as well and have announced plans to enhance central coordination of actors in the South China Sea in the future.<sup>173</sup> A lack of coordination between Chinese government ministries and state-owned weapons manufacturers may also have led to a strain in Sino-Libyan relations in 2011. A Canadian newspaper discovered evidence that three Chinese state-owned companies offered to sell \$200 million in weapons to pro-Qaddafi forces in June in violation of a UN embargo on arms sales to Libya. Chinese Ministry of Foreign Affairs officials denied prior knowledge of the negotiations, and some analysts suggested that the state-owned weapons manufacturers may have bypassed the Ministry of Foreign Affairs and instead dealt directly with the Qaddafi government.<sup>174</sup>

Despite problems of coordination, there is little dispute that the CCP still holds firm control over China’s foreign policy. Although many of the groups involved have access to the political elite in the Communist Party, Dr. Chen testified that “[i]n the end, it is [CCP] decision-making elites who can define and determine which groups can exist and enter the foreign policy-making process.” Ultimately, the top leadership, namely President Hu and the Politburo Standing Committee, are the definitive architects of Chinese foreign policy.<sup>175</sup>

### **Implications for the United States**

The increasing number of voices in Chinese foreign policy-making requires U.S. diplomats and leaders to be adept in identifying which individuals and organizations are influential and where they fall in the Chinese foreign policy-making apparatus while ensuring that they are mindful of the opinions of nontraditional actors as well. As China’s foreign policy actors grow in number and diversity, the direction and intention of China’s foreign policies may become more difficult for U.S. policymakers to calculate. Dr. Shambaugh notes, “[t]he fact that China has such a diverse discourse suggests that it possesses multiple international identities and a schizophrenic personality.”<sup>176</sup> This can complicate how the United States formulates its policies vis-à-vis China and can lead to misperceptions of what each country’s true intentions are. For example, if U.S. leaders exclusively paid attention to the hard-line voices coming out of the PLA, they might be inclined to react to what they perceive is a more aggressive China. During the Com-

mission's December 2010 trip to Singapore, Commissioners heard from the Singaporean Ministry of Foreign Affairs about its frustration with the number of different voices coming out of Beijing, making it difficult to know whether specific Chinese officials' opinions are authoritative.

Although the increasing number of players involved in China's foreign policy-making process may make U.S. policy responses more difficult to coordinate, it could provide U.S. diplomats with multiple channels to engage China's policymakers on important issues. While the Ministry of Foreign Affairs remains the primary point of contact for U.S. officials, the proliferation of other foreign policy players in China could expand opportunities for the United States to pursue a more sophisticated understanding of China's foreign policy process.

### **Conclusions**

- As China expands and diversifies its overseas activities, it encounters an increasingly complex environment requiring the input and advice from knowledgeable subject matter experts. As a result, China's foreign policy-making process is changing to accommodate input from actors who previously had little or no say.
- Actors with increasing influence on China's foreign policies include the PLA, large state-owned enterprises, and academics and think tanks. In addition, while still minor compared to other actors, public opinion, expressed primarily online, appears to have a modicum of influence on some Chinese foreign policies.
- The CCP remains firmly in control of China's foreign policies, especially for issues deemed critical, such as China's policies toward the United States, North Korea, and Taiwan. This is despite the increased difficulty Beijing may have in coordinating a coherent policy among a growing number of actors.
- The growing complexity of China's foreign policy-making process has mixed implications for the United States. On the one hand, Washington may find it more difficult to interact with priority counterparts in Beijing as the number of actors in the policy process expands. On the other hand, the plethora of Chinese actors may provide U.S. foreign policymakers with opportunities to understand or influence Beijing.

## SECTION 3: TAIWAN

### Introduction

Continuing to monitor the situation between Taiwan and China in 2011, the Commission notes that overall the relationship across the Taiwan Strait continues to improve, but at a pace slower than in the previous two years. A key reason for the slower pace of improvements across the Taiwan Strait is the upcoming Taiwan presidential and legislative elections on January 14, 2011, as neither China nor the incumbent Taiwan administration desires to have the cross-Strait rapprochement used as a negative issue prior to the elections. In addition, many of the easier negotiations, such as on economic and trade issues, have been discussed, leaving increasingly difficult political discussions remaining. As a result, this year the two sides have focused on implementing already signed agreements. Despite the slowed, but continued, improvement in economic and diplomatic relations between Taipei and Beijing, the cross-Strait military balance continues to tilt in favor of the mainland due to China's growing military capabilities.

This section of the Commission's Report discusses the current situation across the Taiwan Strait and describes any notable changes in the diplomatic, economic, and military aspects of the cross-Strait relationship over the past year.

### Developments in Cross-Strait Diplomatic Relations

Since the Commission's *2010 Annual Report to Congress*, relations between Taiwan and China have continued to improve, although there has been less cross-Strait diplomatic activity in 2011 than in the previous two years. Since November 2010, Taiwan and China have signed only one agreement, as opposed to the 14 previously signed agreements since Taiwan President Ma Ying-jeou's 2008 inauguration. The December 2010 semiannual talks between the Straits Exchange Foundation and the Association for Relations Across the Taiwan Straits\* produced the Cross-Strait Agreement on Medical and Health Cooperation, which will facilitate cooperation on the exchange of information about epidemics, development of vaccines, and clinical drug trials.<sup>177</sup> During the meeting, the two sides also agreed regularly to review the implementation of previous agreements.<sup>178</sup> The only new agreement introduced and being discussed this year has been on nuclear safety in response to Japan's nuclear crisis, which was proposed by Taiwan in March

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\*Taipei and Beijing do not have an official bilateral relationship. Instead, cross-Strait negotiations are held under the auspices of two quasi-official organizations. Representing Taiwan is the Straits Exchange Foundation, "a private intermediary body" entrusted to act on behalf of the Taiwan government in cross-Strait matters. The corresponding body in China is the Association for Relations Across the Taiwan Straits. U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2010), p 143.

2011.<sup>179</sup> In July 2011, Taiwan's Mainland Affairs Council Minister Lai Shin-yuan stated that the nuclear agreement would be addressed at the next meeting between the Straits Exchange Foundation and the Association for Relations Across the Taiwan Straits, which was tentatively scheduled for August 2011 but was postponed until late October.<sup>180</sup>

In 2011, Taiwan and China also implemented several unilateral policies that expanded cross-strait relations in the areas of travel and education. In June 2011, China and Taiwan agreed to begin allowing individual Chinese citizens to travel to Taiwan rather than only in preapproved groups. The lifting of the ban, however, applies only to the residents from three mainland cities: Beijing, Shanghai, and Xiamen, and the length of stay is limited to 15 days only.<sup>181</sup> Taiwan expanded upon its direct flight agreement with China by announcing in June 2011 that the number of cross-strait direct flights would increase from 370 to 558.\*<sup>182</sup> As a result, tourism between the two sides has grown significantly. In his meeting with Commissioners in July 2011, President Ma noted that more than 3,000 mainlanders visit Taiwan every day.<sup>183</sup> According to Taiwan's Tourism Bureau, 2.4 million Taiwan residents visited the mainland in 2010, a 37 percent increase over 2009. In 2010, 1.6 million mainlanders visited the island, a 41 percent increase over 2009.<sup>184</sup>

Taiwan and the mainland have also made their educational systems more accessible to one another. Taiwan's Ministry of Education announced in January 2011 that it would recognize Chinese degrees. In April 2011, Taipei announced that it would allow 2,000 Chinese students to study at Taiwan's universities. However, students from the mainland are subject to stipulations that prohibit them from receiving Taiwan government scholarships, applying for jobs in Taiwan, or studying topics sensitive to Taiwan's national security, such as military technology and aeronautics.<sup>185</sup> In a meeting with members of Taiwan's National Security Council, Commissioners were told that these restrictions were important because of the continuing threat the mainland poses to Taiwan.<sup>186</sup>

Over the course of the past year, the two sides failed to conclude several anticipated agreements. These agreements included:

- *Cross-Strait investment protection agreement*: The two sides originally intended to sign in December 2010 an agreement to protect Taiwan investments on the mainland.<sup>187</sup> During a meeting with the Taipei Economic and Cultural Representative Office,<sup>†</sup> the Commission heard that the two sides were in dispute over whether the agreement would be treated as a domestic or inter-

\*The direct flight agreement referred to is the Cross-Strait Air Transport Agreement, which was signed in November 2008 and established direct flights between Taiwan and the mainland. Prior to the implementation of this agreement, direct flights between the island and the mainland first had to transit through a third-party airport. Mainland Affairs Council, "Explanation concerning the Cross-Strait Air Transport Agreement," November 4, 2008. <http://www.mac.gov.tw/public/Data/3962917501071.pdf>.

†The Taipei Economic and Cultural Representative Office is Taiwan's principal representative office in the United States. Because the United States and Taiwan do not engage in official diplomatic relations, the office serves as Taiwan's de facto embassy. For more information, see "Taipei Economic and Cultural Representative Office in the United States, TECRO Profile and Mission" (Washington, DC: November 3, 2010). <http://www.taiwanembassy.org/US/ct.asp?xItem=166566&CtNode=2294&mp=12&xp1>.

national agreement.<sup>188</sup> According to the media, Taiwan is wary of China's legal system and insists on using the International Chamber of Commerce for arbitration. However, China refuses to treat any cross-Strait issue as international.<sup>189</sup> It is unclear when further discussions on this issue will be held.

- *Double taxation agreement:* In June 2011, Taiwan's Finance Minister, Lee Sush-der, stated that the two sides have "largely" reached an agreement on a double-taxation avoidance pact originally expected in 2009. The pact had been set aside due to difficulties in agreeing on the tax rates and categories to be included, and Minister Lee provided no details on the provisions that the agreement would contain or when it would be signed.<sup>190</sup>
- *Currency clearance agreement:* During an April 2011 meeting, Taiwan's and China's financial regulation commissions failed to reach a widely anticipated currency clearance agreement that would allow Taiwan banks operating on the mainland to make loans and accept deposits in China's currency, the renminbi (RMB). An official from the People's Bank of China had originally stated in December 2009 that preparation for the agreement was "80 to 90 percent" complete and that it would be signed within the coming months.<sup>191</sup> After the agreement was stalled for more than a year, reports anticipated that the April 2011 meeting between the banking regulators would result in its successful completion. However, the two sides only agreed upon procedural measures, including the establishment of a mechanism for holding regular meetings.<sup>192</sup>
- *Cultural agreement:* Taiwan and China have also continued to disagree over the possibility of a cultural agreement, which Beijing has persisted in suggesting to an unresponsive Taipei. Proposed by China's Minister of Culture, Cai Wu, the agreement would institutionalize cultural exchanges between the two sides and "bring together both sides' resources, funding and creativity."<sup>193</sup> According to one expert, the Ma Administration is reluctant to sign a cultural agreement for fear that the Democratic Progressive Party would attempt to portray the agreement as showing favor to China's culture.<sup>194</sup>

A key complicating factor in further cross-Strait negotiations is Taiwan's upcoming presidential and legislative elections in January 2012, for which the cross-Strait situation is expected to remain a major issue.\* In July 2011, President Ma announced that he planned to scale back visits from high-level mainland officials to Taiwan "during a certain period of time," which other officials in

\* Currently there are three announced candidates for Taiwan's presidential elections. President Ma Ying-jeou is seeking reelection as the Kuomintang Party candidate. His primary opponent is Chairwoman Tsai Ing-wen of the Democratic Progressive Party. In late September 2011, James Soong, formerly of the Kuomintang Party, announced he was running for president as a candidate of the People's First Party. The addition of Mr. Soong's third-party candidacy will likely make an already close election even more difficult to predict.



Taiwan interpreted as an election strategy motivated by aversion to appearing too conciliatory toward China.<sup>195</sup> According to one expert, President Ma has been under pressure from members of his party to prevent the Kuomintang from gaining a reputation as excessively “pro-China.”<sup>196</sup> Taiwan has also banned the travel of senior-level mainland officials to the island, allegedly in an attempt to prevent the visits from being used against his administration in the presidential campaign.<sup>197</sup>

Beijing may also be a factor in the slower pace of developments in the cross-Strait relationship. China has taken a strong interest in the outcome of Taiwan’s election, showing preference for a Kuomintang victory. According to Richard C. Bush, director of the Center for Northeast Asian Policy Studies at The Brookings Institution, Beijing has avoided controversial cross-Strait issues and “is not pushing the agenda” before the election because it “understands that it has an interest in keeping President Ma and the KMT [Kuomintang] in power.”<sup>198</sup> China may even become lenient on issues such as participation in international organizations in order to demonstrate the effectiveness of President Ma’s cross-Strait policies.<sup>199</sup> However, according to one Washington D.C.-based expert on cross-Strait issues, it is possible that if President Ma wins reelection, Beijing could take a harder line with Taipei in order to “secure [China’s President] Hu Jintao’s legacy” before President Hu steps down in the fall of 2012.<sup>200</sup>

### ***Developments in Taiwan’s International Space***

Taiwan has continued to pursue efforts to gain international space through participation in international organizations and negotiating with other countries on visa waiver exemption, extradition, and free trade agreements. Since the publication of the Commission’s *2010 Annual Report to Congress*, Taiwan has experienced both progress and setbacks in its participation in international organizations. In 2011, Taiwan joined one new international organization, the Civil Air Navigation and Services Organization, which is an official observer of the United Nations’ International Civil Aviation Organization.\* It experienced a setback in May 2011, when the World Health Organization used the label, “Taiwan, Province of China,” sparking Taiwan officials formally to assert that it be referred to as “Chinese Taipei.”<sup>201</sup> A similar controversy occurred in July 2011, when Taiwan’s Ministry of Foreign Affairs publicly urged Brazil to make the same change after discovering that the Brazilian government’s website designated Taiwan as a province of China.<sup>202</sup> A report prepared for the Commission by The Economic Strategy Institute discussed similar People’s Republic of China (PRC) indignation expressed when “Taiwan” is used, stating:

\*Rather than joining the organization under a regional name such as the commonly used name “Chinese Taipei,” Taiwan is listed solely as “Air Navigation and Weather Services, Civil Aeronautics Administration,” with no mention of Taiwan. Full membership is open to any organization providing air navigation services, as opposed to the International Civil Aviation Organization, which only admits states. Taiwan is not a member of this latter organization. Shelly Shan, “Taiwan joins CANSO [Civil Air Navigation Services Organization] aviation organization,” *Taipei Times*, January 15, 2011. <http://www.taipetimes.com/News/taiwan/archives/2011/01/15/2003493568>; and Civil Air Navigation Services Organization, “Joining CANSO.” <http://www.canso.org/cms/showpage.aspx?id=329>.

*Any person who has participated in the deliberations of international organizations with China can undoubtedly describe the palpable tension which is created when one delegate makes the mistake of referring to 'Taiwan' rather than by the officially approved nomenclature within that organization. First of all, the room will be quiet enough to hear a pin drop. Then there will be a strong and immediate request by the Chinese representative for a 'correction' to the record. Anyone who makes such a mistake once is unlikely to make it twice. In fact, at Board meetings within the Asian Development Bank, if a delegate does make an erroneous reference to 'Taiwan,' the meeting must be formally stopped, and an official statement clarifying the exact political status of 'Taiwan' is read out. Only when this formal clarification and correction is complete can the Board meeting recommence.*<sup>203</sup>

In another sign of Taiwan's success in expanding its international space, it has made substantial gains in joining visa waiver programs. It currently belongs to 124 visa waiver programs around the world, surpassing its original goal of joining 100 programs by 2011.<sup>204</sup> Taiwan has yet to join the U.S. program, although President Ma noted to Commissioners in August 2011 that this is an important goal of his administration.<sup>205</sup> Taiwan's prospects for joining improved this year due to its declining visa refusal rate, a key obstacle to joining the program.\*<sup>206</sup> Taiwan and the United States have also made progress on an extradition agreement,<sup>207</sup> although a representative from the Taipei Economic and Cultural Representative Office noted to the Commission that obstacles still remain to the agreement's successful conclusion.<sup>208</sup>

Taipei continues to pursue free trade agreements with other nations. According to some Taiwan experts, "The Ma administration hopes that the ECFA [Economic Cooperation Framework Agreement] would serve as a model framework for Taiwan's trade negotiation with the rest of the world so that other FTA [free trade agreement]-like agreements could be reached without Beijing's obstruction."<sup>209</sup> During a meeting with Taiwan's Ministry of Economic Affairs, Commissioners heard how Taiwan is currently negotiating a trade agreement with Singapore.<sup>210</sup> In addition, Taiwan is conducting feasibility studies for possible free trade agreements with India and the Philippines.<sup>211</sup> Several experts have stated that Taiwan's ability to sign free trade agreements with other nations is contingent upon Beijing's approval, but Taipei disagrees with this assertion.<sup>212</sup> Commenting on negotiations with Singapore, Minister Lai stated that "China has no say" over whether Taiwan and Singapore come to an agreement, and in the case of India and

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\* According to section 217 of the Immigration and Naturalization Act, in order to be eligible for participation in the U.S. visa waiver program, countries must have a tourist visa refusal rate for the most recent fiscal year of less than 2.5 percent and an average visa refusal rate for the past two fiscal years of less than 2 percent, or a visa refusal rate of less than 3 percent for just the previous full fiscal year. According to the U.S. State Department, Taiwan's visa refusal rate for fiscal years 2010 and 2009 were 2.2 percent and 4.4 percent. "Immigration and Nationality Act," Title 8, *U.S. Code 1187*, Sec. 217, 2010 edition; U.S. Department of State, "Adjusted Refusal Rate—B—Visas Only by Nationality, Fiscal Year 2009." <http://www.travel.state.gov/pdf/FY09.pdf>; and U.S. Department of State, "Adjusted Refusal Rate—B—Visas Only by Nationality, Fiscal Year 2010." <http://www.travel.state.gov/PDF/FY10.pdf>

the Philippines, “we have made it clear to the other side that this is our right.”<sup>213</sup>

Although the United States remains Taiwan’s third-largest trading partner after China and Japan, negotiations on a U.S.-Taiwan trade agreement, officially titled the U.S.-Taiwan Trade and Investment Framework Agreement,\* have been on hold since 2007. The current obstacle to resumption of the talks is a disagreement about Taiwan’s partial ban on U.S. beef imports.<sup>214</sup> Despite a November 2009 bilateral agreement between Taipei and Washington to allow the import of U.S. beef products into Taiwan, in January 2010 the Taiwan legislature amended a Taiwan food safety law to impose a partial ban on U.S. beef products.<sup>215</sup> In response to the ban, the Office of the U.S. Trade Representative and the U.S. Department of Agriculture issued a joint statement, noting that:

*The decision by Taiwan authorities to place domestic politics over science raises serious concerns. This action will also undermine Taiwan’s credibility as a responsible trading partner and will make it more challenging for us to conclude future agreements to expand and strengthen bilateral trade and economic ties.*<sup>216</sup>

Since the passage of this law, no further official negotiations have been held on the Trade and Investment Framework Agreement with Taiwan.<sup>217</sup>

### **Developments in Cross-Strait Economic Relations**

Despite the absence of a large number of new agreements, cross-strait economic relations in 2011 have been characterized by strong growth in bilateral trade and steady progress in implementing the agreements already signed. The most prominent accord is the 2010 Economic Cooperation Framework Agreement, which included the establishment of the Cross-Strait Economic Cooperation Committee and tariff cuts on more than 800 items on the agreement’s “early harvest” list.<sup>218</sup>

The Cross-Strait Economic Cooperation Committee is a platform for implementing the provisions of the Economic Cooperation Framework Agreement. The committee is responsible for negotiating agreements on trade in commodities and services, investment protection, and conducting dispute resolution between the two sides. It met for the first time in February 2011, and, according to one expert, is “the most senior forum for direct contact between officials from the two sides and represents a significant step forward in cross-strait cooperation.”<sup>219</sup> At the meeting, the committee established six working groups on merchandise trade, services trade, investment, dispute settlement, industry cooperation, and customs. In addition, the members agreed to launch in mid-April 2011 three agreement-authorized negotiations on merchandise trade, services

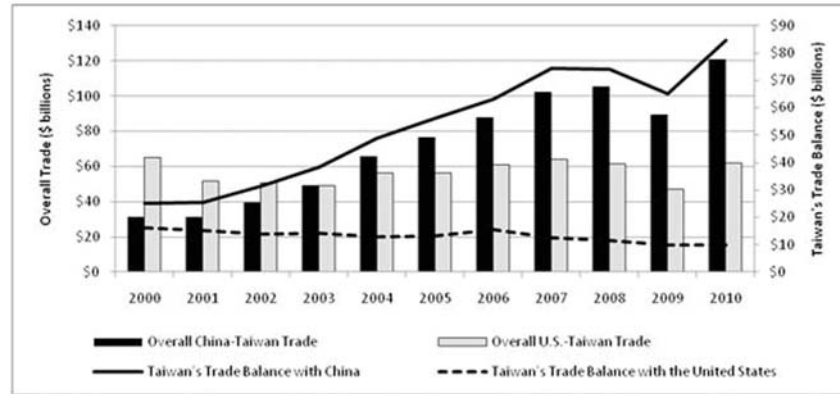
\* According to the Office of the U.S. Trade Representative, “Trade and Investment Framework Agreements (TIFAs) provide strategic frameworks and principles for dialogue on trade and investment issues between the United States and the other parties to the TIFA. . . . [T]hese agreements all serve as a forum for the United States and other governments to meet and discuss issues of mutual interest with the objective of improving cooperation and enhancing opportunities for trade and investment.” Office of the U.S. Trade Representative, “Trade & Investment Framework Agreements” (Washington, DC). <http://www.ustr.gov/trade-agreements/trade-investment-framework-agreements>.

trade, and dispute settlement.<sup>220</sup> Working group talks on merchandise and services trade were held in the beginning of August.<sup>221</sup>

Although Taiwan and China signed no new bilateral economic agreements in 2011, they both continued to pursue individual policies that will improve cross-Strait economic exchange. Taipei has continued to ease restrictions on Chinese investments in Taiwan, although restrictions still remain. According to Taiwan's Ministry of Economic Affairs, investment from the mainland must first undergo a review process to ensure that it does not harm Taiwan's national security or Taiwan industries.<sup>222</sup> As of February 2011, Chinese total investment in Taiwan since mainland investment on the island was first allowed equaled \$139 million.<sup>223</sup> This amount is substantially lower than Taiwan's direct investment in China, which equaled \$14.62 billion in 2010 alone. According to Taiwan's Mainland Affairs Council, Taiwan's direct investment in China has increased from 70 percent of Taiwan's total direct foreign investment in 2009 to 84 percent in 2010.<sup>224</sup> China's comparatively low amount of direct investment in Taiwan is attributed to Taiwan's restrictions, which gradually have been easing.<sup>225</sup> In March 2011, Taiwan's Ministry of Economic Affairs announced it would open 42 additional sectors to Chinese investors, including the strategically important flat panel and computer chip industries.<sup>226</sup> China also is considering reducing tariffs on rare-earth minerals to Taiwan.<sup>227</sup>

Partially as a result of the Economic Cooperation Framework Agreement, cross-Strait trade has continued to expand rapidly. Taiwan's share of China's imports increased in 2011 as a result of the agreement, changing a trend in which its share had been decreasing.<sup>228</sup> According to Taiwan's Mainland Affairs Council, in 2010, total cross-Strait trade increased by 40 percent over the 2009 level, to \$120.8 billion.<sup>229</sup> The import-export balance continues to favor Taiwan, which in the first quarter of 2011 exported to China \$30.1 billion in goods, a 13 percent increase from the same period in the previous year. In contrast, Taiwan imported from China \$14.2 billion in the first half of 2011, a 40 percent increase from the same period last year.<sup>230</sup> By way of comparison, in the first quarter of 2011, U.S. total trade with Taiwan was \$22.1 billion, a 17 percent increase from the same period in 2010. Overall, the United States suffers a trade deficit with Taiwan. In the first half of 2011, the United States imported 35 percent more (\$24.3 billion) from Taiwan than it exported (\$15.7 billion).<sup>231</sup> Figure 1, below, provides a comparison of Taiwan's trade with the United States and China between 2000 and 2010.

**Figure 1: Comparison of Taiwan's Overall Trade Balance with China and the United States (2000-2010)**



Source: Mainland Affairs Council, *Cross-Strait Economic Statistics Monthly* No. 221 (Taipei, Taiwan: August 29, 2011), p. 23. <http://www.mac.gov.tw/public/Attachment/182914593257.pdf>; and U.S. Census Bureau, "Trade in Goods with Taiwan" (Washington, DC: U.S. Department of Commerce). <http://www.census.gov/foreign-trade/balance/c5830.html>.

### Developments in the Cross-Strait Military Balance

Despite a third year of improved economic and diplomatic ties, military tension across the Taiwan Strait remains. Beijing's public statements reflect an effort to downplay the threat that China poses to the island, but Taipei maintains that China's military expansion and recent espionage controversies prove otherwise. Taiwan officials continue to emphasize that it is imperative that the island remain militarily competitive with China in order to maintain an equal hand in cross-Strait negotiations.<sup>232</sup> Taipei has made efforts to demonstrate to the United States that it is in need of additional military technology and equipment and to China that it is still capable of defending itself against an invasion.

Over the past year, Beijing has attempted to make reassuring rather than threatening statements about the cross-Strait military situation. China's 2010 defense white paper, for example, highlighted the progress made in the relationship and downplayed any tension. According to this document:

*The Chinese government has formulated and implemented principles and policies for advancing peaceful development of cross-Strait relations in the new situation, promoted and maintained peace and stability in the area. Significant and positive progress has been achieved in cross-Strait relations.*<sup>233</sup>

The white paper also expressed openness to pursuing confidence-building measures with the Taiwan military, something Taiwan so far has declined.<sup>234</sup> According to Taiwan Military Spokesman Lo Shao-ho, "The proposed confidence-building measures would involve national security and the Ministry of National Defense will follow the government's established policy on China in pushing forward such a mechanism gradually, steadily and practically if necessary."<sup>235</sup> On a May 2011 visit to the United States, People's Liberation Army (PLA) Chief of the General Staff Chen Bingde stated



during a joint press conference that the PLA does not have any missiles stationed “across from Taiwan.”<sup>236</sup> However, the U.S. Department of Defense in its congressionally mandated report on China’s military capabilities noted that “the PLA had deployed between 1,000 and 1,200 short-range ballistic missiles to units opposite Taiwan.”<sup>237</sup>

Several espionage cases alleging the transfer of Taiwan’s military secrets to China have reinforced Taipei’s suspicion of the mainland. In early February 2011, Taiwan Army Major General Lo Hsien-che was arrested on charges of spying for Beijing since 2004.<sup>238</sup> This case is considered by some to be Taiwan’s worst espionage case in 50 years and raised concerns among U.S. officials when it was revealed that details of sensitive U.S. technologies may have been compromised. Documents found in Major General Lo’s office detailed information about Lockheed Martin’s Po Sheng command, control, and communications network being purchased by Taiwan, as well as the procurement details of 30 Boeing AH-64D Longbow Apache attack helicopters.<sup>239</sup> In a second espionage case, a Taiwan businessman was arrested for allegedly trying to steal military secrets for China, but Taiwan’s Ministry of National Defense denied that any national security information was lost.<sup>240</sup> These cases may not be the end of Chinese espionage on the island, as an anonymous Taiwan source told the media that Taiwan knew of at least ten additional spies who had infiltrated Taipei’s national security units and that “[m]any more spies for the Chinese mainland might have gone undetected. . . . The extent of the infiltration into Taiwan’s government units may be worse than imagined.”<sup>241</sup>

In order to show to both China and its own populace that it is capable of defending the island against a mainland attack if necessary, the Taiwan military conducted several high-profile military demonstrations over the past year. These demonstrations included:

- *Military exercises:* In April 2011, Taiwan’s Air Force conducted a high-profile highway landing drill of its fighter jets in a simulation of a surprise attack on Taiwan’s air bases. This was the first highway landing exercise that had been conducted since 2007.<sup>242</sup> Analysts believe that this exercise was meant to send several signals: the first to China in a display of its ability to improvise if its airfields are destroyed, the second to the United States in an attempt to convey to Washington the efficacy with which it would use requested fighter jets, and the third to Taiwan’s public in order to convince them of the Ma Administration’s commitment to defense.<sup>243</sup>
- *Cruise missile developments:* Over the past year, Taiwan announced that it had begun producing two new cruise missiles. In December 2010, Taiwan’s Deputy Defense Minister Chao Shih-chang stated that Taiwan was mass producing the Hsiung Feng IIE, a land-attack cruise missile under development since the late 1990s.<sup>244</sup> With an estimated range between 500 and 650 kilometers, the Hsiung Feng IIE is capable of hitting targets on China’s mainland.<sup>245</sup> Deputy Defense Minister Chao also confirmed that Taiwan had begun producing the Hsiung Feng III, a supersonic antiship cruise missile.<sup>246</sup> In May



2011, an official government statement declared that the Hsiung Feng III will be outfitted on over a dozen navy vessels and patrol boats.<sup>247</sup> However, the accuracy of the Hsiung Feng III was called into question when, during a June 2011 routine test, the missile failed to reach its target, reportedly due to a computer glitch.<sup>248</sup>

- *New missile boats:* In April 2011, President Ma inaugurated a fleet of ten missile boats equipped with stealth capabilities and antiship cruise missiles. These boats, the *Kuang Hua* VI-class missile boat, joined a group of ten already in service in Taiwan's northeastern naval base in Suao and will be followed by another ten by the end of the year. The 171-ton *Kuang Hua* boats will replace Taiwan's aging 50-ton *Seagull*-class missile boats.<sup>249</sup>
- *Naval stealth capabilities:* In July 2011, Taiwan's Navy revealed that it had developed a radar-absorbing stealth coating that makes it significantly harder for radar to detect naval vessels coated with the substance.<sup>250</sup>
- *F-CK-1 fighter upgrade:* In an effort to improve its deteriorating air defense capabilities,\* Taiwan has sought to upgrade its indigenously developed fighter aircraft, the F-CK-1A/B Indigenous Defense Fighters. In June 2011, Taiwan's Air Force took delivery of the first six upgraded fighters. Sixty-five more fighters, out of a total of 125, are set to be upgraded by the end of 2012. The upgrades included enhanced radar, electronic warfare systems, and cockpit computers, as well as the ability to double the payload to four air-to-air missiles.<sup>251</sup>
- *Missile tests:* Taiwan also conducted two missile tests this past year in an effort to demonstrate its defensive capabilities, but during both tests a substantial portion of the missiles failed. In January 2011, six of 19 surface-to-air and air-to-air missiles failed to reach their targets, prompting President Ma to express public dissatisfaction with the results.<sup>252</sup> In a March 2011 test, two out of four surface-to-air missiles again missed their targets. Taiwan's Defense Minister Kao Hua-chu stated that problems with the tests could be due to both human and mechanical errors, and a Democratic Progressive Party spokesman criticized the Ministry of Defense for not solving the problem after the first unsuccessful test.<sup>253</sup>

Further progress in developing Taiwan's indigenous defense capabilities may be hampered by budgetary constraints. Taiwan's 2011 defense budget reached a five-year low of \$9.2 billion, or approximately 2.2 percent of Taiwan's gross domestic product (GDP). In a meeting in Taiwan, Taiwan's Ministry of Defense described to Commissioners how, although the Ma Administration desired a target of 3 percent of GDP for the defense budget, this was unattainable due to economic constraints stemming from the 2010 typhoon recovery and the global financial crisis.<sup>254</sup> Budget cuts have already impacted President Ma's plan to convert the military from a

\* For more on Taiwan's deteriorating air capabilities, see the U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2010), pp. 149–152.

conscript-based force to an all-volunteer force.<sup>255</sup> Budget constraints may also have postponed the purchase of U.S. Patriot missiles and Black Hawk helicopters, contained in the Obama Administration's January 2010 arms sale notification to Congress.<sup>256</sup> While Kuomintang legislator Lin Yu-fang asserted that the reason for the postponement was a budget shortfall, Taiwan Defense Ministry spokesman Luo Shou-he blamed production delays.<sup>257</sup> Because of the complexity of the U.S. foreign military sales process, it is unclear whether either reason is true, and to date only four of the 60 Black Hawk helicopters contained in the January 2010 notification are under contract.<sup>258 \*</sup>

In accordance with the Taiwan Relations Act of 1979<sup>†</sup> and Taiwan's designation as "a major non-NATO [North American Treaty Organization] ally" for the provision of defensive arms,<sup>‡</sup> on September 21, 2011, the Obama Administration notified Congress of a potential arms sale to Taiwan for almost \$5.9 billion. The notification contained three separate components: an upgrade to Taiwan's current inventory of 145 F-16A/B fighters (\$5.3 billion), a continuation of the F-16 training program in the United States for Taiwan F-16 pilots (\$500 million), and spare parts for Taiwan's fighter and transport aircraft (\$52 million). The proposed upgrade to Taiwan's F-16A/B fighter fleet includes the following:<sup>259</sup>

- Active electronically scanned array radars
- Global Positioning System navigation equipment
- Improved electronic warfare systems
- Updated cockpit computer systems
- Engineering and design study for engine upgrade
- Improved communication equipment
- Data link terminals
- Helmet targeting systems
- Night vision systems
- Laser-guided munitions
- Spare parts
- Logistical support

\*Part of the difficulty in determining the status of Taiwan arms sales is the large gap between when the administration notifies Congress about a possible arms sale and when the actual item in question is transferred to Taiwan. For example, in October 2008, the Bush Administration notified Congress of the possible arms sale of 30 Apache attack helicopters to Taiwan. According to U.S. government website USASpending.gov, a preliminary "long lead contract" for the production of these helicopters was issued on July 30, 2009, and to date, only 9 percent of the total \$2.5 billion has been obligated by the Taiwan government. Delivery for these helicopters is not expected to begin until at least 2014. USASpending.gov, "Prime Award Spending Data: W58RGZ09C0147," September 23, 2011. [http://www.usaspending.gov/search?query=&search\\_type=&formFields=eyJTZWFyY2hUZXJtIjpbIjc1OFJHWjA5QzAxNDciX X0%3D#](http://www.usaspending.gov/search?query=&search_type=&formFields=eyJTZWFyY2hUZXJtIjpbIjc1OFJHWjA5QzAxNDciX X0%3D#); Defense Security Cooperation Agency, "Boeing Co., W58RGZ-09-G-0147: \$141,701,518" (Washington, DC: U.S. Department of Defense, November 8, 2010). <http://air-attack.com/contracts/date/2010-11-08>; and China News Agency (Taiwan), "Boeing Gets Taiwan Apache Helicopter Contract," November 9, 2010. <http://www.wantchinatimes.com/news-subclass-cnt.aspx?id=20101109000044&cid=1102>. NOTE: The Boeing contract number contains a typo and should actually be W58RGZ-09-C-0147.

<sup>†</sup>The Taiwan Relations Act (TRA) of 1979 (Public Law 96-8) helps govern the U.S. relationship with Taiwan in the absence of formal diplomatic recognition. "The TRA specifies that it is U.S. policy, among the stipulations: to consider any non-peaceful means to determine Taiwan's future 'a threat' to the peace and security of the Western Pacific and of 'grave concern' to the United States; 'to provide Taiwan with arms of a defense character,' and 'to maintain the capacity of the United States to resist any resort to force or other forms of coercion' jeopardizing the security, or social or economic system of Taiwan's people." Shirley A. Kan, "China/Taiwan: Evolution of the 'One China' Policy—Key Statements from Washington, Beijing, and Taipei" (Washington, DC: Congressional Research Service, July 9, 2007), summary page. A full text of the act is available at <http://www.ait.org.tw/en/taiwan-relations-act.html>.

<sup>‡</sup>According to Public Law 107-228, "for purposes of the transfer or possible transfer of defense articles or defense services under the Arms Export Control Act (22 U.S.C. 2751 et seq.), the Foreign Assistance Act of 1961 (22 U.S.C. 2151 et seq.), or any other provision of law, Taiwan shall be treated as though it were designated a major non-NATO [North American Treaty Organization] ally (as defined in 644(q) of the Foreign Assistance Act of 1961 (22 U.S.C. 2403(q))." The Foreign Relations Authorization Act of Fiscal Year 2003, Public Law 107-228, 107th Cong., 1st sess., September 30, 2002.

According to the announcement of the possible sale, “the improved capability, survivability, and reliability of newly retrofitted F-16A/B aircraft will greatly enhance the recipient’s ability to defend its borders.”<sup>260</sup>

In response to the arms sale announcement, Beijing quickly followed up on its previous warnings to the United States. Prior to the announcement, China repeatedly expressed its opposition to the sale in several official venues, such as during Secretary Gates’ January 2011 trip to China and during the May 2011 trip of Chen Bingde, chief of the PLA General Staff, to the United States.<sup>261</sup> Immediately following the announcement, China’s Ministry of Foreign Affairs spokesperson noted that:

*Paying no heed to China’s repeated solemn representations, the US side keeps selling advanced arms to Taiwan under the pretext of the Taiwan Relations Act. Its action has grossly violated the three China-US joint communiqués, especially the principles enshrined in the August 1972 Communiqué. It constitutes a serious interference in China’s internal affairs and severely undermines China’s national security and reunification. It also impairs China-US relations and the peace and stability across the Taiwan Straits. The Chinese Government and people will by no means accept it. The erroneous practice of the US will inevitably cause damage to China-US relations and bilateral exchanges and cooperation in the military, security and other fields, and the responsibility completely rests with the US side. [emphasis added].*<sup>262</sup>

A day after the arms sales announcement, China’s foreign minister, Yang Jiechi, gave a speech in New York to the National Committee on U.S.-China Relations and the U.S.-China Business Council, stating that:

*The Chinese side urges the U.S. side to fully recognize that U.S. arms sales to Taiwan is a highly sensitive and harmful issue. The Chinese side urges the U.S. side to take China’s solemn position very seriously, correct the mistake of selling weapons to Taiwan, immediately revoke the above-mentioned wrong decision, stop arms sales to Taiwan and U.S.-Taiwan military contacts, and take real actions to uphold the larger interest of China-U.S. relations and peace and stability in the Taiwan Straits.*<sup>263</sup>

A few days later, a senior State Department official provided details about a September 26 meeting between Secretary of State Hillary Rodham Clinton and Foreign Minister Yang. According to the State Department official, Foreign Minister Yang indicated to Secretary Clinton that China was “going to suspend or cancel or postpone a series of military-to-military engagements” with the U.S. military, just restarted back in January 2011. The official also warned that more, unspecified retaliations may be forthcoming from China.<sup>264</sup>

With the Obama Administration’s announcement of the possible sale of F-16A/B retrofits to Taiwan, Taiwan has two arms sales requests still outstanding: F-16C/D fighter jets and diesel-electric submarines. Since 2006, Taiwan has attempted to submit a Letter

of Request to the United States for the purchase of 66 F-16C/D fighters from the United States to replace Taiwan's aging aircraft, especially its 1960s-era F-5 fighters. However, to date, neither the Bush Administration nor the Obama Administration has accepted Taiwan's Letter of Request, the first step in the foreign military sales process.<sup>265</sup> Over the past year, Taiwan officials have repeatedly called for the United States to approve the sale of F-16C/D fighters to Taiwan. During the Commission's trip to Taiwan, for example, President Ma described how the sale of the F-16C/D fighters is critical in order to offset the shifting of the cross-Strait military balance in China's favor.<sup>266</sup> Despite Taiwan's repeated attempts to submit a Letter of Request for the F-16C/D, its inability to submit the letter prevents any deliberation of an arms sale from going forward and keeps Taiwan defense planners in suspense over the possibility of a future sale of the F-16C/D. Immediately after the announcement of the potential sale of the F-16A/B upgrade package, President Ma noted that his administration, while appreciative of the F-16A/B upgrade, would continue to press for the sale of the 66 F-16C/D fighters.<sup>267</sup>

#### **Recent Congressional Actions Related to Taiwan Arms Sales**

Over the last year, Members of the U.S. Congress have expressed concern regarding Taiwan's ability to defend itself from a Chinese attack. In addition to a number of public statements, Members of Congress have taken the following steps in support of U.S. arms sales to Taiwan:

- On April 13, 2011, Representative Robert Andrews (D-NJ) introduced H.Cong.Res.39, which expresses the sense of Congress that the president should move forward with the sale to Taiwan of new and upgraded F-16s.
- On May 26, Senate Taiwan Caucus Co-Chairmen Robert Menendez (D-NJ) and James Inhofe (R-OK) sent a letter to President Obama urging the administration to approve the sale of F-16C/D fighters to Taiwan. The letter was signed by 45 senators.
- On July 20, the House Committee on Foreign Affairs passed H.R. 2583, *The Foreign Relations Authorization Act for Fiscal Year 2012*. The bill contains language that would require the president to take immediate steps to sell to Taiwan both the 66 F-16C/D fighters and the upgrade package for Taiwan's F-16A/B fighters. The bill also requires the sale of the eight diesel-electric submarines once Taiwan has budgeted for them. This language was included in the bill through amendments offered by Representatives Howard Berman (D-CA), Dan Burton (R-IN), and Gerry Connolly (D-VA) and passed by voice votes.

**Recent Congressional Actions Related to Taiwan  
Arms Sales—Continued**

- On August 1, the House Taiwan Caucus, led by Representatives Shelley Berkley (D–NV), Gerry Connolly (D–VA), Mario Diaz-Balart (R–FL), and Phil Gingrey (R–GA), sent a letter with 181 House cosigners to President Obama urging the administration to approve the sale of F–16 C/D fighters to Taiwan.
- On September 12, Senators John Cornyn (R–TX) and Robert Menendez (D–NJ) introduced S.1539, *The Taiwan Airpower Modernization Act of 2011*, which would require the president to sell to Taiwan the requested 66 F–16C/D fighters.
- On September 21, Representative Kay Granger (R–TX) introduced the House version of *The Taiwan Airpower Modernization Act of 2011*, H.R. 2992.
- On September 21, the Senate voted on an amendment offered by Senator John Cornyn (R–TX) S.Amdt.634 to H.R.2832, which would have required the president to sell to Taiwan no fewer than 66 F–16C/D fighters. The amendment failed in the Senate by a vote of 48–48.
- On September 23, Representative Ileana Ros-Lehtinen (R–FL) introduced H.R.2918, *The Taiwan Policy Act of 2011*, which, among other things, would make it the policy of the United States to accept Taiwan’s Letter of Request for the F–16C/D fighters or to provide Taiwan with a formal sales offer for the aircraft. The legislation also would require the administration to consult with Congress regarding Taiwan arms sales and to provide an annual report to Congress detailing Taiwan’s requests for purchase of defense articles; the defense needs asserted by Taiwan; and the decision-making process used to reject, postpone, or modify any such request.

A second outstanding arms sales request by Taiwan is for diesel-electric submarines. First requested in 1995, Taiwan’s request for eight diesel-electric submarines was approved by the Bush Administration in 2001. However, subsequent disputes over the price and funding of the submarines held up the actual sale. In 2002, Taiwan amended its original request for the purchase of the submarines to include a requirement for some of the submarines to be produced in Taiwan with U.S. assistance, further hindering Taiwan’s procurement of the submarines. In 2006, Taiwan submitted a formal Letter of Request for a two-phased approach to the procurement: an initial submarine design phase, followed by possible submarine construction. In January 2008, the Bush Administration accepted Taiwan’s Letter of Request for the submarine design phase. However, neither the Bush Administration nor the Obama Administration has notified Congress of any pending submarine design program. Taiwan continues to reiterate its need for new submarines.<sup>268</sup> In August 2011, President Ma expressed to the Commissioners his desire to purchase the submarines.<sup>269</sup> Later in that trip, the Commissioners heard from Taiwan’s Minister of Defense Kao Hua-chu that these submarines are critical to Taiwan’s de-



fense, since its current fleet of two 1970s-era submarines is ineffective against China's improving naval capabilities.<sup>270</sup>\*

### **Implications for the United States**

Improvements in the diplomatic and economic realm benefit the United States by noticeably reducing tension across the Taiwan Strait. Growing trade between the two sides decreases the likelihood of a conflict in the near future. Similarly, an increase in people-to-people and government relations across the Taiwan Strait helps to prevent misunderstanding. The overall effect of improved cross-Strait relations helps to safeguard the stability of the region.

At the same time, the continued cross-Strait military standoff tempers the positive developments and potentially endangers U.S. interests in the region. As China continues to increase its military capabilities while Taiwan's ability to defend itself is increasingly in question, the peaceful resolution of the cross-Strait situation is less likely. A gross military imbalance could also lead Beijing to resolve the cross-Strait problem through the use of military force, possibly resulting in U.S. military involvement.

### **Conclusions**

- In 2011, Taiwan and China have continued to strengthen their economic and diplomatic relations by focusing on implementing previous agreements rather than signing new agreements.
- A major factor leading to the slower pace of reduced tensions across the Taiwan Strait is Taiwan's upcoming presidential and legislative elections. Seeking to prevent improving cross-Strait ties from being used against the incumbent Kuomintang Party, both Taiwan and China have moved away from pressing for rapid negotiations and developments as in previous years.
- The cross-Strait military balance continues increasingly to favor China, making it less likely that a peaceful resolution to the Taiwan issue will occur. Despite attempts to improve its capacity to defend the island against a potential attack from the mainland, Taiwan continues publicly to call for additional U.S. arms sales to augment its defense needs.

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\*For more on China's growing naval capabilities, see chapter 2, section 2, of the Commission's *2009 Annual Report to Congress*. U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2009).



## SECTION 4: HONG KONG

### Introduction

Hong Kong's relationship with mainland China is characterized in Hong Kong's constitution by the phrase "one country, two systems," whereby Hong Kong enjoys "a high degree of autonomy" in governing itself while still being an "unalienable" part of China.<sup>271</sup> Some developments in Hong Kong over the past year suggest that Beijing's influence in the city's affairs is growing. In the past year, Beijing enhanced its focus on Hong Kong's economy, utilizing it as a vehicle for the internationalization of China's currency, the renminbi (RMB). Mainland involvement in Hong Kong's political affairs was an issue of contention among Hong Kong policymakers and citizens throughout 2011. Furthermore, while Hong Kong citizens and press largely continue to enjoy freedom of expression and assembly, these rights were challenged at times by Hong Kong authorities, who are perceived to be acting out of deference to Beijing. On its trip to mainland China, the Commission stopped in Hong Kong to gain insight into these developments and their implications.

### The Role of Hong Kong in China's Economic Policies

Hong Kong's unique status as an international financial center and trading hub affords it importance in China's economic policies. This was affirmed in 2011 when China released its 12th Five-Year Plan (2011–2015), which was the first five-year plan to include a chapter devoted specifically to Hong Kong and Macau.<sup>272</sup> The components of the 12th Five-Year Plan related to Hong Kong were laid out in a much-vaunted visit by China's Vice Premier Li Keqiang to Hong Kong in August 2011.\* In his visit, the vice premier described Beijing's new policies and measures "designed to deepen the economic and financial cooperation between the mainland and Hong Kong": developing Hong Kong into an offshore RMB center, expanding access to China's markets, enhancing Hong Kong's standing as an international financial center, supporting Hong Kong's participation in international and regional economic cooperation, helping Hong Kong companies "go global," and enhancing Guangdong-Hong Kong-Macau economic cooperation, among other things.<sup>273</sup>

The most visible of these efforts, even before it was reiterated in the five-year plan, has been China's development of Hong Kong as a center for offshore RMB transactions and a launch pad for the

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\* Vice Premier Li will likely succeed current Premier Wen Jiabao in 2013. His visit was seen as an indication of this, because only the most senior officials get to make such high-profile trips to Hong Kong. Willy Lam, "Li Keqiang Meets Hong Kong," *Wall Street Journal*, August 15, 2011. <http://online.wsj.com/article/SB10001424053111903918104576503311098645364.html>; Goldman Sachs representative, meeting with the U.S.-China Economic and Security Review Commission, Hong Kong, August 15, 2011.

internationalization of China's currency. China has designated Hong Kong as a platform to conduct a limited amount of trading, investing, and lending in RMB as part of a national strategy gradually to internationalize its currency.<sup>274</sup> (For more information on Beijing's currency globalization efforts, see chap. 1, sec. 1, of this Report.) Hong Kong's unique status as a global trade and finance center and the "freest economy in the world"<sup>275</sup> makes it a useful vehicle for China to carry out this strategy. Moreover, Hong Kong provides a controlled setting for China to test out its policies, thanks to its economic and political ties to the mainland. Goldman Sachs representatives in Hong Kong told Commissioners that the city had been chosen to be China's offshore RMB market because Beijing would be able to fully control the terms of the market.<sup>276</sup>

To promote demand for the RMB as a currency for international transactions, China in 2011 announced a number of incentivizing policies in both the mainland and Hong Kong. According to Vice Premier Li, the mainland will expand RMB circulation channels between Hong Kong and the mainland, eventually allowing all provinces to conduct trade in Hong Kong using RMB; Hong Kong companies making direct investments on the mainland in RMB will be given additional support from the Chinese government; and more mainland-based financial institutions will be able to issue RMB-denominated bonds in Hong Kong. For example, in conjunction with Vice Premier Li's Hong Kong visit, China's Ministry of Finance issued 20 billion RMB (\$3.1 billion) in treasury bonds in Hong Kong, five billion RMB (\$786 million) of which were targeted at individuals, "giving more investment opportunities for Hong Kong residents," according to the vice premier. Larger RMB bond issuances are to follow in the future.<sup>277</sup>

Hong Kong business representatives, government officials, and journalists told Commissioners during several meetings in Hong Kong that the city's role as a vehicle for China's currency internationalization has been expanding and will expand in the future.<sup>278</sup> One official noted that 550 billion RMB (\$86 billion) had accumulated in Hong Kong's bond markets by August 2011.<sup>279</sup> RMB bank deposits in Hong Kong increased more than six-fold from May 2010 to August 2011.<sup>280</sup>

The emphasis on Hong Kong's economic development in the 12th Five-Year Plan, coupled with attention from high-level mainland officials on the city's economic issues, indicates that Beijing is sensitive to popular discontent over the city's growing economic woes.<sup>281</sup> Citizen discontent over economic management was widespread in 2011, with complaints focused on skyrocketing housing prices (and assumed collusion between political leaders and property tycoons in mainland China), rising unemployment, growing poverty, a widening wealth gap, and unpopular tax reforms, among other things.<sup>282</sup> During his August visit, the vice premier acknowledged some of these economic challenges but emphasized that China was committed to Hong Kong's development and expressed that he was "fully confident" about Hong Kong's economic future.<sup>283</sup> A few months earlier, the head of the central government's Hong Kong and Macau Affairs Office visited Hong Kong and sounded a warning note on the city's economic management. He remarked that the city's government should allocate more resources

for low-cost housing in order to alleviate discontent over growing poverty and high housing costs. He warned that “housing [in Hong Kong] is both a social and economic issue, and if it’s not handled well, it becomes a political issue.”<sup>284</sup>

### **Beijing’s Influence in Hong Kong’s Political Affairs**

Beijing’s creeping influence in Hong Kong’s political affairs continued to be a contentious issue in 2011. For instance, Beijing attained an unprecedented amount of influence in the city’s independent judicial system when Hong Kong’s highest court appealed to China’s National People’s Congress to interpret Hong Kong’s constitution, the Basic Law.<sup>285</sup> This was the first time that Hong Kong courts had requested that Beijing interpret Hong Kong law, and some policymakers and outside analysts feared that this action would set a precedent for greater mainland influence in Hong Kong’s judiciary.<sup>286</sup> The case, in which a Delaware investment fund filed a lawsuit against the Democratic Republic of Congo, hinged on the contested issue of whether sovereign states can be sued in Hong Kong’s courts. The case was referred by Hong Kong’s Court of Final Appeal to the National People’s Congress because it concerned foreign and diplomatic affairs, which, according to the Basic Law, are the responsibility of the central government. In August, the National People’s Congress ruled that Hong Kong law would follow the central government’s position of granting sovereign states immunity from being sued.<sup>287</sup>

Another high-profile example of growing mainland influence was a Hong Kong government proposal to introduce compulsory “moral and national education” for Hong Kong schoolchildren. The proposal was met with staunch opposition by citizens, educators, and some leaders, who denounced it as “political brainwashing” by Beijing, which had advocated patriotic education in Hong Kong since 2007.<sup>288</sup> A public consultation period for the proposal lasted from May until August 2011, and a final curriculum guide is expected to be released by the Hong Kong Ministry of Education in February 2012.<sup>289</sup>

The divisive nature of Beijing’s influence in Hong Kong politics was highlighted following closed-door negotiations over Hong Kong’s electoral reforms between Beijing officials and Hong Kong’s Democratic Party in 2010. The reform amendments highlighted Beijing’s reluctance to allow significant democratic reforms to Hong Kong’s electoral process and exposed conflict within Hong Kong’s prodemocracy camp.<sup>290</sup> The Basic Law states that the “ultimate aim” of Hong Kong’s leadership selection process is “universal suffrage.”<sup>291</sup> However, the city’s top political leaders, the chief executive and the Legislative Council, are currently selected by a largely undemocratic combination of government appointments, popular voting, and functional constituency voting.\*<sup>292</sup> In response to ever-growing demands for universal suffrage from democratic groups, the People’s Republic of China (PRC) Standing Committee of the National People’s Congress in 2007 ruled that Hong Kong’s chief

\*Functional constituencies are interest group voting blocs, mainly comprised of business and industry leaders. These groups, deemed vital to Hong Kong’s economic growth, are reliably pro-Beijing and generally support and reinforce the policy priorities of mainland China. Ngok Ma, “Hong Kong’s Democrats Divide,” *Journal of Democracy* 22:1 (January 2011): 55.

executive and Legislative Council could be elected by universal suffrage *at the earliest* in 2017 and 2020, respectively. The Standing Committee indicated that only minimal changes to electoral law could be made in the meantime.<sup>293</sup>

The administration of Hong Kong Chief Executive Donald Tsang (who was selected by a pro-Beijing election committee in Hong Kong) followed up on the Standing Committee's decision and offered amendments that Chief Executive Tsang said would democratize the electoral process. Prodemocracy members of the Legislative Council planned to veto the amendments, claiming they did not move swiftly enough toward universal suffrage. However, shortly before the July 2010 vote on the amendments, legislators from the Democratic Party, the flagship party of the democratic camp, completed closed-door negotiations with the Liaison Office of the Central People's Government\* and arrived at a compromise: the Election Committee for selecting the chief executive would increase from 800 to 1,200 members, and ten directly elected seats would be added to the 60-member Legislative Council (previously, there had been 30 functional constituency seats and 30 directly elected seats).<sup>294</sup> The amendments were approved by Hong Kong's Legislative Council and administration and will be in effect for the 2012 elections of Hong Kong's next chief executive and Legislative Council.

Hong Kong's administration hailed the deal between the Democratic Party and Beijing as "a victory of reason" and "a milestone in the city's democratic development."<sup>295</sup> However, some within the democratic camp disapproved of the deal and criticized the Democratic Party for collaborating with Beijing to pass what they saw as a weak, pro-Beijing law that did not take sufficient steps toward universal suffrage.<sup>296</sup> One founding Democratic Party legislator quit in protest immediately after the vote, and 30 party members resigned en masse just hours before a Democratic Party annual meeting in December 2010.<sup>297</sup> Included were seven of the Democratic Party's 60 representatives in the District Councils, Hong Kong's "neighborhood" consultative bodies that have a role in choosing the chief executive and the Legislative Council.<sup>298</sup>

Divisions in the democratic camp became more evident as the various democratic groups prepared for November 2011 District Council elections. In past District Council elections, the democratic camp often coordinated its campaigns to ensure that multiple democratic candidates would not compete against each other for any single seat, in an effort to counter overwhelming numbers of pro-Beijing candidates.<sup>299</sup> For the November 2011 elections, however, at least 36 candidates from other democratic groups registered to run against Democratic Party candidates as a punishment for the party's "betrayal" and cooperation with Beijing officials in 2010.<sup>300</sup>

Hong Kong's democratic camp has a history of being disenfranchised by pro-Beijing interests both in the mainland and

\*The Liaison Office of the Central People's Government in the Hong Kong Special Administrative Region acts as the central government's primary liaison with Hong Kong. The office facilitates economic, security, cultural, technological, and educational exchanges between Hong Kong and the mainland. Michael F. Martin, *Prospects for Democracy in Hong Kong: The 2012 Election Reforms* (Washington, DC: Congressional Research Service, February 2011), pp. 9–10. [http://assets.opencrs.com/rpts/R40992\\_20110201.pdf](http://assets.opencrs.com/rpts/R40992_20110201.pdf).

in Hong Kong.<sup>301</sup> Interparty conflict could exacerbate the democrats' already limited influence to the benefit of pro-Beijing parties and their supporters in mainland China.<sup>302</sup> According to Chan Kin Man, director for the Centre for Civil Society Studies at the Chinese University of Hong Kong, the Chinese Communist Party (CCP) "would love to see a divided pro-democracy camp in Hong Kong so that it will not be forced to speed up constitutional reform in the SAR [Hong Kong Special Administrative Region], a process that might destabilize the political equilibrium on the mainland."<sup>303</sup>

### **Rights to Freedom of Expression and Assembly Challenged**

Journalists, activists, and human rights lawyers reported that Hong Kong citizens' efforts to assert their rights to freedom of expression and association were met with increasing intolerance by Hong Kong authorities in 2011.\*<sup>304</sup> The Hong Kong Journalists Association noted in its 2011 Annual Report that freedom of expression and assembly established in the "one country, two systems" policy was often challenged by Hong Kong authorities who appeared to be undermining Hong Kong citizens' democratic rights in deference to mainland political sensitivities:

*There are now growing and disturbing signs that the one-country element is over-riding two-systems, and that could have far-reaching implications on Hong Kong's autonomy and one of its most fundamental rights—freedom of expression and press freedom.*<sup>305</sup>

### **Freedom of Press**

Media organizations in Hong Kong issued complaints of interference in their reporting by Hong Kong authorities, especially in cases when they were covering politically sensitive topics related to mainland China.<sup>306</sup> Police actively prevented reporters from covering large events and political protests and, in some cases, harmed journalists. During Hong Kong's annual July 1 protest,† police used pepper spray on 19 journalists covering the event, including three who were sprayed directly in the eyes.<sup>307</sup> During Vice Premier Li's August visit, police blocked camera lenses and stationed the press area too far away to observe events.<sup>308</sup> Such actions are violations of Hong Kong Police General Orders, which require officers to facilitate the work of news media as much as possible.<sup>309</sup> Press restrictions during Vice Premier Li's visit prompted an outcry among media and citizens, including a protest of 300 journalists condemning police heavy-handedness and harassment of media.<sup>310</sup> A representative of the International Federation of Jour-

\* Article 27 of Hong Kong's Basic Law guarantees Hong Kong citizens "freedom of speech, of the press, and of publication; freedom of association, of assembly, of procession and of demonstration." National People's Congress of the People's Republic of China, *The Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China* (Beijing, China: April 4, 1990). [http://www.basiclaw.gov.hk/en/basiclawtext/images/basiclaw\\_full\\_text.pdf](http://www.basiclaw.gov.hk/en/basiclawtext/images/basiclaw_full_text.pdf).

† Every year, on the anniversary of Hong Kong's handover to China from Britain on July 1, 1997, Hong Kong citizens participate in marches and demonstrations. The marches are often used as opportunities for citizens to voice grievances against the government, with participants numbering in the hundreds of thousands in some years. Kevin Drew, "Growing Discontent Seen In Annual Hong Kong Protest," *New York Times*, July 1, 2011. <http://www.nytimes.com/2011/07/02/world/asia/02iht-hong02.html?pagewanted=all>.



nalists told a Legislative Council panel that Hong Kong police were becoming more like China's police, who are known to routinely hassle journalists.<sup>311</sup>

Hong Kong's Basic Law guarantees freedom of the press and encourages independent reporting, but personnel changes in two Hong Kong news stations in 2011 prompted concerns over the editorial independence of the organizations. The government appointment of a veteran civil servant with no experience in public broadcasting as the chief editor of Radio Television Hong Kong was received with skepticism and concern by the station's staff and two journalism associations. These organizations pointed to potential conflicts between the new chief editor's government background and the role of the station in acting as a check on the government.<sup>312</sup> In a similar situation at Hong Kong's Asia Television Limited station, a newly appointed news chief instructed journalists to "tune down" coverage of a Democratic Party protest over the resignation of the news chief's predecessors, which ostensibly occurred over an erroneous report on the death of former Chinese President Jiang Zemin. There was some speculation that the resignations were encouraged for political reasons.<sup>313</sup> The Hong Kong News Executives' Association as well as Democratic Party Vice Chairwoman Emily Lau were among the individuals and organizations expressing concern over the incident.<sup>314</sup>

Self-censorship was reported to be a growing problem in 2011 as well. An annual Hong Kong University survey of the general population showed that a record number of Hong Kong citizens (over half of survey respondents) believe that Hong Kong's media practices self-censorship.<sup>315</sup> The survey also reported that the general credibility rating of the news media had dropped to its lowest level since 2003.<sup>316</sup> In a July 2011 meeting between Commissioners and Alan Leong, Hong Kong legislator and leader of the democratic Civic Party, Mr. Leong acknowledged that self-censorship, while difficult to measure, is a part of the history of Hong Kong's media and exists in Hong Kong reporting today as well.<sup>317</sup>

One positive recent development in Hong Kong's media field has been the rise of social media and citizen reporting. According to the Hong Kong Journalists Association, such informal news outlets are useful in identifying and monitoring local corruption, especially in cases when representatives of the mass media are prevented from gaining access to sites or information.<sup>318</sup> In one case, a citizen media website reported extensively on an urban development project that residents of a nearby housing estate opposed, fearing that the project would stifle ventilation in the neighborhood. The website published an in-depth report detailing public records going back 30 years and chronicling how developers had exploited loopholes in urban planning laws to advance their projects.<sup>319</sup> In another case, more than 40,000 Hong Kong citizens used Facebook to report and protest the construction of a sprawling private estate on protected government land.<sup>320</sup> The Hong Kong Journalists Association deemed these cases of citizen reporting encouraging, noting that "[w]hile the mainstream media face problems such as patriotic pressure and obstruction of government information, the new media are playing an increasingly important role in monitoring the government."<sup>321</sup>



Publications from Hong Kong that Beijing might consider politically sensitive sometimes can be found in mainland China. In meetings with business leaders in Hong Kong, Commissioners were told that some editorially independent newspapers from Hong Kong have limited circulation in China, enabling independent reports on big events such as the fatal high-speed rail train crash in Wenzhou to be picked up in China.<sup>322</sup> Mr. Leong told Commissioners that a critical book about Premier Wen Jiabao, *China's Best Actor: Wen Jiabao*, is widely available at points of exit and entry in Hong Kong and that many mainland Chinese who visit Hong Kong purchase the book.<sup>323</sup>

### ***Freedom of Assembly***

In 2011, Hong Kong citizens continued their tradition of exercising their right to free assembly. The annual July 1 march, attended by 200,000 people, was the second-largest Hong Kong protest since the city was returned to China in 1997.<sup>324</sup> An annual June 4 candlelight vigil in remembrance of the 1989 Tiananmen Square massacre also drew a near-record amount of participants. Police estimated that 77,000 attended the 2011 candlelight vigil, but event organizers estimated over 150,000 participants, which would make it the one of the city's largest June 4 vigils in 22 years.<sup>325</sup> Large demonstrations against local and national government policies took place in March and June as well, with smaller protests occurring throughout the year.<sup>326</sup> Mr. Leong told Commissioners that some participants at the larger events were visiting mainland Chinese, some of whom expressed that they wanted to participate in a "free society demonstration."<sup>327</sup>

Citizens, activists, and journalists reported several instances of police interference in protest activities in 2011. According to the Civil Human Rights Front, 179 people were arrested in Hong Kong protests in the first half of 2011, compared to just 53 arrests in 2010.<sup>328</sup> The Hong Kong Journalists Association reported that police were particularly intolerant of protests staged near Beijing's Liaison Office.<sup>329</sup> Police excess was also reported during Vice Premier Li's visit, when protesters gathered to voice concerns about human rights, among other things.<sup>330</sup> At a Hong Kong University event attended by Vice Premier Li, police detained three protesting students, which may have constituted false imprisonment, according to Johannes Chan Man-mun, a dean at the university.<sup>331</sup> Hong Kong police have asserted that this claim is unfounded.<sup>332</sup> At another event associated with Vice Premier Li's visit, security officers reportedly dragged away and arrested a man wearing a shirt with the slogan "Vindicate June 4," a reference to the Tiananmen Square massacre.\* According to Legislative Council member James To Kun-sun, police on duty during these demonstrations were trying to prevent Vice Premier Li from being embarrassed.<sup>333</sup> After the incident, several lawmakers requested an investigation into police tactics during the visit, and Hong Kong Police Commissioner Andy Tsang was questioned in a Legislative Council session. Some

\*Discussion of the June 4, 1989, Tiananmen Square massacre is prohibited on the mainland, but in Hong Kong the event is generally freely discussed and commemorated. BBC, "Tiananmen: Thousands in Hong Kong mark crackdown," June 4, 2011. <http://www.bbc.co.uk/news/world-asia-pacific-13658037>.

lawmakers and at least 1,000 citizens called for his resignation.<sup>334</sup> A police review of security arrangements during the vice premier's visit was ongoing at the time of the publication of this Report.

Hong Kong police also have taken more subtle measures to obstruct protest activities. In an April protest opposing the arrest and detention of mainland dissident artist Ai Weiwei,\* and again during the annual July 1 protest, police restricted access to protest venues.<sup>335</sup> Mr. Leong indicated in his meeting with the Commission that police directed participants in the June 4 candlelight vigil to walk an unnecessarily long distance to reach the venue. Mr. Leong characterized this excessive police requirement as "sending a message to the Hong Kong public."<sup>336</sup>

Restriction of travel to Hong Kong was also a growing problem in 2011. The Hong Kong government was accused of catering to mainland political sensitivities when it denied visas to two prominent mainland dissidents ostensibly to prevent them from attending the funeral of Szeto Wah, a founder of Hong Kong's democracy movement.<sup>337</sup> The two dissidents, Wang Dan and Wu'er Kaixi, live in exile in Taiwan. A democratic member of the Legislative Council lamented this action as indicative of the erosion of the "one country, two systems" policy.<sup>338</sup>

Travel from Hong Kong to the mainland continued to be restricted in 2011 as well. In an August 2011 letter to Vice Premier Li from Hong Kong's Democratic Party, Chairman Alfred Ho wrote, "For more than 20 years, many members of the Hong Kong pro-democracy movement have been banned from traveling to [the] Mainland. The freedom of travel to the Mainland is a fundamental right of all Chinese citizens and should not be deprived of."<sup>339</sup>

### **Implications for the United States**

Chinese and Hong Kong policies to promote the gradual internationalization of the RMB are intended, among other things, to allow the RMB to develop into an alternate reserve currency to the U.S. dollar, which is currently the internationally preferred reserve currency. After the global financial crisis, Chinese policymakers indicated a desire to reduce reliance on the dollar and diversify away from U.S. Treasuries.<sup>340</sup>

Hong Kong law, especially as it relates to commercial activity, impacts U.S. and foreign interests operating in Hong Kong. In the case of the abovementioned court decision referred by Hong Kong's Court of Final Appeal to Beijing, a U.S. investment fund's lawsuit filed in Hong Kong was decided by China's National People's Congress. If Beijing becomes more active in Hong Kong's judicial affairs, cases like this may occur again.<sup>341</sup>

Restrictions on Hong Kong's administrative autonomy and freedom of expression and assembly run counter to Hong Kong's Basic Law, as memorialized in the U.S. Hong Kong Policy Act of 1992, which expresses U.S. support for the maintenance of a "high degree

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\*Ai Weiwei, a mainland Chinese artist and political dissident, was arrested in April 2011 for suspected "economic crimes," although it is widely assumed that the government targeted him for political, not economic, reasons. He was detained for almost three months before being released on June 22, 2011. Edward Wong, "Dissident Chinese Artist is Released," *New York Times*, June 22, 2011. <http://www.nytimes.com/2011/06/23/world/asia/23artist.html?pagewanted=all>.

of autonomy” in Hong Kong’s self-governance and for human rights development and democratization in Hong Kong.<sup>342</sup>

### **Conclusions**

- Hong Kong plays a central role in China’s policy goal of internationalizing its currency. In 2011, China introduced substantial new measures supporting Hong Kong’s status as China’s primary platform for RMB offshoring.
- Mainland involvement in Hong Kong’s political affairs was evident in 2011, prompting citizen discontent and conflict within Hong Kong’s democratic groups.
- Hong Kong continued to have a vibrant protest culture in 2011, with record amounts of participants in some annual protests. However, there were reports that police sometimes challenged Hong Kong citizens’ rights during protests, especially when protests targeted mainland China.
- Hong Kong’s mass media reported increased interference in their activities by Hong Kong authorities in 2011. Public perception of self-censorship in Hong Kong’s press peaked in 2011, and public opinion of press credibility fell to its lowest level in eight years.

## RECOMMENDATIONS

### *An Overview of China's Relations with North Korea and Iran*

The Commission recommends that:

- Congress investigate whether U.S. sanctions have been imposed on all Chinese firms that have violated the sanction laws by investing in Iran's petroleum industry or providing Iran with refined petroleum products or advanced conventional weapons.
- Congress, in light of China's continued investments in North Korea, hold hearings to evaluate the effectiveness of expanding North Korean sanctions to cover foreign firms investing in North Korea's natural resource industry.

### *Actors in China's Foreign Policy*

The Commission recommends that:

- Congress investigate the extent to which the People's Liberation Army is becoming a more influential actor in China's foreign policy-making.
- Members of Congress make an effort to engage with multiple official and unofficial foreign policy actors during their trips to China in order to better understand and establish channels of communication with these actors.

### *Taiwan*

The Commission recommends that:

- Congress urge the administration to sell Taiwan the additional fighter aircraft it needs to recapitalize its aging and retiring fleet.
- Congress request from the administration an update on the Taiwan submarine program that was approved for sale by the U.S. government in 2001.
- Congress explore in hearings the implications for the United States and the region of closer China-Taiwan relations.

### *Hong Kong*

The Commission recommends that:

- Congress reauthorize Section 301 of the Hong Kong Policy Act of 1992, which requires the U.S. secretary of State to submit an annual report to Congress on political, social, and economic developments in Hong Kong as they relate to the United States. This

should include reporting on China's measures to use Hong Kong as a platform for the internationalization of the renminbi.

- Members of Congress, when visiting mainland China, also visit Hong Kong and that Congress encourage senior administration officials, including the secretary of State, to make visits to Hong Kong part of their travel.
- Congress encourage its Members to raise the issue of preserving Hong Kong's special status when meeting with members of China's National People's Congress.

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## CHAPTER 4

# CHINA'S PUBLIC DIPLOMACY INITIATIVES REGARDING FOREIGN AND NATIONAL SECURITY POLICY

### Introduction

Recent years have seen significant debate about what China's emergence as a great power means for the rest of the world.<sup>1</sup> As China's economy has grown, Chinese investments, diplomatic influence, and military presence have assumed ever more prominent international profiles. Furthermore, the emergence of a more complex field of foreign policy actors in the People's Republic of China (PRC) has brought diverse—and sometimes conflicting—institutional interests and voices into China's foreign and national security decision-making process.<sup>2</sup> (For further discussion of this topic, see chap. 3, sec. 2, of this Report, "Actors in China's Foreign Policy.")

Major questions have circulated regarding the future intentions of the Chinese state: Having achieved economic and diplomatic clout that might have seemed unimaginable a generation ago, what do China's leaders intend to do with it? And how will the steadily increasing capabilities of the People's Liberation Army (PLA) factor into future Chinese foreign policy, particularly given the PRC's growing economic interests abroad and its continuing territorial disputes with many of the countries on its periphery? In response to these questions, the Chinese government has declared itself to be focused, in the economic realm, on development and mutually beneficial trade; in the military sphere, on building an adequate self-defensive capacity and protecting its sovereignty and territorial integrity, while striving to maintain peaceful relations with its neighbors; and in international affairs, on pursuing cooperative action on issues such as climate change, terrorism, and counterproliferation.<sup>3</sup>

Other observers have questioned such messages, however, in light of China's continued backing for North Korea and its aggressive efforts to assert sovereignty over disputed territories in regions such as the South China Sea and the border with India.<sup>4</sup> Such reassurances are also called into question by scholars who describe the influence on China's leaders of zero-sum thinking about international relations,<sup>5</sup> as well as by those who identify a legacy of deception either in China's traditional strategic culture<sup>6</sup> or in the practices of the Chinese Communist Party (CCP).<sup>7</sup>

The Commission undertook efforts in 2011 to assess the nature of China's propaganda messages directed to international audi-

ences. This chapter will seek to offer greater insight into how China frames its role in the world and its relations with other countries, as well as the implications for U.S. policy in the Asia-Pacific region.

### **The Chinese Government's Formulation of Messages in Media and Public Diplomacy**

The CCP treats the control of propaganda/public diplomacy messages\* to foreign audiences as a fundamental tool of statecraft.<sup>8</sup> Furthermore, it is highly critical of what it calls the “Western media’s ideological assault on the rest of the world”<sup>9</sup> and sees itself as engaged in a “global war for public opinion.”<sup>10</sup> As an illustration of this outlook, Li Changchun, a member of the Standing Committee of the Politburo and the CCP’s most senior official in charge of the government’s ideology and propaganda system,<sup>11</sup> stated in November 2008 that:

*Communication capacity determines influence. In the modern age ... whichever nation’s communication capacity is strongest, it is that nation whose culture and core values are able to spread far and wide, and that nation that has the most power to influence the world. ... Enhancing our communication capacity domestically and internationally is of direct consequence to our nation’s international influence and international position ... and of direct consequence to the function and role of our nation’s media within the international public opinion structure.*<sup>12</sup>

The processes by which leadership messages are formulated and then transmitted through China’s informational bureaucracy are opaque. At a minimum, these decisions involve the leaders of the CCP Central Committee’s Foreign Affairs/National Security Leading Small Group (chaired since 2002–2003 by CCP General Secretary Hu Jintao) and the Propaganda and Ideology Leading Small Group (chaired since 2003 by Politburo Member Li Changchun).<sup>13</sup> As described to the Commission this year by Ashley Esarey, an academic specialist on China’s propaganda system:

*By far the most powerful decision-making body in the propaganda system overall is the Central Leading Group on Propaganda. ... This secretive body hides the extent to which it controls information in China to blunt criticism of its actions. ... Efforts to promote foreign propaganda, in particular, are managed by the CCP Central Committee Foreign Propaganda Office [whose director] concurrently serves as the Deputy Director of the [CCP] Central Propaganda Department and Director of the State Council Infor-*

\*The Chinese term for “propaganda” does not necessarily carry a pejorative meaning, and the term is used extensively in Chinese discourse. See U.S.-China Economic and Security Review Commission, *Hearing on China’s Narratives Regarding National Security Policy*, written testimony of Ashley Esarey, March 10, 2011. As defined by another expert witness, Nicholas Cull, the term “public diplomacy” is “simply the process by which an international actor conducts foreign policy by engaging a foreign public.” See U.S.-China Economic and Security Review Commission, *Hearing on China’s Propaganda and Influence Operations, its Intelligence Activities that Target the United States, and its Resulting Impacts on US National Security*, written testimony of Nicholas Cull, April 30, 2009.

*mation Office. Day-to-day supervision of foreign propaganda is handled by the State Council Information Office, which pays attention to media coverage of salient issues in foreign affairs and interacts with foreign journalists in China.*<sup>14</sup>

In pursuit of a larger voice in international affairs, Chinese media officials have significantly increased resources for state-controlled foreign language media outlets.<sup>15</sup> In 2009, the *Global Times*, an official Chinese Communist Party newspaper, launched a new English edition; and in July 2010, the Xinhua News Agency launched a global 24-hour English-language television channel titled “CNC World.”<sup>16</sup> In May 2011, Xinhua moved its North American headquarters from an office in New York City’s borough of Queens to a much more prominent location on the top floor of a skyscraper in Manhattan’s Times Square.<sup>17</sup> In addition to expanding its international news outlets, in recent years the Chinese government has sponsored increased lobbying efforts directed at U.S. policymakers.<sup>18</sup>

The Chinese government has also attempted to reach out directly to public audiences in the United States through large-scale advertising campaigns. The Chinese government sponsored commercials hailing China’s cultural achievements that appeared on television networks and in Times Square during President Hu Jintao’s official visit to the United States in January 2011.<sup>19</sup> In August 2011, the Xinhua News Agency complemented the move of its New York bureau by signing a lease of at least six years for a 60 foot by 40 foot electronic billboard on the side of 2 Times Square.<sup>20</sup> The state-owned newspaper *China Daily* has paid for “advertorial” inserts in major newspapers such as the *Washington Post* (see image below) and the *New York Times*.<sup>21</sup> The *Washington Post* has also created the *China Watch* page on its website to present further news articles provided by *China Daily*.<sup>22</sup> These articles emphasize China’s desire for a “harmonious” world;<sup>23</sup> the benefits to Americans of Chinese economic policies; and the necessity for China to maintain CCP one-party rule.<sup>24</sup> Such advertising campaigns involve a significant outlay of resources: For example, the cost of a single instance of publishing an editorial advertising insert of the type placed by *China Daily* in the *Washington Post* is approximately \$300,000, not including additional fees for any related web content.<sup>25</sup>



Image: An example article from an "advertising supplement" insert (provided by the PRC state-owned newspaper *China Daily*) printed in the *Washington Post*. The cartoon accompanying the article personifies China as a friendly panda, expressing the PRC's desire for a "harmonious" international order. Source: *Washington Post*, March 25, 2011.

Despite such efforts, the Chinese government's attempt to find a more persuasive international voice may be hampered by its own misperceptions regarding foreign societies. Many Chinese officials believe that western governments direct the media in their countries to cast China in a negative light<sup>26</sup> as part of a vast campaign to contain China's emergence as a great power.<sup>27</sup> The fact that the CCP feels the need to push back with ambitious media and public diplomacy efforts against an imaginary U.S.-led international conspiracy (see box, below) is highly revealing—both of the CCP's national security worldview and of the challenges the CCP faces in successfully adapting its propaganda messages to international audiences.

### **The Chinese Communist Party and its View of the United States**

The CCP's formulation of foreign and national security narratives proceeds from the prism through which the party views the world. This outlook differs significantly from the win-win messages on international cooperation promoted by the PRC diplomatic corps and foreign language media. Domestic PRC media and internal party messages reflect a view of the outside world characterized by perceptions that China is surrounded by hostile actors. This produces a blinkered and distorted understanding of the international system as a whole and the United States in particular.



**The Chinese Communist Party and its  
View of the United States—Continued**

Despite widespread cynicism throughout Chinese society regarding Communist doctrine, Marxist social analysis is still a central element of CCP discourse,<sup>28</sup> to include traditional Marxist analysis on capitalism and imperialism: As stated in summer 2010 by an author in the *Global Times*, a newspaper controlled by the CCP Central Propaganda Department:<sup>29</sup>

*To understand the provocations made by America ... you must have a basic understanding of this country's nature and its global strategy. ... As seen from its history, America is constantly conducting war, searching for enemies, and in fact this is a normal condition of its social development. Without war, America cannot stimulate its economy. ... America is set upon a path of war from which it cannot turn back.*<sup>30</sup>

Senior PRC officials have also described the United States as an imperialist and militarist power, as when PRC Vice Premier and former Foreign Minister Qian Qichen stated in November 2004 that U.S. policy “advocates [that] the United States should rule over the whole world with overwhelming force, military force in particular.”<sup>31</sup> CCP analysis depicts the U.S. “hegemon”<sup>32</sup> as carrying out a “highly cohesive master plan designed to strengthen and expand its global domination ... this perception breeds a conspiratorial view, which in turn predisposes China to see ill intentions and sinister motives in every U.S. act.”<sup>33</sup> The United States is specifically accused of:

- Fomenting social unrest aimed at destabilizing Chinese society and overturning the government.<sup>34</sup> This narrative has been dominant since 1989, when CCP leaders blamed the Tiananmen protests on a U.S.-led plot by “hostile, reactionary foreign forces” intent on overthrowing China’s “socialist system”;<sup>35</sup>
- Intentionally bombing the PRC embassy annex in Belgrade in 1999 to intimidate and humiliate a rising China;<sup>36</sup>
- Linking U.S. overseas bases and military alliances into a “C-shaped ring of encirclement” (ranging from Japan and South Korea, down to Southeast Asia and the Indian Ocean, and up to Afghanistan) directed at containing China;<sup>37</sup>
- Making calls for China to be a “responsible stakeholder” in the international system, with the intent to weaken China by trapping it in foreign entanglements;<sup>38</sup>
- Fostering the 2008 global financial crisis in an effort to hurt China’s economic growth;<sup>39</sup>
- Pressuring China to let the renminbi (RMB) appreciate as part of a “currency war” started by “American hegemony” against China’s economy;<sup>40</sup>

**The Chinese Communist Party and its  
View of the United States—Continued**

- Conducting “hegemonistic deeds of using human rights issues to interfere in other countries’ internal affairs” and employing this as “a political instrument to defame other nations’ image and seek [the United States’] own strategic interests;”<sup>41</sup>
- Using covert means to instigate ethnic unrest in regions such as Tibet and Xinjiang, with the goal of weakening China or even causing it to break apart;<sup>42</sup> and
- Orchestrating the award of the 2010 Nobel Peace Prize to Chinese dissident Liu Xiaobo as part of an effort to embarrass China.<sup>43</sup> The PRC state press described the awarding of the prize to Mr. Liu, an “incarcerated criminal,” as “a political tool that serves an anti-China purpose . . . the Nobel committee would like to see the country split by an ideological rift, or better yet, collapse like the Soviet Union.”<sup>44</sup>

The accusations made against the United States in official PRC discourse reveal a great deal about the anxieties and distorted worldview of Chinese political elites, and the PRC’s more assertive behavior in 2010 may be explained in part by a perceived need to push back forcefully against this imagined U.S.-led “conspiracy” directed against China.<sup>45</sup> However, the centrality of the U.S. role in the international system, and the importance of the U.S. market for Chinese-made goods, means that China’s leaders continue to treat relations with the United States as “one of the most dynamic and important bilateral relations in the world,”<sup>46</sup> despite their suspicious views of American power and intentions.<sup>47</sup>

**Chinese Messages and Policy Debates on Geopolitics in East Asia and China’s Emergence as a Great Power**

CCP propaganda officials set the parameters for debate on foreign policy issues inside China and also actively promote the party’s official narratives. Over the past two decades, China’s official propaganda messages to foreign audiences have emphasized four broad themes:

1. The primacy of “stability” for China while continuing the policies of social and economic “reform and opening up” under the continued political leadership of the CCP;
2. The primacy of economic development in China’s foreign policy goals, the mutually beneficial nature of China’s economic growth for other countries, and the attractiveness of China as a destination for investment;
3. The desire to maintain a stable and peaceful international environment in order to facilitate China’s domestic development;
4. The completely defensive nature of China’s military modernization, and China’s peaceful intentions toward neighboring countries.<sup>48</sup>

Although the slogans change over time, official PRC foreign policy narratives overlap with, and do not supersede, one another. Instead, they represent shifts in message emphasis rather than changes in actual policy.

### The Foreign Policy Guidelines of Deng Xiaoping

Deng Xiaoping's "24-Character Strategy" first emerged in 1990 in response both to the global backlash from the 1989 Tiananmen Square crackdown and to the CCP's sense of alarm following the collapse of the communist states of Eastern Europe.<sup>49</sup> The strategy provided basic principles on how China should protect its national interests while increasing its interactions with the world. The "24-Character Strategy" has been roughly translated as:

*Observe calmly; secure our position; cope with affairs calmly; hide our capacities and bide our time; be good at maintaining a low profile; and never claim leadership.*<sup>50</sup>

Chinese officials and scholars have interpreted these policy guidelines to mean that China should avoid military rivalries; gradually grow China's comprehensive economic, military, and political strength; and minimize international responsibilities.<sup>51</sup> CCP General Secretary Jiang Zemin continued this policy throughout the 1990s, making it a central tenet of Chinese foreign policy for more than ten years. The result was that China's strategic orientation "demonstrate[d] unusual consistency from the 1980s through the 2000s," with China's leaders "insisting on the importance of sticking to Deng Xiaoping's realist legacy."<sup>52</sup>

### Overview of Three Leading PRC Foreign Policy Narratives

China's Global Narratives	Leading Spokesman	Year	Synopsis
"Five Principles of Peaceful Coexistence" <sup>53</sup>	Zhou Enlai	1954	States should conduct relations with one another on an equal basis, with high regard for sovereignty and non-interference in each other's internal affairs.
The "24-Character Strategy" <sup>54</sup>	Deng Xiaoping	1990	Keep focused on domestic economic growth while avoiding the burdens of international commitments and military competition. Stay alert for efforts to subvert China through "peaceful evolution," but do not challenge western countries.
"Peaceful Rise" <sup>55</sup> —shifts to— "Peaceful Development" <sup>56</sup>	Zheng Bijian  Hu Jintao	Nov. 2003  April 2004	Remain focused on economic growth above all other priorities while pursuing peaceful integration into the international system as a great power. As above, but with less emphasis on China's emergence as a great power and greater emphasis on how China's growth benefits other countries. China will undertake selected international roles while avoiding binding commitments or military competition with other powers.

### The Themes of “Peaceful Rise” vs. “Peaceful Development”

The “peaceful rise” theme was unveiled by Zheng Bijian (an influential foreign policy advisor to Hu Jintao) at the Boao Forum for Asia in November 2003.<sup>57</sup> Mr. Zheng described this as a “new strategic path [of] China’s peaceful rise through independently building socialism with Chinese characteristics, while participating in rather than detaching from economic globalization.”<sup>58</sup> This theme was also articulated to international audiences through an article by Mr. Zheng published in *Foreign Affairs* in 2005 titled “China’s ‘Peaceful Rise’ to Great Power Status.”<sup>59</sup>

While the slogan of “peaceful rise” continued to circulate, by April 2004 the term had been replaced in official statements by the phrase “peaceful development,” which was confirmed as the official narrative with the release of a December 2005 government white paper titled “China’s Peaceful Development Road.”<sup>60</sup> In the white paper, the Chinese government outlined its new official foreign policy narrative as follows:

*To take the road of peaceful development is to unify domestic development with opening to the outside world, linking the development of China with that of the rest of the world, and combining the fundamental interests of the Chinese people with the common interests of all peoples throughout the world. China persists in its pursuit of harmony and development internally while pursuing peace and development externally; the two aspects, closely linked and organically united, are an integrated whole, and will help to build a harmonious world of sustained peace and common prosperity.<sup>61</sup>*

One academic expert has suggested that the change could be attributable to concerns that some neighboring countries or the United States might interpret the use of “rise” as too threatening a sign of hegemonic aspirations.<sup>62</sup> It is also possible that Hu Jintao may have wished for China’s foreign policy narrative to more closely parallel his overarching domestic propaganda theme of the “Scientific Outlook on Development.”<sup>63</sup> However, the reason for the change from “peaceful rise” to “peaceful development” is unknown.

#### China Studies Historical Great Powers

In debating how China should adapt to its growing economic, diplomatic, and military power, the leadership circles of the CCP have searched for answers in historical precedents, as when the Politburo undertook a “study session” in November 2003 to examine the development of major powers from the 15th to the 20th centuries.<sup>64</sup> This same theme was also on display in a major television documentary series produced on Chinese state television in 2006 titled “Rise of the Great Powers.” The documentaries catalogued the rise to great power status of Britain, France, Germany, Japan, Russia/the Soviet Union, and the United States.<sup>65</sup>

### **China Studies Historical Great Powers—Continued**

This interest in the emergence of great powers has been further influenced by traditional concepts of statecraft drawn from China's own Warring States Period (approximately 475–221 BCE), in which rising states frequently fell into conflict with dominant “hegemonic” states that sought to protect their position by striking out at the challengers.<sup>66</sup> Chinese leaders also reportedly have been alarmed by parallels comparing China's rise in the late 20th century with that of Imperial Germany in the late 19th/early 20th century and the attendant arms race and geopolitical competition that ensued between Germany and Great Britain—the dominant “hegemon” of the international system in the early 20th century.<sup>67</sup>

Therefore, the PRC has embarked on an active propaganda/public diplomacy campaign to reassure audiences in other states—and most particularly policymakers in the United States, the “hegemon” of the current international order—that China has no intent either to threaten its neighbors or to upset the international system.<sup>68</sup> Singapore's “Minister Mentor” Lee Kuan Yew noted this informational campaign in an interview in October 2007, when he made reference to the “Rise of the Great Powers” television series. Mr. Lee stated that the Chinese government intended the series to be “a lesson to support their gradual opening up and their idea of how they can do it without conflict—the ‘peaceful rise.’ They have worked out this scheme, this theory, this doctrine to assure America and the world that they're going to play by the rules.”<sup>69</sup>

### **The Path of “Peaceful Development” in 2010–2011**

China adopted a much more assertive international profile in 2010, to include actions such as harassing U.S. survey vessels operating in international waters off the Chinese coast, aggressively pressing unrecognized territorial claims in the East and South China Seas, and supporting North Korea in the aftermath of unprovoked acts of aggression against South Korea.<sup>70</sup> This behavior has unnerved neighboring countries and undone much of China's goodwill diplomacy of the past decade.<sup>71</sup> Alongside these provocative actions, the messages emerging from China about its foreign and national security policy were also in a state of flux over the past year, as new policy directions were debated and a more diverse group of PRC foreign policy actors promoted their views.<sup>72</sup>

The themes of “peaceful development,” along with parallel messages on seeking a “harmonious” international environment,<sup>73</sup> continue to dominate official PRC foreign policy messages. These messages grew even more emphatic in late 2010 and early 2011, voiced in prominent fora by very senior PRC officials, a possible sign of public diplomacy damage control undertaken in reaction to the backlash that China faced over its aggressive behavior in 2010. In a speech to the United Nations (UN) General Assembly on September 23, 2010, Premier Wen Jiabao stated that:

*China will stay firmly committed to peaceful development.  
You may ask what is the essence of peaceful development?*

*It is to foster a peaceful international environment for our development and at the same time contribute to world peace through our development. ... China's development will not harm anyone or pose a threat to anyone. There were powers who sought hegemony once they grew strong. China will never follow in their footsteps.*<sup>74</sup>

This was followed by a December 2010 article in the English-language *Beijing Review* by PRC State Councilor Dai Bingguo titled "Stick to the Path of Peaceful Development."<sup>75</sup> As described in testimony to the Commission by John Park of the U.S. Institute of Peace:

*With over 60 references to 'peace' and an explicit assurance that 'China has no culture or tradition of seeking expansion or hegemony' and that 'benevolence and harmony are at the heart of our political and cultural tradition, which values harmony, good-neighborliness and friendship with all' throughout its thousands of years of history, Dai's article appeared to be conspicuously overcompensating for the events and statements of a summer that seemed to confirm many countries' suspicions about the nature of China's rise.*<sup>76</sup>

In a similar vein, in January 2011, PRC Vice Premier and Politburo Standing Committee Member Li Keqiang, the likely successor to Wen Jiabao as state premier, published an op-ed in the *Financial Times* titled "The World Need Not Fear a Growing China." In the article, Mr. Li strongly asserted "China's pursuit of the path of peaceful development," its desire for "harmonious relations with our neighbours," and China's contributions to world economic growth.<sup>77</sup>

Prominent PRC academics have also been engaged in the PRC's redoubled efforts at strategic reassurance. Wang Jisi, dean of the School of International Studies at Beijing University, asserted in a February 2011 *Foreign Affairs* article that China would continue to adhere to nonconfrontational policies as it emerged as a major world power. He explained away China's more abrasive foreign policy actions in 2010, writing that:

*In recent years, China's power and influence relative to those of other great states have outgrown the expectations of even its own leaders. Based on the country's enhanced position, China's international behavior has become increasingly assertive. ... Last year, some Chinese commentators reportedly referred to the South China Sea and North Korea as ['core interests'], but these reckless statements, made with no official authorization, created a great deal of confusion. ... As long as no grave danger ... threatens the CCP leadership or China's unity, Beijing will remain preoccupied with the country's economic and social development, including in its foreign policy.*<sup>78</sup>

These more moderate views of Wang Jisi—which could reasonably be interpreted as the official message that China's leaders hope that international audiences will believe<sup>79</sup>—are directed in large part to policymakers and public opinion in the United States,



a result of the uncertainty and anxiety that CCP leaders feel about U.S. strategic intentions toward China.<sup>80</sup>

Although the general narrative framework of the PRC's foreign propaganda is unlikely to change in the near term, the emergence in 2012 of a new Central Committee and Politburo leadership following the Eighteenth Party Congress may produce new slogans, and possibly modified explanatory language, to reflect the public diplomacy priorities of the CCP's new leadership circle.

### **Should “Peaceful Development” Be Taken at Face Value?**

Some expert witnesses who testified before the Commission this year raised concerns that the PRC's official messages may be a deceptive cover for revisionist PRC foreign policy goals. Gilbert Rozman of Princeton University testified that “[t]here [has been] a calculated duality to Chinese writings. Has the Chinese narrative been intentionally deceptive? I think so . . . Having closely followed Chinese works [I believe] that positions taken in 2010 that are at variance with earlier positions are a result of prior concealment of China's attitudes.”<sup>81</sup> This opinion was also reflected in the testimony of Jacqueline Newmyer Deal of the Long Term Strategy Group, who told the Commission that:

*The Chinese government prioritizes manipulating information more than most Americans realize and perhaps more than any other major power. My analysis indicates that Chinese elites manage to deliver a range of messages tailored to American audiences that could have the effect of encouraging us to act, or in some cases refrain from acting, in ways that serve Chinese interests at the expense of U.S. interests or broader international norms.*<sup>82</sup>

The testimonies of Dr. Rozman and Dr. Newmyer Deal are supported by limited anecdotal evidence available from within the Chinese Communist Party itself. In early 2011, lecture notes taken at the CCP's Central Party School were leaked on the news website *China Digital Times*. According to the notes of this anonymous official, Central Party School lecturers told their students that the relationship between the CCP and “American imperialism” was one of “strategic adversaries” and that “the so-called cooperative partnership is deceptive.”<sup>83</sup>

If there is a disparity between what the Chinese government says to different audiences about China's rise as a great power, it is not surprising: The CCP informational bureaucracy has long held an “insider” and “outsider” view of access to information, as this pertains both to non-Chinese Communist Party members and to foreigners.<sup>84</sup> The CCP has a deeply ingrained institutional culture favoring secrecy<sup>85</sup> and a long history of proactively using information to promote the party's objectives while suppressing information deemed harmful to its interests.<sup>86</sup> China's leaders have selected the reassuring message of “peaceful development” as the public diplomacy narrative that they believe to be most advantageous to China's interests as well as the one that most accords with their self-image of China as “a force for stability and peace.”<sup>87</sup> However, the extent to which this optimistic narrative may diverge

from the CCP's actual view of international relations, and from China's longer-term policy goals, remains an open question.

### The "Shanghai Spirit"

In June 2011, on the tenth anniversary of the founding of the Shanghai Cooperation Organization (SCO), the Chinese media began to extol the institution's "Shanghai Spirit" as the embodiment of a new model of international relations. According to an article published in English by PRC Foreign Minister Yang Jiechi:

*The SCO embodies ... the 'Shanghai Spirit' whose essence is mutual trust, mutual benefit, equality, consultation, respect for diverse civilizations and seeking common development. It reflects the member states' fresh perspectives on security, development, cooperation and civilization. An inspiration to the world, it is a major contribution to efforts to foster a new type of state-to-state relations and build a harmonious region.*<sup>88</sup>

Material published in Chinese is more revealing as to why the Chinese government holds up the SCO as its preferred model for an international organization. In thinly veiled code language referring to the threat allegedly posed by the United States and other western governments, the *People's Daily* has written that:

*The SCO supports the democratization of international relations, actively advancing the building of a new international order. In our world, although the Cold War is over, the paths of unilateralism and new interventionism are still prevalent; the 'Superiority of Western Civilization,' 'Democratic Reform,' and other such concepts still threaten the balanced and stable development of international politics.*<sup>89</sup>

In contrast to other institutions that "the PRC had little role in creating and had to join on a take-it-or-leave-it basis, Chinese officials have been able to shape the design and evolution of the SCO more than any other country ... allowing the Chinese to construct the SCO as an institution that reflects their preferred values."<sup>90</sup> Such values include "full respect for independence, sovereignty and territorial integrity, as well as upholding the principle of non-interference in internal affairs of all states,"<sup>91</sup> and "democratic development with due regard for [members'] national realities as well as cultural historical features."<sup>91</sup> They also include "democratizing international relations"—that is, excluding from participation the "hegemonic" United States and its allies, who have historically played a prominent role in international institutions. (For further discussion of the increasingly influential role of China in international organizations, see the March 2011 contracted research report, "The Evolving Role of China in International Institutions," available on the Commission's website at [www.uscc.gov](http://www.uscc.gov)).

### The Chinese Government's Messages Related to China's Military Modernization and Defense Policies

In referring to China's military modernization and its national security policies, Chinese writings consistently assert China's peaceful military tradition and its rejection of "hegemony" and "power politics." Chinese messages often contrast the Chinese military tradition with that of the West, which they characterize as violent and expansionist.<sup>92</sup> Notably, since 2005 PRC messaging has made particular use of the story of the 15th century Ming Dynasty maritime explorer Zheng He, stressing the theme that China's naval expansion will be peaceful in nature and beneficial to surrounding countries.<sup>93</sup>

All of these themes have figured prominently in official PRC policy documents intended for foreign audiences. As stated in China's 2010 defense white paper:

*The pursuit of a national defense policy which is defensive in nature is determined by China's development path, its fundamental aims, its foreign policy, and its historical and cultural traditions. [China] promotes the building of a harmonious world enjoying lasting peace and common prosperity externally [and] maintains ... its belief in valuing peace above all else, advocating the settlement of disputes through peaceful means, prudence on the issue of war, and the strategy of 'attacking only after being attacked.' China will never seek hegemony, nor will it adopt the approach of military expansion now or in the future, no matter how its economy develops.*<sup>94</sup>

These messages have also been promoted in U.S.-China military-to-military exchanges. In May 2011, General Chen Bingde, the chief of the People's Liberation Army (PLA) General Staff Department and a member of the 17th CCP Central Committee,<sup>95</sup> led a 24-member delegation to the United States to restart high-level military exchanges that the PRC had halted following U.S. military sales to Taiwan in October 2008 and January 2010.<sup>96</sup>

In an address at the National Defense University in Washington, DC, General Chen offered statements consistent with the messages on foreign policy and national security issues that the Chinese government promotes to foreign audiences: Foremost, that China has a peaceful military tradition and poses no threat to its neighbors, and that it is focused on promoting a peaceful external environment to allow for its own domestic economic development. General Chen repeatedly stressed the capabilities gap between the Chinese and U.S. armed forces and that China has no intent to challenge U.S. military superiority or the U.S. position in the international system. He also stressed the prospects for security cooperation between the United States and China on transnational issues such as terrorism, piracy, and counterproliferation. However, General Chen attached conditions to closer military-to-military ties—in particular, the need for the United States to "respect" China's "core interests," especially in regard to Taiwan.<sup>97</sup> (For a fuller discussion of General Chen's visit and the issues surrounding it, see the USCC backgrounder "The Chinese People's Liberation Army Dele-

gation Visit to the United States, May 2011: A Summary of Key Actors and Issues,” available on the USCC website at [www.uscc.gov](http://www.uscc.gov).)

### What Constitutes a “Core Interest” of China?

The term “core interests” has been invoked by PRC officials and state media in reference to multiple policy areas, and the use of the term has increased dramatically from 2008 to the present.<sup>98</sup> The phrase has been used most commonly in regard to issues of national sovereignty but has also been invoked in relation to economic development, “social stability,” and territorial integrity.<sup>99</sup> According to one author writing in an authoritative CCP forum, “National core interests are a country’s paramount interests, related to the life or death of a country and its people. Therefore, in international contacts and negotiations one cannot yield, and there is no room for compromise.”<sup>100</sup>

At the close of the first round of the Strategic and Economic Dialogue in July 2009, PRC State Councilor Dai Bingguo described China’s “core interests” as follows:

*To ensure that our bilateral relationship will move forward on the track of long-term and sound development, a very important thing is that we need to support, respect, and understand each other, and to maintain our core interests. And for China, our concern is we must uphold our basic systems,\* our national security; and secondly, the sovereignty and territorial integrity; and thirdly, economic and social sustained development.*<sup>101</sup>

Despite such comments, Beijing has not made clear which issue areas merit classification as a “core interest.” In past years, the term was used primarily to denote sovereignty issues—particularly in regard to Taiwan, Tibet, and Xinjiang.<sup>102</sup> However, the term was used more expansively by PRC officials throughout 2010–2011. In May 2010, Mr. Dai told Secretary of State Hillary Rodham Clinton that the South China Sea represented one of China’s “core interests”;<sup>103</sup> this was followed in July 2010 by a PRC Defense Ministry spokesman who stated that “China has indisputable sovereignty of the South [China] Sea.”<sup>104</sup> In the ensuing international controversy, PRC officials backed away from the explicit assertion that the region qualified as a “core interest” but did not withdraw the claim.<sup>105</sup>

\*The context of Mr. Dai’s remarks indicates that by “basic systems” he meant China’s current political order—i.e., the continued rule of the CCP. Jin Canrong, a professor at Renmin University, has written that Mr. Dai’s term “basic system” refers to China’s system of “multiparty cooperation and political consultation led by the Communist Party of China.” See *Global Times Online* (in English), “China Denies Taking Tough Stance on International Affairs,” March 8, 2010. <http://www.globaltimes.cn/chinaldiplomacy/2010-03/510467.html>.

### **What Constitutes a “Core Interest” of China?—Continued**

Additionally, PRC officials and media have become more vocal in protesting U.S. actions that “touch upon” China’s “core interests.” These include arms sales to Taiwan<sup>106</sup> as well as pressure to revalue the renminbi (RMB), which “would harm Chinese policymakers’ core interest of managing the economic wellbeing of the Chinese people.”<sup>107</sup> The term has also been invoked in reference to foreign criticism of China’s human rights practices, as when CCP General Secretary Hu Jintao referred in November 2006 to “Taiwan, Tibet, human rights and other major questions involving China’s state sovereignty and core interests.”<sup>108</sup>

Confusing messages regarding what qualifies as a “core interest” of China may reflect a lack of consensus among competing voices in the PRC foreign policy process. (For further discussion of this topic, see chap. 3, sec. 2, of this Report, “Actors in China’s Foreign Policy.”) However, it also reflects a growing assertiveness on the part of PRC foreign policy decisionmakers, who feel that China’s rise into the ranks of great powers gives it the necessary clout to reshape international practices to which it objects:

*[I]f a country’s identity changes as its power grows, it may cease to accept another party’s policies and behavior, although the country may have swallowed the bitter fruit in the past ... with the growth of China’s power and [the] Chinese people’s growing attention to foreign affairs, China cannot accept some behaviors such as arms sales to Taiwan, which has been done for decades. However ... the offensive taken by China is not a move of expansion. In fact, Beijing’s offensive strategy on arms sales to Taiwan is a small step of counterattack after its core national interest has been infringed repeatedly and for decades.<sup>109</sup>*

Such a sense of China’s increasing power, tied to a deep sense of grievance regarding China’s historical treatment at the hands of foreign powers,<sup>110</sup> suggests that PRC officials will prove increasingly expansive and assertive in how they choose to define the list of China’s “core interests.”<sup>111</sup>

### **China’s “Defensive” Military Tradition**

Authoritative PRC military commentators consistently declare that China maintains a purely defensive military orientation and that this is the continuation of a long historical legacy: “The Chinese nation has a time-honored tradition of loving peace. In the history of military development over thousands of years, it always pursued a defensive type of military strategy.”<sup>112</sup> However, some scholars of historical Chinese statecraft have identified a realpolitik readiness to use military force in the pursuit of state interests, thinly veiled beneath official rhetoric on peace and benevolence.<sup>113</sup> Andrew Scobell, senior political scientist at the RAND

Corporation, has described the result as a dualistic Chinese strategic culture that “paradoxically tends to dispose Chinese leaders to pursue offensive military operations as a primary alternative in pursuit of national goals, while rationalizing these actions as being purely defensive and last resort.”<sup>114</sup> One example of this thinking is PRC discourse on China’s 1979 invasion of Vietnam, which is invariably referred to as a “self-defensive counterattack” made in response to Vietnamese provocations.<sup>115</sup>

More recently, the PRC’s assertion of a peaceful, defensive military posture has also been questioned due to increasing Chinese aggressiveness in asserting sovereignty claims in areas such as the South China Sea,<sup>116</sup> as well as to its increasing development of capabilities for strike warfare.\* Many of China’s neighbors in East Asia are hedging against the possibility of China’s future intentions being less peaceful than its narratives would attest, as is revealed in the most recent Japanese and Australian defense white papers<sup>117</sup> and in summer 2011 exercises conducted between the U.S. Navy and naval vessels from the Philippines and Vietnam.<sup>118</sup> These same concerns have also been displayed in South Korea’s efforts to strengthen its security alliance with the United States following attacks from North Korea and the subsequent moves taken by the PRC to shield Pyongyang from any serious repercussions for its actions.<sup>119</sup>

### **Nationalist Rhetoric from the PLA Officer Corps**

The peaceful prospects of China’s military modernization have also been called into question by hawkish comments from senior PLA officers that clash with the official themes advocating peaceful economic development and international cooperation.<sup>120</sup> One of the most high-profile examples from the past year was provided by General Liu Yuan, the political commissar of the PLA General Logistics Department, and the son of former PRC head of state Liu Shaoqi.<sup>121</sup> General Liu has emerged as a prominent voice among the group of “princelings”—the children of high-ranking CCP officials—who extol the virtues of the party’s past.<sup>122</sup>

General Liu has accused unnamed CCP leaders of selling out the country to foreign interests<sup>123</sup> and has called upon party members to embrace revolutionary-era communist values, described as a return to “New Democracy.”<sup>124</sup> General Liu’s comments are evocative of the worrisome trend of a “Maoist revival” in some quarters of the CCP, with calls for assertive nationalism, a return to Marxist ideological orthodoxy, reinforced state control over the economy, and harsher repression of dissent.<sup>125</sup> General Liu has also praised war as a unifying and progressive force in Chinese history,<sup>126</sup> writing that “[t]he state is an apparatus for the use of force, forged for vio-

\* Strike warfare is defined as “operations to destroy or neutralize enemy targets . . . including attack against strategic and tactical targets such as manufacturing facilities and operating bases from which the enemy is capable of conducting or supporting air, surface, or subsurface operations against friendly forces.” See U.S. Department of Defense, *Joint Publication 3-04: Doctrine for Joint Maritime Operations (Air)* (Washington DC: July 1991), p. GL-5. [http://edocs.nps.edu/dodpubs/topic/jointpubs/JP3/JP3\\_04\\_910731.pdf](http://edocs.nps.edu/dodpubs/topic/jointpubs/JP3/JP3_04_910731.pdf). For a discussion of the PLA’s increasing capabilities for strike warfare operations, see U.S.-China Economic and Security Review Commission, *2010 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, 2010).



lence; history is written in massacres and blood sacrifices, and new civilizations and new cultures often have their origins in warfare.”<sup>127</sup>

General Liu’s extreme language is not an authoritative reflection of Chinese government policy. However, General Liu is a rising figure in the PLA and enjoys the favor of Xi Jinping, who is on track to assume the role of paramount CCP leader in 2012.<sup>128</sup> Mr. Xi is himself a princeling—the son of former PRC Vice Premier Xi Zhongcun—and has been described as a staunch supporter of promoting fellow princelings to senior government positions.<sup>129</sup> The two men are also believed to share an orthodox interpretation of Communist ideology.<sup>130</sup> Some expert observers of Chinese politics believe that Mr. Xi is laying the groundwork for General Liu to be appointed as a vice chairman of the CCP Central Military Commission at the 18th CCP Party Congress in autumn 2012.<sup>131</sup> If this were to prove true, it would make General Liu one of the two most senior officers in the PLA, as well as its highest-ranking political commissar<sup>132</sup>—thereby giving him a powerful platform for shaping both the military’s internal political indoctrination as well as the messages that the PLA promotes beyond the ranks.

General Liu also is not isolated in his views, as provocative nationalist commentary from PLA officers became more prominent throughout 2010 and 2011.<sup>133</sup> In one such example, in May 2010 a U.S. delegation in Beijing received an angry, three-minute lecture from Rear Admiral Guan Youfei, deputy director of the Foreign Affairs Office in the PRC Defense Ministry. Admiral Guan lambasted the United States for treating China as an enemy (as proven by arms sales to Taiwan); for being a bullying “hegemon” of the international system; and for plotting to encircle China with strategic alliances.<sup>134</sup> Such commentary from senior-ranking officers has generated concerns that nationalist impulses within the PLA may be driving more aggressive behavior in PRC foreign policy<sup>135</sup> or that elements of the PLA may be acting in a “roguish” fashion outside of full civilian control.<sup>136</sup> It has also contributed to concerns that political and personnel changes underway in the lead-up to the 18th CCP Party Congress in autumn 2012 could serve to boost the political influence of the PLA and amplify nationalist voices in the PRC’s foreign policy decision-making process.<sup>137</sup>

### **Track Two Exchanges and PRC Messages Regarding Military and National Security Policy**

There are many “track two” exchanges between U.S. and Chinese host institutions, which bring together scholars and former government officials to discuss diplomatic, security, and economic topics of concern to both countries.\* Additionally, a number of “track 1.5” exchanges have also appeared in recent years, which involve gov-

\*“Track two” diplomatic exchanges are those that take place between representatives of non-governmental groups (think tanks, academics, retired senior political figures, or military officers, etc.) who may nonetheless be in a position to relay the results to active policymakers or to otherwise influence government policy or public opinion in regard to particular issues in foreign relations. See Dalia Dassa Kaye, *Talking to the Enemy: Track Two Diplomacy in the Middle East and South Asia* (Santa Monica, CA: RAND Corporation, 2007).

ernment officials conducting discussions in an unofficial capacity.\* Such exchanges have come to occupy a prominent place in U.S.-Chinese relations as conducted outside of formal government channels. For example, from 2002–2008 the Institute for U.S.-China Issues at the University of Oklahoma conducted annual meetings of “The Sino-American Security Dialogue” in partnership with Chinese academic institutions; this subsequently changed to the “US–China Diplomatic Dialogue” for mid-career U.S. and Chinese diplomats, which last met in summer 2011 in Anhui, China.<sup>138</sup>

Track two exchanges offer many potential benefits, to include greater mutual understanding and the opportunity for discussion of contentious topics outside of the restrictions of official diplomatic channels. However, the representatives of PRC friendship associations and think tanks are not independent actors: Virtually all are subordinate to a government ministry or Communist Party body,<sup>139</sup> and their personnel appointments are dependent upon CCP vetting and approval.<sup>140</sup> Therefore, such exchanges also offer opportunities for Chinese government–controlled front organizations to reinforce official propaganda messages and to conduct subtle perception management efforts under the guise of nominally independent person-to-person and scholarly exchanges.

The Commission’s examination of this issue revealed a prominent role for PRC intelligence entities in organizing and hosting track two exchanges. For example, one prominent Chinese sponsor of exchange trips and dialogues is the China Association for International Friendly Contact (CAIFC), which is a front organization for the International Liaison Department of the PLA General Political Department.<sup>141</sup> The International Liaison Department performs dual roles of intelligence collection and conducting PRC propaganda and perception management † campaigns, particularly in the case of efforts focused on foreign military forces.<sup>142</sup>

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\*According to a definition provided by the Berghof Foundation for Conflict Studies, a Danish think tank, track 1.5 exchanges involve “informal dialogue and problem-solving formats with high ranking politicians and decision-makers. Involves Track 1 participants, but employs Track 2 approaches.” See Berghof Foundation for Conflict Studies. “Glossary: Track 1.5,” <http://www.berghof-foundation.de/en/glossary/track-1.5>.

†The term “perception management” has been defined by the Department of Defense as follows: “Actions to convey and/or deny selected information and indicators to foreign audiences to influence their emotions, motives, and objective reasoning as well as to intelligence systems and leaders at all levels to influence official estimates, ultimately resulting in foreign behaviors and official actions favorable to the originator’s objectives.” See U.S. Department of Defense, *Joint Publication 1-02: Department of Defense Dictionary of Military and Associated Terms* (Washington, DC: April 2001 [as amended through October 31, 2009]), p. 411.

<b>Selected CAIFC/CPD Track Two Exchanges with Government Officials and Think Tank Scholars in 2009–2010</b> <sup>143</sup>	
<p>In addition to activities that it sponsors directly, the Chinese Association for International Friendly Contact also operates its own associated think tank, the Center for Peace and Development (CPD).<sup>144</sup> Not counting the extensive number of programs run by other Chinese organizations, the CAIFC and CPD conduct a very active list of exchanges. A list of selected exchanges sponsored by CAIFC and/or CPD from the years 2009–2010 includes the following:</p>	
Dates	Participating Foreign Organization(s)/Person(s) and Issues Discussed (If Known)
June 27–July 9, 2010	A delegation from CAIFC meets in Washington, DC, with Members of Congress and representatives of the Asia Society and the Center for Strategic and International Studies, among others. They also meet in New York with faculty at Columbia University. Topics discussed reportedly focused on U.S and Chinese policy in Central Asia.
June 15, 2010	CAIFC hosts a visit to China by the governor of Hawaii and an accompanying delegation from the Hawaii Chamber of Commerce.
April 4–13, 2010	CAIFC sponsors a delegation of five former Members of Congress to visit China; in Beijing, they visit the National People’s Congress, the Ministry of Foreign Affairs, the Ministry of Commerce, and the People’s Bank of China.
November 25, 2009	CPD hosts a visiting delegation from Britain’s Royal United Services Institute for Defence and Security Studies. Topics discussed reportedly included Chinese-European relations, Afghanistan, and the Iranian nuclear program.
October 16–24, 2009	In the second round of meetings of the “Sanya Initiative,” <sup>145</sup> a delegation of retired Chinese generals visits the United States. They visit U.S. Pacific Command headquarters in Honolulu; and subsequently travel to Washington, D.C., where they meet with Secretary of State Hillary Rodham Clinton, Vice Chairman of the Joint Chiefs General James Cartwright, and members of the China Working Group caucus of the U.S. House of Representatives.
May 19, 2009	CAIFC representatives, including former Foreign Minister Li Zhaoxing, entertain a visiting delegation of senior-ranking retired Japanese military officers at the Diaoyutai Guest House in Beijing.
May 15, 2009	Hosted by CAIFC, a delegation from the Asia-Pacific Center for Security Studies visits the Ministry of Foreign Affairs, the China Institute of International Studies, the Chinese Academy of Social Sciences Institute of American Studies, and Qinghua University.
April 8–18, 2009	A delegation of CAIFC representatives travels to Washington State to meet with state political and business leaders and subsequently to Washington, DC, for discussions at The Brookings Institution and the Center for Strategic and International Studies.

Despite concerns raised by the sponsorship role of Chinese intelligence and Communist Party-controlled entities—and their role as conduits for propaganda messages targeted at foreign elites—many U.S. participants involved with track two exchanges have emphasized the value of dialogue with PRC state-controlled think tanks and other like bodies, noting that these discussions offer insights into the policy positions favored by the government parent organization.<sup>146</sup> In testimony before the Commission this year, Abraham

Denmark, a senior fellow at the Center for a New American Security, defended track two exchanges with Chinese interlocutors as “an invaluable source of information,” as well as an avenue for building contacts and communication with Chinese foreign policy thinkers.<sup>147</sup> The Commission itself has met on multiple occasions for discussions with representatives of Chinese think tanks, to include those operated by intelligence entities. For example, in July 2010 members of the Commission met in Beijing with representatives of the China Institute for International Strategic Studies (operated by PLA military intelligence<sup>148</sup>) and the China Institute of Contemporary International Relations (a branch of the Ministry of State Security, China’s leading civilian intelligence service<sup>149</sup>).

### **Implications for the United States**

The official foreign policy narrative of the Chinese government expresses its desire for a peaceful and “harmonious” international environment as well as for economic growth that benefits China and the rest of the world. If true, this offers hope for exchanges between the United States and China that could produce a mutually beneficial trade relationship, avoid military competition, and bring about cooperative efforts on pressing international issues such as piracy, counterproliferation, and global climate change.

However, multiple messages are emerging from China regarding its place in the world, and some of these messages conflict with the official ones. All governments seek to present their policy choices in the most favorable light and frequently may claim high-minded justifications for actions motivated by *realpolitik* interests. However, the case may be particularly serious in relation to China: Although China’s diplomats and informational bureaucracy speak to international audiences in terms of mutually beneficial cooperation, Chinese domestic discourse reveals a profound distrust of the United States and a focus on approaches that favor China’s state interests regardless of the effects on other countries.

This disparity in external and internal messages, as well as between China’s words and deeds as observed in 2010 and 2011, carries with it troubling implications. If China’s leaders are presenting reassuring messages to the outside world for public relations purposes while actually implementing a contrary set of revisionist and self-interested policies, this bodes ill for policy initiatives that proceed from *prima facie* acceptance of stated PRC intentions. It could also portend increased security competition in Asia: By themselves, reassuring Chinese statements about a “harmonious” international order will prove unconvincing to neighboring states alarmed by China’s military buildup and its aggressive behavior in disputed maritime territories.

### **Conclusions**

- The Chinese government places a high priority on the management of information as a tool of policy, to include the messages that it promotes to international audiences regarding its goals in foreign and national security policy. The central leadership of the Chinese Communist Party selects official foreign policy messages intended to support state policy goals. These messages are then

disseminated through diplomatic channels, state-controlled media, advertising, and “track two” exchanges.

- The Chinese government’s official narratives stress China’s desire for mutually beneficial “peaceful development” and for a “harmonious” international environment that will allow China to focus attention and resources on its economic and social development. China’s statements on its defense policies emphasize that they are entirely defensive in nature and that China will never pose a threat to any of its neighbors.
- There are notable differences between the optimistic character of China’s official messages on national security policy, which stress prospects for international cooperation, and the nature of its domestic discourse, which portrays the United States as a dangerous and predatory “hegemon” of the international system.
- The Chinese government frequently discusses important policy issues in terms of China’s “core interests,” accompanied by an insistence that other countries accept the PRC’s non-negotiable positions on these issues. However, conflicting statements from different parts of the Chinese government leave it unclear as to exactly which issues fall into the category of a “core interest.” In order to prevent misunderstandings with the United States and other countries that could have serious diplomatic consequences, Beijing should clarify which issues it sees as truly representing a “core interest.”
- The emergence of a more outspoken field of PRC foreign policy actors has produced messages that are sometimes at variance with official government narratives. This is particularly true of nationalist voices within the Chinese military.
- The Chinese government makes extensive use of front organizations. Congress and the American public often are not aware that nominally private civic organizations in China that purport to have educational, cultural, or professional purposes are frequently controlled by military, intelligence, or Communist Party organs. These front organizations are used to advance PRC state interests while disguising the guiding role of the government.

## **RECOMMENDATIONS**

The Commission recommends that:

- Congress evaluate the effectiveness of U.S. government public diplomacy programs in the East Asian region.
- Congress urge the administration to seek clarification on the Chinese government's views as to what represents a "core interest" as well as what this formulation means for U.S.-China relations, and the implications for U.S. allies and friends.
- Congress ensure that its own Members are made fully aware of the Chinese institutional actors engaged in exchange programs involving officials of the U.S. Government.



## ENDNOTES FOR CHAPTER 4

1. As one prominent example of the debate between international relations scholars about what the rise of China as a great power means for the United States and the rest of the world, see John Mearsheimer and Zbigniew Brzezinski, "Clash of the Titans," *Foreign Policy* 146 (January/February 2005).
2. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives Regarding National Security Policy*, written testimony of David Lampton, March 10, 2011. See also Linda Jakobson and Dean Knox, *New Foreign Policy Actors in China* (Stockholm, Sweden: Stockholm International Peace Research Institute, Policy Paper No. 26, September 2010). <http://books.sipri.org/files/PP/SIPRIPP26.pdf>.
3. Cheng Bingde, "Speech presented at the U.S. National Defense University" (Washington, DC, May 18, 2011). Notes taken by USCC staff. Many Chinese academics have reinforced these positive messages, and their writings have found a supportive audience among many distinguished American scholars of Chinese affairs. As an example, see Wang Jisi, "A Rising Great Power Finds its Way," *Foreign Affairs* (March/April 2011); and the comments on Dr. Wang's article in U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives Regarding National Security Policy*, written testimony of David Lampton, March 10, 2011. For further arguments providing an optimistic view of the rise of China and of future U.S.-China relations, see John Ikenberry, "The Rise of China and the Future of the West; Can the Liberal System Survive?" *Foreign Affairs* (January/February 2008).
4. For two such examples, see Aaron Friedberg, "Hegemony with Chinese Characteristics," *National Interest* (July-August 2011); and John Mearsheimer, "The Gathering Storm: China's Challenge to US Power in Asia," *The Chinese Journal of International Politics* 3 (2010).
5. Michael Pillsbury, *China Debates the Future Security Environment* (Honolulu, HI: University Press of the Pacific, 2005).
6. Gilbert Rozman, *Chinese Strategic Thought Toward Asia* (New York, NY: Palgrave MacMillan, 2010), p. 4. For a further survey on trends in Chinese strategic culture, see Eric C. Anderson and Jeffrey G. Engstrom, *China's Use of Perception Management and Strategic Deception* (research report prepared by Science Applications International Corporation on behalf of the U.S.-China Economic and Security Review Commission, November 2009). [http://www.uscc.gov/researchpapers/2009/ApprovedFINAL\\_SAICTrategicDeceptionPaperRevisedDraft06Nov2009.pdf](http://www.uscc.gov/researchpapers/2009/ApprovedFINAL_SAICTrategicDeceptionPaperRevisedDraft06Nov2009.pdf). See also Alastair Iain Johnston, *Cultural Realism: Strategic Culture and Grand Strategy in Chinese History* (Princeton, NJ: Princeton University Press, 1995); Andrew Scobell, *China's Use of Military Force: Beyond the Great Wall and the Long March* (New York, NY: Cambridge University Press, 2003); and Thomas G. Mahnken, "Secrecy and Stratagem: Understanding Chinese Strategic Culture" (Sydney, Australia: Lowy Institute for International Policy, 2011), <http://www.lowyinstitute.org/Publication.asp?pid=1515>.
7. "Like communist and revolutionary parties throughout history, formed and nurtured by underground cells and violent conflict with the regimes they sought to overthrow, the Party in China is secretive by habit and inclination." Richard McGregor, *The Party: The Secret World of China's Communist Rulers* (New York, NY: Harper Collins, 2010), p. 20. See also U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2009), pp. 297-298.
8. For discussion of this concept, see U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, 2009), pp. 292-293.
9. U.S.-China Economic and Security Review Commission, *Hearing on China's Propaganda and Influence Operations, Its Intelligence Activities that Target the United States, and the Resulting Impacts on U.S. National Security*, written testimony of Anne-Marie Brady, April 30, 2009.
10. David Bandurski, "Li Changchun on the Media and China's 'Global Influence'" (Hong Kong, SAR [Special Administrative Region]: China Media Project). <http://cmp.hku.hk/2009/01/19/1457>.
11. Anne-Marie Brady, "Guiding Hand: The Role of the CCP Central Propaganda Department in the Current Era" (London, United Kingdom: University of Westminster, *Westminster Papers in Communication and Culture*, 2006).
12. Li Changchun, speech made on the occasion of the fiftieth anniversary of China Central Television. See David Bandurski, "Li Changchun on the Media and China's 'Global Influence'" (Hong Kong, SAR [Special Administrative Region]: China Media Project). <http://cmp.hku.hk/2009/01/19/1457>.

13. Alice Miller, "The CCP Central Committee's Leading Small Groups," *China Leadership Monitor* 26 (Fall 2008). <http://www.hoover.org/publications/china-leadership-monitor/article/5689>.

14. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives Regarding National Security Policy*, written testimony of Ashley Esarey, March 10, 2011. Note that "the Office of Foreign Propaganda, which is more commonly known by its other nameplate, the State Council Information Office, oversees matters relating to external propaganda. The two bureaucracies are closely linked and coordinated." See U.S.-China Economic and Security Review Commission, *Hearing on China's Propaganda and Influence Operations, Its Intelligence Activities that Target the United States, and the Resulting Impacts on U.S. National Security*, testimony of Anne-Marie Brady, April 30, 2009.

15. For a fuller discussion of this phenomenon, see U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, 2009), pp. 294-297.

16. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives on National Security Policy*, written testimony of Gary D. Rawnsley, March 10, 2011; and Xinhua News Service (in English, "Xinhua Launches CNC World English Channel," July 1, 2010. <http://news.xinhuanet.com/english/2010/china/2010-7/01/cG7<13378575.htm>.

17. Xinhua News Service (in English), "Xinhua Opens New Office in NYC's Time Square," May 20, 2011. <http://news.xinhuanet.com/english/2010/business/2011-05/20/c13884252.htm>; and Stuart Elliott, "Sign of Arrival, for Xinhua, Is 60 Feet Tall," *New York Times*, July 25, 2011.

18. For discussion of this point, see U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, 2009), pp. 304-307.

19. The advertisement showcased notable Chinese accomplishments in various sections including business, sports, and the arts. See Loretta Chao, "Pro-China Ad Debuts in Times Square," *Wall Street Journal*, January 18, 2011; and Yidi Zhao, "China Airs Commercial in U.S. to Present Positive Image During Hu's Visit," Bloomberg News, January 17, 2011. The advertising videos themselves may be seen at [www.youtube.com/watch?v=570LHTMWOmw&feature=related](http://www.youtube.com/watch?v=570LHTMWOmw&feature=related).

20. Stuart Elliott, "Sign of Arrival, for Xinhua, Is 60 Feet Tall," *New York Times*, July 25, 2011.

21. James Fallows, "Happy Birthday, China Daily!" *The Atlantic* (on-line blog edition), June 1, 2011. <http://www.theatlantic.com/national/archive/2011/06/happy-birthday-china-daily/239619/>.

22. See James Fallows, "Official Chinese Propaganda: Now Online from the WaPo [Washington Post]!" *The Atlantic* (online blog edition), February 3, 2011. <http://www.theatlantic.com/international/archive/2011/02/official-chinese-propaganda-now-online-from-the-wapo/70690/>; and Laura McGann, "State-Run Papers from China and Russia Buy Convincing Advertorial Sections on the WaPo's [Washington Post] Website" (Cambridge, MA: Nieman Journalism Lab, Nieman Foundation at Harvard University), December 1, 2010. <http://www.niemanlab.org/2010/12/state-run-papers-from-china-and-russia-buy-convincing-advertorial-sections-on-the-wapos-website/>.

23. The theme of "harmony" has become a staple of CCP propaganda, both stressing the creation of a "socialist harmonious society" inside China and providing a reassuring message to foreign audiences. See John Dotson, "The Confucian Revival in the Propaganda Narratives of the Chinese Government" (Washington, DC: U.S.-China Economic and Security Review Commission, staff research report, July 20, 2011). [http://www.uscc.gov/researchpapers/2011/Confucian\\_Revival\\_Paper.pdf](http://www.uscc.gov/researchpapers/2011/Confucian_Revival_Paper.pdf).

24. As two such examples from the *China Watch* website ("A Paid Supplement to the Washington Post"), see "China 'Best Served' with [Chinese Communist Party] at the Helm," July 1, 2011, <http://chinawatch.washingtonpost.com/2011/07/china-best-served-with-cpc-at-the-helm.php>; and Zhang Yuwei, "Land of Opportunity Chinese Companies Help Grow US Economy," May 18, 2011, <http://chinawatch.washingtonpost.com/2011/05/land-of-opportunity-chinese-companies-help-grow-us-economy.php>.

25. \$300,000 is the approximate cost of placing a six-page, full-color, preprinted advertising insert "with editorial content" (the format employed by the *China Daily*) in a weekday edition of the *Washington Post*. The actual rate per instance of publication may be lower, as clients placing multiple advertising inserts over time can negotiate a lower rate. Additional fees would be charged for hosting web content, such as that found on the *China Watch* website. Source: Telephone inquiry by Commission staff to *Washington Post* advertising department, August 17, 2011.

26. U.S.-China Economic and Security Review Commission, *Hearing on China's Propaganda and Influence Operations, Its Intelligence Activities that Target the United States, and the Resulting Impacts on U.S. National Security*, written testimony of Ross Terrill and oral testimony of Anne-Marie Brady, April 30, 2009.

27. For an example of PRC accusations that negative views of China are fostered by western governments as part of a broader campaign of containment, see Mo Nong, "Part of the Plot to Contain China," *China Daily*, October 11, 2010. [http://www.chinadaily.com.cn/opinion/2010-10/11/content\\_11392433.htm](http://www.chinadaily.com.cn/opinion/2010-10/11/content_11392433.htm).

28. David Shambaugh, *Beautiful Imperialist: China Perceives America, 1972-1990* (Princeton, NJ: Princeton University Press, 1992); Philip Saunders, "China's America Watchers: Changing Attitudes Towards the United States," *China Quarterly* 161 (March 2000); Rosalie Chen, "China Perceives America: Perspectives of International Relations Experts," *Journal of Contemporary China* 12: 35 (2003); and David Shambaugh, "Coping with a Conflicted China," *Washington Quarterly* (Winter 2011).

29. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives Regarding National Security Policy*, written testimony of Gary Rawnsley, March 10, 2011.

30. Dai Xu, "Zhongguo Ying Gei Meiguo Weidu Xingwei Hua Hong Xian" (China Must Draw a Red Line Against America's Encircling Actions), *Huanqiu Shibao* (*Global Times*), August 2, 2010. Translation by USCC staff. <http://opinion.huanqiu.com/roll/2010-08/977633.html>.

31. BBC News OnLine, "China Attacks Bush Foreign Policy," November 1, 2004. <http://news.bbc.co.uk/2/hi/asia-pacific/3971271.stm>.

32. The depiction of the United States as a predatory "hegemon" is a pillar of the official CCP conception of international affairs. This term has two specific sets of connotations as employed by Chinese writers. One is tied to ancient Chinese concepts of statecraft: As described by author Michael Pillsbury, "One specific Chinese premise from the ancient statecraft of the Warring States era seems to influence Chinese authors who write about the United States today — the concept of how to diagnose and deal with a powerful 'hegemon' (*ba*) that seeks to dominate several other less powerful states. The way hegemon conducted themselves during the Warring States period of ancient China forms one of the sources of the classic lessons of Chinese statecraft . . . One set of 'lessons' (among many) was how to become a hegemon; another was how to survive destruction at the hands of a predatory hegemon." See Michael Pillsbury, *China Debates the Future Security Environment* (Honolulu, HI: University Press of the Pacific, 2005), pp. xxxv-xxxvi. The second set of connotations is tied to the CCP's official Marxist interpretations of modern history and in particular to the analysis of the contemporary world system as laid down by Deng Xiaoping in the late 1980s: "The world is so full of colonialism, neocolonialism, hegemony and power politics! . . . one Cold War . . . is being waged against all the countries of the South and the Third World, and the other against socialism. The Western countries . . . want to bring about the peaceful evolution of socialist countries towards capitalism. . . . National sovereignty is far more important than human rights, but they often infringe upon the sovereignty of poor, weak countries of the Third World. Their talk about human rights, freedom and democracy is only designed to safeguard the interests of the strong, rich countries, which take advantage of their strength to bully weak countries, and which pursue hegemony and practice power politics." See Deng Xiaoping, "We Must Adhere To Socialism and Prevent Peaceful Evolution Towards Capitalism" (excerpt from a conversation with Julius Nyerere, former president of Tanzania), November 23, 1989. From the *Selected Works of Deng Xiaoping*, Vol. 3 (Beijing, China: Foreign Languages Press, 1994). [http://www.archive.org/stream/SelectedWorksOfDengXiaopingVol.3/Deng03\\_djvu.txt](http://www.archive.org/stream/SelectedWorksOfDengXiaopingVol.3/Deng03_djvu.txt).

33. Yong Deng, "Hegemon on the Offensive: Chinese Perspectives on U.S. Global Strategy," *Political Science Quarterly* 116: 3 (2001).

34. For examples, see *Global Times*, "Turbulent Mid-East Disrupts the World," February 26, 2011. <http://opinion.globaltimes.cn/editorial/2011-02/627723.html>; U.S.-China Economic and Security Review Commission, *2009 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, November 2009), pp. 278-280; and *Beijing Ribao* (*Beijing Daily*), "Wei hu Wending cong Meigeren Zuoqi" (Maintaining Stability Starts with Every Person), March 6, 2011. Translation by USCC staff. [http://bjrb.bjd.com.cn/html/2011-03/06/content\\_375830.htm](http://bjrb.bjd.com.cn/html/2011-03/06/content_375830.htm).

35. Andrew Nathan and Perry Link, eds., *The Tiananmen Papers* (New York, NY: Public Affairs Books, 2001). See in particular "Excerpts from State Security Ministry, 'On Ideological and Political Infiltration into Our Country from the United States and Other International Political Forces,' report to Party Central, June 1," pp. 338-348.

36. Peter Hays Gries, "Tears of Rage: Chinese Nationalist Reactions to the Belgrade Embassy Bombing," *The China Journal* 46 (July 2001); and Peter Hays Gries, *China's New Nationalism* (Berkeley, CA: University of California Press, 2004), pp. 98–108. The 1999 U.S.-led North Atlantic Treaty Organization's (NATO) bombing campaign against the former Republic of Yugoslavia has itself been consistently depicted in PRC commentary as part of an effort to "further contain and weaken Russia" by diminishing a Russian ally and expanding NATO military control of Europe. See Wang Naicheng, "Failure of the New Strategic Concept," *Jiefangjun Bao (PLA Daily)*, May 22, 1999. OSC ID FBIS-CHI-1999-0601, as cited in Michael Pillsbury, *China Debates the Future Security Environment* (Honolulu, HI: University Press of the Pacific, 2005), p. 169.

37. Li Mingbo, "Mei Mimou Jian Dongya Fandao Tixi" (America's Scheme to Build an Anti-Missile System in East Asia), *Guangzhou Ribao (Guangzhou Daily)*, online edition, February 13, 2010. Available as "PRC Experts on US 'Plot' To Build East Asia Antimissile System To 'Encircle' PRC." OSD ID CPP201002140 01002. [www.opensource.gov](http://www.opensource.gov).

38. "Most Chinese analysts believe (and there is virtual consensus across the spectrum) that the whole concept of global governance is a Western trap which tries to undermine China's sovereignty and lure it into a variety of entanglements where China does not belong. There is a widespread perception that U.S. and EU calls for China to be a 'responsible power' (*fuzeren de daguo*) or 'responsible international stakeholder' are just the latest ruse for retarding and undermining China's power." David Shambaugh, "Coping with a Conflicted China," *Washington Quarterly* (Winter 2011).

39. "Quanqiu Jinrong Weiji Shi Meiguo de Yinmou Ma" (Is the Financial Crisis an American Conspiracy?) *Huanqiu Shibao (Global Times)*, October 23, 2008. Translation by USCC staff. [http://www.otliba.com/show\\_news.asp?ID=40](http://www.otliba.com/show_news.asp?ID=40). See also Oiwan Lam, "U.S. Economic Crisis a Hot Topic on Chinese Blogs," *Global News Journal Blog* (Reuters News Service), October 2, 2008. <http://blogs.reuters.com/global/2008/10/02/us-economic-crisis-a-hot-topic-on-chinese-blogs>.

40. Shi Jianxun, "RMB Appreciation Pressure Harmful to Interests of China, EU," *People's Daily OnLine* (in English), October 9, 2010. <http://english.people-daily.com.cn/90001/90780/91421/7161021.html>. See also *China Stakes.com*, "Conspiracy Theory Stalks China-US Financial Relations," January 25, 2008. <http://www.chinastakes.com/2008/1/conspiracy-theory-stalks-china-us-financial-relations.html>.

41. People's Republic of China State Council Information Office, "Human Rights Record of the United States in 2010" (Beijing, China: April 11, 2011). [http://www.chinadaily.com.cn/china/2011-04/11/content\\_12300327.htm](http://www.chinadaily.com.cn/china/2011-04/11/content_12300327.htm).

42. As an example of PRC state media commentary on alleged U.S. involvement in Tibetan unrest, see Xinhua (in English), "Double Act, Old Trick Behind Tibet Chaos," April 18, 2008. The article is posted on the website of the Embassy of the People's Republic of China in the United States at <http://www.china-embassy.org/eng/xw/t426629>. For similar allegations of U.S. involvement in Xinjiang, see *People's Daily Online* (in English), "Rebiya Kadeer's Funding Sources," July 14, 2009. <http://www.globaltimes.cn/www/english/truexinjiang/urumqi-riot/rebiya-kadeer/2009-07/446397.html>.

43. Michael Wines, "Cables Reveal Early Tensions Between U.S. and China on Nobel Winner," *New York Times*, December 9, 2010; and Malcolm Moore, "China Steps Up Anti-Nobel Campaign by Blocking BBC Website," *Telegraph* (United Kingdom), December 9, 2010.

44. *Global Times*, "2010 Nobel Peace Prize a Disgrace," October 9, 2010. <http://opinion.globaltimes.com.cn/editorial/2010-10/580091.html>. For a more detailed discussion of the controversy in China surrounding the awarding of the 2010 Nobel Peace Prize to Liu Xiaobo, see John Dotson, "The Confucian Revival in the Propaganda Narratives of the Chinese Government" (Washington, DC: U.S.-China Economic and Security Review Commission, staff research report), July 20, 2011. [http://www.uscc.gov/researchpapers/2011/Confucian Revival Paper.pdf](http://www.uscc.gov/researchpapers/2011/Confucian%20Revival%20Paper.pdf).

45. Bonnie Glaser, "Ensuring that China Rises Peacefully" (Clingendael, The Netherlands: Netherlands Institute of International Relations, December 23, 2010). [http://www.clingendael.nl/publications/2010/20101223\\_CAF\\_artikel\\_BGlaser.pdf](http://www.clingendael.nl/publications/2010/20101223_CAF_artikel_BGlaser.pdf).

46. Quotation attributed to PRC Vice President Xi Jinping in "China, U.S. Agree Bilateral Relations 'Most Important'" *People's Daily Online* (in English), January 13, 2009. <http://english.people-daily.com.cn/90001/90776/90883/6572553.html>.

47. David Shambaugh, "Coping with a Conflicted China," *Washington Quarterly* (Winter 2011).

48. See U.S.-China Economic and Security Review Commission, *Hearing on China's Propaganda and Influence Operations, Its Intelligence Activities that Target the*



*United States, and the Resulting Impacts on U.S. National Security*, written testimony of Anne-Marie Brady, April 30, 2009; People's Republic of China State Council Information Office, *China's Peaceful Development Road* (government white paper on China's development goals) (Beijing, China: December 22, 2005). [http://english.peopledaily.com.cn/200512/22/eng20051222\\_230059.html](http://english.peopledaily.com.cn/200512/22/eng20051222_230059.html); and People's Republic of China State Council Information Office, *China's National Defense in 2010* (government white paper on China's defense policies) (Beijing, China: March 31, 2011). [http://news.xinhuanet.com/english/2010/china/2011-03/31/c\\_13806851.htm](http://news.xinhuanet.com/english/2010/china/2011-03/31/c_13806851.htm).

49. John Garver, "The Chinese Communist Party and the Collapse of Soviet Communism," *China Quarterly* 133 (March 1993).

50. Office of the Secretary of Defense, *Annual Report to Congress: Military Power of the People's Republic of China 2008* (Washington, DC: U.S. Department of Defense, 2008), p. 8. Some PRC commentators have written that western governments and media have misunderstood aspects of the "24 Character Strategy," particularly the phrase "hide our capacities and bide our time." As stated in a 2010 essay posted on an official CCP website, "Hide our capabilities and bide our time, make some contributions' and related thoughts, these were put forward by Deng Xiaoping for the 'special period' of the late 1980s and early 1990s, in the midst of sudden changes in Eastern Europe and the collapse of the socialist camp. . . . Currently, there are people in other countries who have produced misunderstandings and distortions of 'hide our capabilities and bide our time.' These people believe that China's foreign policy strategy has a long-term, undeclared content and purpose: This is that China believes that its current strength is insufficient, and the time has not yet come to announce and implement this great strategy, and consequently must 'Hide our capabilities and bide our time,' concealing the true situation and waiting for the right time of opportunity. . . . However, this is . . . a serious misunderstanding and distortion of the 'hide our capabilities and bide our time' idea stated by Comrade Deng Xiaoping . . . the original idea of using the expression 'hide our capabilities and bide our time' was the strategy of 'developing ourselves,' and not at all to 'seek revenge on others' after we have developed." See Xiao Feng, "Was Comrade Deng Xiaoping's Idea of 'Hide Our Capabilities and Bide Our Time' a Measure of Expediency?" (*Deng Xiaoping Tongzhi de 'Tao Guang Yang Hui' Sixiang shi 'Quan Yi Zhi Ji' Ma?*) *Beijing Daily* (in Chinese), April 6, 2010. <http://dangshi.people.com.cn/GB/138903/141370/11297254.html>. Translation by USCC staff.

51. Office of the Secretary of Defense, *Annual Report to Congress: Military Power of the People's Republic of China 2008* (Washington, DC: U.S. Department of Defense, 2008), p. 8.

52. Gilbert Rozman, *Chinese Strategic Thought Toward Asia* (New York, NY: Palgrave MacMillan, 2010), p. 3.

53. *Xinhuanet* (in English), "Backgrounder: Five Principles of Peaceful Coexistence," June 14, 2004. [http://news.xinhuanet.com/english/2005-04/08/content\\_2803638.htm](http://news.xinhuanet.com/english/2005-04/08/content_2803638.htm).

54. Office of the Secretary of Defense, *Annual Report to Congress: Military Power of the People's Republic of China 2008* (Washington, DC: U.S. Department of Defense), p. 8.

55. Zheng Bijian, "China's 'Peaceful Rise' to Great-Power Status," *Foreign Affairs* 84: 5 (September-October 2005).

56. Information Office of the State Council of the People's Republic of China, *China's Peaceful Development Road* (Beijing, China: December 22, 2005). Of note, President Hu's speech at the 2004 Boao Forum for Asia on Hainan Island was expected to reiterate the theme of "peaceful rise," but instead it emphasized a new narrative, "peaceful development." Robert L. Suttinger, "The Rise and Descent of 'Peaceful Rise,'" *China Leadership Monitor* 12 (2004).

57. Hsin Pao, *Hong Kong Economic Journal* (January 27, 2006). OSC ID: CPP20060222904001. <http://www.opensource.gov>; and Zheng Bijian, "China's 'Peaceful Rise' to Great-Power Status," *Foreign Affairs* 84: 5 (September-October 2005): 18–24.

58. Robert L. Suttinger, "The Rise and Descent of 'Peaceful Rise,'" *China Leadership Monitor* 12 (2004).

59. Zheng Bijian, "China's 'Peaceful Rise' to Great Power Status," *Foreign Affairs* (September/October 2005).

60. Information Office of the State Council, *China's Peaceful Development Road* (Beijing, China: December 22, 2005). Note that the Information Office of the State Council has a dual identity and also functions as the CCP Office of Foreign Propaganda.

61. Information Office of the State Council, *China's Peaceful Development Road* (Beijing, China: December 22, 2005).

62. Robert L. Seuttinger, "The Rise and Descent of 'Peaceful Rise,'" *China Leadership Monitor* 12 (2004).
63. For a summary of the CCP leadership's messages on this theme, see *People's Daily Online* (in English), "Hu Jintao Proposes Scientific Outlook on Development for Tackling China's Immediate Woes, Challenges," October 15, 2007. <http://english.peopledaily.com.cn/90001/6283112.html>.
64. Yiyi Lu, "The Collective Study Sessions of the Politburo: A Multipurpose Tool of China's Leadership," (Nottingham, United Kingdom: University of Nottingham, China Policy Institute, October 2007). For a discussion of the role of Politburo study sessions, see also Philip Saunders, "The Chinese Politburo Hits the Books" (Washington, DC: The Jamestown Foundation, *China Brief*, May 9, 2007).
65. China Central Television, homepage for the television series "The Rise of the Great Powers" (*Da Guo Jueqi*). <http://finance.cctv.com/special/C16860/01/index.shtml>.
66. For an illustrative discussion of how interpretations of the Warring States Period affect modern-day Chinese concepts of statecraft, see Wei Zongyou, "In the Shadow of Hegemony: Strategic Choices," *Chinese Journal of International Politics* 1: 2 (2006). For comment on the same phenomenon from an American perspective, see also Jacqueline Newmyer, "Oil, Arms, and Influence: The Indirect Strategy Behind Chinese Military Modernization," *Orbis* (Spring 2009).
67. For an example of an author making the comparison between a rising China and Imperial Germany, see John Mearsheimer's arguments in Zbigniew Brzezinski and John Mearsheimer, "Clash of the Titans," *Foreign Policy* 146 (January/February 2005) <http://mearsheimer.uchicago.edu/pdfs/A0034.pdf>; and in John Mearsheimer, "Why China's Rise Will Not Be Peaceful," on-line essay dated September 17, 2004. <http://mearsheimer.uchicago.edu/pdfs/A0034b.pdf>. For a discussion of the concerns that Chinese leaders felt over such parallels, and their reactions to them, see Robert Sutter, "Debate on How to Deal with the United States" (paper presented at the conference "Chinese Leadership Differences," Carnegie Endowment for International Peace, Washington, DC, November 2, 2005). [http://carnegieendowment.org/files/Sutter\\_Revised.pdf](http://carnegieendowment.org/files/Sutter_Revised.pdf).
68. Ashley Tellis, "A Grand Chessboard," *Foreign Policy* (January/February 2005). <http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=16540>.
69. *Asia Media*, "Full Transcript: Tom Plate and Jeffrey Cole interview Lee Kuan Yew" (Los Angeles, CA: University of California, Los Angeles International Institute, October 9, 2007). <http://www.asiamedia.ucla.edu/article.asp?parentid=9541>.
70. Bonnie Glaser, "Ensuring that China Rises Peacefully" (Clingendael, The Netherlands: Institute of International Relations, December 23, 2010). [http://www.clingendael.nl/publications/2010/20101223\\_CAF\\_artikel\\_BGlaser.pdf](http://www.clingendael.nl/publications/2010/20101223_CAF_artikel_BGlaser.pdf).
71. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives Regarding National Security Policy*, written testimony of David Lampton, March 10, 2011.
72. David Shambaugh, "Coping with a Conflicted China," *Washington Quarterly* (Winter 2011); and Linda Jakobson and Dean Knox, *New Foreign Policy Actors in China* (Stockholm, Sweden: Stockholm International Peace Research Institute, SIPRI Policy Paper no. 26, September 2010). [http://books.sipri.org/product\\_info?c\\_product\\_id=410](http://books.sipri.org/product_info?c_product_id=410).
73. For a discussion of the themes of "harmony" in PRC public diplomacy, see John Dotson, "The Confucian Revival in the Propaganda Narratives of the Chinese Government" (Washington, DC: U.S.-China Economic and Security Review Commission, staff research report), July 20, 2011. [http://www.uscc.gov/researchpapers/2011/Confucian\\_Revival\\_Paper.pdf](http://www.uscc.gov/researchpapers/2011/Confucian_Revival_Paper.pdf).
74. Wen Jiabao, "Getting to Know the Real China" (speech delivered at the 65th Session of the United Nations General Assembly, New York, NY, September 23, 2010). Posted on the website of the Ministry of Foreign Affairs of the People's Republic of China. <http://www.fmprc.gov.cn/eng/wjdt/zyjh/t761353.htm>.
75. Dai Bingguo, "Stick to the Path of Peaceful Development," *Beijing Review*, December 24, 2010.
76. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives on National Security Policy*, written testimony of John Park, March 10, 2011.
77. Li Keqiang, "The World Need Not Fear a Growing China," *Financial Times*, January 9, 2011.
78. Wang Jisi, "China's Search for a Grand Strategy," *Foreign Affairs* (March/April 2011).
79. The themes in Mr. Wang's article closely mirror statements by senior Chinese leaders. Furthermore, Wang Jisi is a frequent commentator on foreign affairs, with a very prominent position as the dean of the School of International Studies



at Beijing University. Publishing a piece such as this, in a widely respected journal that is influential among English-speaking foreign policy circles, would almost certainly require political clearance by CCP authorities.

80. Michael Chase, "Chinese Suspicions and US Intentions," *Survival* 53:3 (June 2011); and John Lee, "China's America Obsession," *ForeignPolicy.com*, May 6, 2011. [http://www.foreignpolicy.com/articles/2011/05/06/china\\_s\\_america\\_obsession?page=0,0](http://www.foreignpolicy.com/articles/2011/05/06/china_s_america_obsession?page=0,0).

81. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives on National Security Policy*, written testimony of Gilbert Rozman, March 10, 2011.

82. A.U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives on National Security Policy*, written testimony of Jacqueline Newmyer Deal, March 10, 2011.

83. Author unknown, "Developing a New Understanding of the Communist Party at the Central Party School," January 17, 2011. <http://chinadigitaltimes.net/2011/01/developing-a-new-understanding-of-the-communist-party-at-a-party-school>. Translation by *China Digital Times* (Don Weiland) and USCC staff.

84. As noted in a 1998 propaganda handbook, officials should be careful when speaking with foreigners, "remembering that 'insiders and outsiders are different' and to be mindful of the need for secrecy." "Shandong Sheng Duiwai Xuanchuan Gongzuo Huibian Ziliao 1992-1998" (Shandong Province Foreign Propaganda Work Reference Materials 1992-1998), publisher unknown, Vol. 2 (1998), p. 1921. The work is cited in Anne-Marie Brady, *Marketing Dictatorship* (Lanham, MD: Rowman & Littlefield, 2008), p. 161. For a discussion of the party's practices of suppressing information on certain issues while making reports on these same issues available to senior party officials, see He Qinglian, *The Fog of Censorship: Media Control in China* (New York, NY: Human Rights in China, 2008), pp. 71-75.

85. "Like communist and revolutionary parties throughout history, formed and nurtured by underground cells and violent conflict with the regimes they sought to overthrow, the Party in China is secretive by habit and inclination." Richard McGregor, *The Party: The Secret World of China's Communist Rulers* (New York, NY: Harper Collins, 2010), p. 20.

86. On the employment of "proactive" propaganda by the CCP, see David Shambaugh, "China's Propaganda System: Institutions, Processes and Efficacy," *China Journal* 57 (January 2007). For a discussion of the suppression of negative news, see Ashley Esarey, "Speak No Evil: Mass Media Control in Contemporary China" (Washington, DC: Freedom House Special Report, February 2006). <http://www.freedomhouse.org/uploads/specialreport/33.pdf>.

87. Andrew J. Nathan and Bruce Gilley, *China's New Rulers: The Secret Files* (New York, NY: The New York Review of Books, 2003), p. 233.

88. Yang Jiechi, "Strengthen Shanghai Spirit," *China Daily*, June 15, 2011. [http://www.chinadaily.com.cn/opinion/2011-06/15/content\\_12698267.htm](http://www.chinadaily.com.cn/opinion/2011-06/15/content_12698267.htm).

89. *People's Daily Online* (in Chinese), "Shanghai Jingshen' Zhangxian Wuxian Meili" (Displaying the Limitless Charm of the "Shanghai Spirit"), June 15, 2011. <http://world.people.com.cn/GB/57507/14910318.html>. Translation by USCC staff.

90. Richard Weitz, "Balancer-in-Chief: China Assumes SCO Chair," *China Brief*, July 1, 2011.

91. "Astana Declaration of the 10th Anniversary of the Shanghai Cooperation Organization," Shanghai Cooperation Organization statement issued in Astana, Kazakhstan, June 15, 2011. <http://www.sco2011.kz/en/kzscsco/inform.php>.

92. Wang Guosheng, "Comments and Analysis on China's Traditional Strategy of Defense," *Zhongguo Junshi Kexue* (China Military Science) 4 (2005); and *People's Daily Online* (in Chinese), "Peaceful Journey, Sowing Civilization: Commemorating the 600th Anniversary of the Voyages of Zheng He" (*Heping zhi Lu, Bosan Wenming—Jinian Zheng He Xia Xiang 600 Zhounian*), June 29, 2005. <http://www.people.com.cn/GB/32306/32313/32330/3506449.html>.

93. See the discussion of recent PRC propaganda treatment of the Zheng He narrative in John Dotson, "The Confucian Revival in the Propaganda Narratives of the Chinese Government" (Washington, DC: U.S.-China Economic and Security Review Commission, staff research report), July 20, 2011. [http://www.uscc.gov/research/papers/2011/Confucian\\_Revival\\_Paper.pdf](http://www.uscc.gov/research/papers/2011/Confucian_Revival_Paper.pdf).

94. People's Republic of China State Council Information Office, *China's National Defense in 2010* (government white paper on China's defense policies) (Beijing, China: March 31, 2011). [http://news.xinhuanet.com/english2010/china/2011-03/31/c\\_13806851.htm](http://news.xinhuanet.com/english2010/china/2011-03/31/c_13806851.htm).

95. "Chen Bingde," biographical entry at *ChinaVitae.com*. [http://www.chinavitae.com/biography/Chen\\_Bingde/summary](http://www.chinavitae.com/biography/Chen_Bingde/summary).

96. Shirley A. Kan, "U.S.-China Military Contacts: Issues for Congress" (Washington, DC: Congressional Research Service, December 2010), pp. 3–4.

97. Chen Bingde "Speech presented at the National Defense University" (Washington, DC, May 20, 2011). Notes taken by USCC staff.

98. According to scholar Michael Swaine, the term "core interests" appeared in articles in the *People's Daily* three times in 2003; 55 times in 2005; 95 times in 2008; 260 times in 2009; and 325 times in 2010. See Michael Swaine, "China's Assertive Behavior, Part One: On 'Core Interests,'" *China Leadership Monitor* 34 (2011).

99. Comments made by Chinese academics in a roundtable discussion with members of the U.S.-China Economic and Security Review Commission, U.S. Consulate in Shanghai, August 11, 2011.

100. Huai Chengbo, "How Do We Understand 'National Core Interests'?" (*Zenmo Lijie "Guojia Hexin Liyi"?*), *Qsttheory.cn* (website of the official CCP theoretical journal *Qiushi*), January 25, 2011. [http://www.qsttheory.cn/hqwg/2011/201102/201101/t20110125\\_63092.htm](http://www.qsttheory.cn/hqwg/2011/201102/201101/t20110125_63092.htm). Translation by USCC staff.

101. PRC State Councilor Dai Bingguo, remarks made at the closing of the U.S.-China Strategic and Economic Dialogue, Washington, DC, July 28, 2009. <http://www.state.gov/secretary/rm/2009a/july/126599.htm>. Chinese academics have cited Mr. Dai's remarks as the authoritative position of the CCP, as with comments made by Chinese academics in a roundtable discussion with members of the U.S.-China Economic and Security Review Commission, U.S. Consulate in Shanghai, August 11, 2011.

102. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives on National Security Policy*, written testimony of John Park, March 10, 2011.

103. Greg Sheridan, "China Actions Meant as Test, Hillary Clinton Says," *Australian* (Sydney, Australia), November 9, 2010.

104. John Pomfret, "Beijing Claims 'Indisputable Sovereignty' Over South China Sea," *Washington Post*, July 31, 2010.

105. Edward Wong, "China Hedges Over Whether South China Sea Is a 'Core Interest' Worth War," *New York Times*, March 30, 2011. For commentary from a prominent PRC academic that seeks to downplay the significance of this controversy, see Wang Jisi, "A Rising Great Power Finds its Way," *Foreign Affairs* (March/April 2011).

106. Huai Chengbo, "How Do We Understand 'National Core Interests'?" (*Zenmo Lijie "Guojia Hexin Liyi"?*), *Qsttheory.cn* (website of the official CCP theoretical journal *Qiushi*), January 25, 2011. [http://www.qsttheory.cn/hqwg/2011/201102/201101/t20110125\\_63092.htm](http://www.qsttheory.cn/hqwg/2011/201102/201101/t20110125_63092.htm).

107. John Milligan-Whyte and Dai Min, "Getting Tough or a New Era of Partnership?" *People's Daily Online* (in English), March 26, 2010. <http://english.people.com.cn/90001/90780/91343/693227.html>.

108. Comments by Hu Jintao made in Islamabad, Pakistan, on November 24, 2006, as cited in Michael Swaine, "China's Assertive Behavior, Part One: On 'Core Interests,'" *China Leadership Monitor* 34 (2011).

109. Da Wei, "A Clear Signal of 'Core Interests' to the World," *China Daily*, August 2, 2010. [http://www.chinadaily.com.cn/usa/2010-08/02/content\\_11083124.htm](http://www.chinadaily.com.cn/usa/2010-08/02/content_11083124.htm).

110. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives on National Security Policy*, written statement of Alison Kaufman ("The 'Century of Humiliation' and China's National Narratives"), March 10, 2011. For a statement by a paramount Chinese leader on the direct linkage between the history of imperialism and China's present-day circumstances, see Deng Xiaoping, "We Must Adhere To Socialism and Prevent Peaceful Evolution Towards Capitalism" (excerpt from a conversation with Julius Nyerere, former president of Tanzania), November 23, 1989. From the *Selected Works of Deng Xiaoping*, Vol. 3 (Beijing, China: Foreign Languages Press, 1994). [http://www.archive.org/stream/SelectedWorksOfDengXiaopingVol.3/Deng03\\_djvu.txt](http://www.archive.org/stream/SelectedWorksOfDengXiaopingVol.3/Deng03_djvu.txt).

111. "China is to a considerable extent a bargaining culture in which prior bargains are open for renegotiation whenever the underlying power positions, or broader circumstances, of the two (or more) parties shift. China, meaning its government and its people, has been chafing at some of the implicit or explicit bargains struck in the past with the United States, most notably regarding Taiwan, the U.S. military's close-in surveillance of the Mainland, visits to the White House by the Dalai Lama, vulnerability of the PRC's nuclear deterrent, and so forth. Now that China perceives itself stronger, and America and its allies on a trajectory of decreased dominance, it is no surprise Beijing is asking to 'renegotiate' the prior bargains it finds most unsatisfactory." U.S.-China Economic and Security Review Commission,

Hearing on China's Narratives on National Security Policy, written testimony of David Lampton, March 10, 2011.

112. Wang Guosheng, "Comments and Analysis on China's Traditional Strategy of Defense," *Zhongguo Junshi Kexue* (China Military Science) 4 (2005).

113. Alastair Iain Johnston, *Cultural Realism: Strategic Culture and Grand Strategy in Chinese History* (Princeton, NJ: Princeton University Press, 1995).

114. Andrew Scobell, *China and Strategic Culture* (Carlisle, PA: U.S. Army War College Strategic Studies Institute, 2002), p. V. <http://www.strategicstudiesinstitute.army.mil/pdffiles/pub60.pdf>.

115. Xiaoming Zhang, "China's 1979 War with Vietnam: A Reassessment," *China Quarterly* 184 (December 2005). [http://www.viet-studies.info/kinhte/China\\_G7<War\\_With\\_Vietnam.pdf](http://www.viet-studies.info/kinhte/China_G7<War_With_Vietnam.pdf).

116. Jay Solomon, "U.S. Takes on Maritime Spats," *Wall Street Journal*, July 24, 2010. <http://online.wsj.com/article/SB10001424052748703294904575384561458251130.html>.

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118. Patrick Barta, "U.S., Vietnam in Exercises Amid Tensions with China," *Wall Street Journal*, July 16, 2011; and *Manila Times* (Philippines), "Spratlys Dispute Won't Affect PH-China Ties," July 18, 2011, <http://www.manilatimes.net/news/topstories/spratlys-dispute-won%E2%80%99t-affect-ph-china-ties-2/>.

119. Jim Garamone, "Cheonan Tragedy Strengthens U.S.-South Korea Alliance," *American Forces Press Service*, July 21, 2010; and Edward Luttwak, "The Guns of December," *ForeignPolicy.com*, December 21, 2010. [http://www.foreignpolicy.com/articles/2010/12/21/the\\_guns\\_of\\_december?page=0,1](http://www.foreignpolicy.com/articles/2010/12/21/the_guns_of_december?page=0,1).

120. David Lai, "The Coming of Chinese Hawks" (Carlisle, PA: U.S. Army War College Strategic Studies Institute, October 2010). <http://www.strategicstudiesinstitute.army.mil/pdffiles/PUB1028.pdf>.

121. "Liu Yuan," biographical entry in *ChinaVitae.com*. [http://www.chinavitae.com/biography/Liu\\_Yuan/4071](http://www.chinavitae.com/biography/Liu_Yuan/4071). In the early 1960s, Liu Shaoqi ranked second in the CCP hierarchy and was Mao Zedong's designated successor. However, the elder Mr. Liu was purged, and later died in prison, during the Cultural Revolution.

122. "Shaping history is particularly important to China's so-called princelings ... having secured influence and often wealth on the basis of their family's connections, members of this small but powerful group celebrate a wart-free version of the past that boosts their status—and sidesteps their parents' role as enforcers and then victims of party brutality." Andrew Higgins, "The Party Line on Party History," *Washington Post*, May 27, 2011.

123. John Garnaut, "Chinese General Rattles Sabre," *The Age* (Australia), May 23, 2011; and Andrew Higgins, "The Party Line on Party History," *Washington Post*, May 27, 2011.

124. Liu Yan, excerpts from text as cited in *Renminwang* (*People's Daily Online*), "Liu Shaoqi de Zi Liu Yuan Shangjiang: Hebu Mingzhengyanshun, Lizhiqizhuang de Juqi Xin Minzhu Zhuyi?" (Liu Shaoqi's Son General Liu Yuan: Why Aren't We Perfectly Justified in Upholding New Democracy?), May 16, 2011. <http://blog.163.com/lasz8720@126/blog/static/138019571201141674446665/>. Translation by USCC staff.

125. Willy Ho-Lap Lam, "The Death of Factions within the Chinese Communist Party?" *China Brief* 11:9 (May 20, 2011); Willy Ho-Lap Lam, "Hu Revives Quasi-Maoist Tactics to Stem Social Instability," *China Brief* 10:20 (October 8, 2010); and Willy Ho-Lap Lam, "Chinese Leaders Revive Marxist Orthodoxy," *China Brief* 10:9 (April 29, 2010).

126. John Garnaut, "Chinese General Rattles Sabre," *The Age* (Australia), May 23, 2011.

127. Liu Yan, excerpts from text as cited in *Renminwang* (*People's Daily Online*), "Liu Yuan: Hebu Mingzhengyanshun, Lizhiqizhuang de Juqi Xin Minzhu Zhuyi?" (Liu Yuan: Why Aren't We Perfectly Justified in Upholding New Democracy?), May 16, 2011. <http://history.people.com.cn/GB/205396/14651911.html>. Translation by USCC staff.

128. Willy Lam, "The Military Maneuvers of Xi Jinping," *Wall Street Journal*, Journal 26, 2011. [http://online.wsj.com/article/SB10001424052748704698004576103513580674214.html?mod=googlenews\\_wsj](http://online.wsj.com/article/SB10001424052748704698004576103513580674214.html?mod=googlenews_wsj).

129. Paul Eckert, "Sizing Up China's Next Leader," Reuters News Service, February 17, 2011. <http://graphics.thomsonreuters.com/11/01/XiJinping.pdf>. See also Peter Foster, "WikiLeaks: China's Politburo a Cabal of Business Empires," *Tele-*

graph (United Kingdom), December 6, 2010. <http://www.telegraph.co.uk/news/worldnews/wikileaks/8184216/WikiLeaks-Chinas-Politburo-a-cabal-of-business-empires.html>; and Malcolm Moore, "Light Cast on the Man China's Censors Have Been Trying to Hide," *Sydney Morning Herald* (Australia), January 5, 2011. <http://www.smh.com.au/technology/technology-news/light-cast-on-the-man-chinas-censors-have-been-trying-to-hide-20110104-19j2t.html>.

130. Warren Sun (professor at Monash University) as quoted in John Garnaut, "China's Party Princes Fight for a Chance to Go Back to the Future," *Sydney Morning Herald* (Australia), May 24, 2011. <http://www.smh.com.au/business/chinas-party-princes-fight-for-a-chance-to-go-back-to-the-future-20110523-1f0pu.html>.

131. Strategic Forecasting, Inc. (STRATFOR), "Former President's Son on Track for a Powerful Military Position," July 23, 2011; and Willy Lam, "The Military Maneuvers of Xi Jinping," *Wall Street Journal*, January 26, 2011. [http://online.wsj.com/article/SB10001424052748704698004576103513580674214.html?mod=googlenews\\_wsj](http://online.wsj.com/article/SB10001424052748704698004576103513580674214.html?mod=googlenews_wsj).

132. In recent years, the CCP Central Military Commission has had either ten or 11 members, normally consisting of: a chairman (the civilian CCP paramount leader, currently Hu Jintao); two uniformed vice chairmen, one a political commissar and the other a line officer (currently General Xu Caihou and General Guo Boxiong, respectively); at some times, another civilian vice chairman (the CCP heir apparent leader, currently Xi Jinping); the heads of the four PLA general departments (Staff, Political, Logistics, Armaments); and the heads of the four PLA service branches (army, navy, air force, and Second Artillery). The current PRC defense minister, General Liang Guanglie, also sits on the Central Military Commission, apparently providing dual representation for the Defense Ministry and for the ground forces.

133. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives on National Security Policy*, written testimony of Gilbert Rozman, March 10, 2011. This tendency is particularly true of books published by senior officers through military publishing houses, which frequently include strident language and predictions of inevitable conflict with the United States. Such writings do not reflect official policy, but they do reveal intense nationalist feeling and hostility to the United States within elements of the military as well as a receptive commercial audience for such ideas. See Chris Buckley, "China PLA Officer Urges Challenging U.S. Dominance," Reuters, February 28, 2010; and Peter Brown, "The PLA Raises Its Voice," *Asia Times*, March 8, 2010.

134. John Pomfret, "In Chinese Admiral's Outburst, a Lingering Distrust of U.S.," *Washington Post*, June 8, 2010.

135. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives Regarding National Security Policy*, written testimony of Abraham Denmark, March 10, 2011.

136. For a discussion of this and other potential explanations for PLA nationalist commentary, see U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives Regarding National Security Policy*, written testimony of Andrew Scobell, March 10, 2011; and Andrew Scobell, "Is There a Civil-Military Gap in China's Peaceful Rise?" *Parameters* (Summer 2009).

137. Willy Lam, "The Military Maneuvers of Xi Jinping," *Wall Street Journal*, January 26, 2011. [http://online.wsj.com/article/SB10001424052748704698004576103513580674214.html?mod=googlenews\\_wsj.K](http://online.wsj.com/article/SB10001424052748704698004576103513580674214.html?mod=googlenews_wsj.K)

138. Website of the Institute for U.S.-China Issues at the University of Oklahoma, "The Sino-American Security Dialogue," <http://www.ou.edu/uschina/SASD/index.htm>; and Peter Gries (University of Oklahoma) e-mail communication with Commission staff, October 13–14, 2011.

139. For only three examples out of many that could be cited: the Chinese People's Institute for Foreign Affairs is subordinate to the PRC Foreign Ministry, and the China Association for International Understanding is subordinate to the CCP International Department [see David Shambaugh, "China's Propaganda System: Institutions, Processes and Efficacy," *China Journal* 57 (January 2007)]; and the China Institutes of Contemporary International Relations, or CICIR, is subordinate to the PRC Ministry of State Security (Open Source Center, "Profile of MSS-Affiliated PRC Foreign Policy Think Tank CICIR," August 25, 2011. [www.opensource.gov](http://www.opensource.gov).)

140. As an example, see the discussion of appointments to the Chinese Academy of Social Sciences in: U.S.-China Economic and Security Review Commission, *2008 Annual Report to Congress* (Washington, DC: U.S. Government Printing Office, 2008), p. 292.

141. According to Dr. David Shambaugh of The George Washington University, "[i]t appears that [the China Association for International Friendly Contact] is



linked to the Intelligence Bureau of the Liaison Department of the PLA's General Political Department . . . [with additional] ties to both the Ministry of State Security and the Ministry of Foreign Affairs." [See David Shambaugh, "China's International Relations Think Tanks: Evolving Structure and Process," *China Quarterly* 171 (September 2002).] In addition to serving as "a front for inviting and meeting with selected foreigners in China," the China Association for International Friendly Contact has also served as a vehicle "for sending active-duty intelligence collectors abroad under various kinds of cover." [See David Shambaugh, *Modernizing China's Military: Progress, Problems, and Prospects* (Los Angeles, CA: University of California Press, 2002), p. 136]. For further commentary on the role of the GPD/LD [Liaison Department] and the China Association for International Friendly Contact in sending agents abroad, see also Howard DeVore, *China's Intelligence and Internal Security Forces* (Alexandria, VA: Jane's Information Group, 1999), pp. 50–51; and Nicholas Eftimiades, *Chinese Intelligence Operations* (Annapolis, MD: Naval Institute Press, 1994), pp. 103–104.

142. The International Liaison Department of the PLA General Political Department has traditionally borne responsibility for conducting propaganda and psychological operations directed at other militaries. [See Howard DeVore, *China's Intelligence and Internal Security Forces* (Alexandria, VA: Jane's Information Group, 1999), p. 50–51; and Interagency OPSEC [Operational Security] Support Staff, *Intelligence Threat Handbook* (2004), p. 23. <http://www.fas.org/irp/threat/handbook/foreign.pdf>.] The Liaison Department conducts its perception management operations in accordance with centrally determined CCP propaganda narratives: As stated in the mid-1990s by Nicholas Eftimiades, an analyst with the Defense Intelligence Agency, "[P]olitical-military propaganda against foreign forces is a national function under the purview of the GPD's [General Political Department] liaison department. Implementation of a specific theme of disinformation must somehow advance national policy objectives. It is therefore probable that the GPD formulates propaganda in accordance with [Central Military Commission] military and policy decisions. Such campaigns are then implemented through the PLA's overt and intelligence channels under the supervision of political commissars." [See Nicholas Eftimiades, *Chinese Intelligence Operations* (Annapolis, MD: Naval Institute Press, 1994), pp. 92–93.]

143. Survey performed by USCC staff of the international exchanges listed on the CAIFC website for the years 2009–2010. The list is not exhaustive but instead shows a selected number of more prominent exchange activities. See Website of the China Association for International Friendly Contact. <http://www.caifc.org.cn>. Material translated by USCC staff.

144. The Center for Peace and Development shares office space with the CAIFC in a compound in the northern part of Beijing. The institute conducts exchanges with foreign academics and events with government officials and also publishes its own bimonthly journal on foreign affairs, eponymously titled *Peace and Development*. For a discussion of the connection between CAIFC and CPD, see David Shambaugh, *Modernizing China's Military: Progress, Problems, and Prospects* (Los Angeles, CA: University of California Press, 2002), p. 136. Brief profiles of recent CPD exchanges with foreign academics and Chinese government officials may be found in the website of the Center for Peace and Development, "Scholarly Exchange Activities." <http://www.caifc.org.cn/qk.aspx>. Lists of tables of contents from selected issues of *Peace and Development*, and abstracts of the articles, may be found on *China National Knowledge Infrastructure On-Line*, profile for *Peace and Development*. [http://www.acad.cnki.net/Kns55/oldnavi/n\\_item.aspx?NaviID=1&BaseID=HPFZ&NaviLink=](http://www.acad.cnki.net/Kns55/oldnavi/n_item.aspx?NaviID=1&BaseID=HPFZ&NaviLink=)

145. The "Sanya Initiative" is a series of track two dialogues between retired, senior-ranking flag officers of the U.S. and Chinese armed forces. On the Chinese side, the initiative is hosted by the China Association for International Friendly Contact. The exchanges commenced in February 2008 with meetings in Beijing and in the city of Sanya, on Hainan Island. The Sanya Initiative dialogues are not official military-to-military exchanges conducted by the U.S. Department of Defense.

146. For two such examples, see U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives Regarding National Security Policy*, testimonies of John Park and Abraham Denmark, March 10, 2011.

147. U.S.-China Economic and Security Review Commission, *Hearing on China's Narratives Regarding National Security Policy*, testimony of Abraham Denmark, March 10, 2011.

148. Michael Pillsbury, "China's Research Institutes" (paper written on behalf of the U.S.-China Economic and Security Review Commission, June 2001). [http://www.uscc.gov/researchpapers/2000\\_2003/pdfs/cri.pdf](http://www.uscc.gov/researchpapers/2000_2003/pdfs/cri.pdf).

149. Open Source Center, "Profile of MSS [Ministry of State Security]-Affiliated PRC Foreign Policy Think Tank CICIR," August 25, 2011. [www.opensource.gov](http://www.opensource.gov).





## **COMPREHENSIVE LIST OF THE COMMISSION'S RECOMMENDATIONS**

### **Introduction**

The Commission recommends that:

1. Congress, through legislation, require the president to assign the National Security Council to conduct an agency-wide comprehensive review of the U.S. economic and security policies toward China to determine the need for changes to address the increasingly complicated and serious challenges posed by China to U.S. international and domestic interests. Such a review should be examined and debated as appropriate by Congressional committees.

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

#### ***Section 2: Chinese State-owned Enterprises and U.S.-China Bilateral Investment***

The Commission recommends that:

2. Congress urge the administration to employ all necessary remedies authorized by WTO rules to counter the anticompetitive and trade-distorting effects of the Chinese government's extensive subsidies for Chinese companies operating in China and abroad.
3. Congress assess the extent to which existing laws provide for effective remedies against the anticompetitive actions of Chinese state-owned or state-invested enterprises operating in the U.S. market. Appropriate remedies, if they are not readily available, should also be considered.
4. Congress urge the administration to include in any bilateral investment treaty with China the principles of nondiscrimination and competitive neutrality between SOEs and other state-invested or -supported entities and private enterprises.
5. Congress assess China's new national security review process for foreign investment to determine whether it is being used as a trade barrier.
6. Congress direct the U.S. Department of Commerce to report annually on Chinese investment in the United States including, among other things, data on investment in the United States by Chinese SOEs and other state-affiliated entities.
7. Congress direct the U.S. Securities and Exchange Commission to revise its protocols for reviewing filings by foreign entities listed on or seeking to be listed on the U.S. stock exchanges.

The Securities and Exchange Commission should develop country-specific data to address unique country risks to assure that U.S. investors have sufficient information to make investment decisions. The commission should focus, in particular, on state-owned and -affiliated companies, and subsidies and pricing mechanisms that may have material bearing on the investment.

8. Congress urge the administration to review federally subsidized contracts provided under the American Recovery and Reinvestment Act of 2009 and report on the extent to which Chinese-produced goods and services were procured using such funds.
9. Congress urge the administration to direct the USTR to move aggressively to bring more WTO cases against China for violating its obligations under the WTO Subsidies Agreement.
10. Congress urge the administration to direct the USTR to strengthen its mandated annual review of China's compliance with its WTO obligations by adding conclusions and recommendations to its annual report to Congress.

### ***Section 3: Indigenous Innovation and Intellectual Property Rights***

The Commission recommends that:

11. Congress request the administration to report on whether procurement catalogues are actionable under WTO obligations.
12. Congress instruct the administration to insist that all procurement catalogues at all levels of government be explicitly recalled in order to comply with assurances by President Hu Jintao to separate government procurement from the catalogues.
13. Congress urge the administration to raise with China in the Strategic and Economic Dialogue and the Joint Commission on Commerce and Trade and in other appropriate bilateral and multilateral venues the need for China to table a serious offer to join the Government Procurement Agreement that provides reciprocal opportunities for access to the estimated \$1 trillion in procurement controlled by central, provincial, and local governments as well as state-affiliated entities. If China fails to engage in serious negotiations, the U.S. government should restrict access to Chinese suppliers to government procurement opportunities and should coordinate policies with the states to limit procurement contracts with China.
14. Congress instruct the administration to make a top priority within the Joint Commission on Commerce and Trade and the Strategic and Economic Dialogue negotiations an agreement to lower the threshold for criminal prosecution of cases of piracy and counterfeiting of business and entertainment software.
15. Congress recommend the administration adopt a more reciprocal trading relationship in critical areas, such as intellectual property protection. The United States should demand the

same level of treatment from its major trading partners that it provides to those other nations. The administration should identify those sectors that China has failed to open up to trade in goods and services and identify the practices that act to nullify and impair anticipated economic benefits for U.S. producers and service providers. The administration should seek the elimination of such practices in a timely manner and, if unable to gain sufficient market access, should evaluate what reciprocal actions may be appropriate.

16. Congress urge the administration to insist that China audit the use of licensed software on government computers rather than just audit the budget for software procurement. The audit should be performed by the World Bank.
17. Congress assess the reauthorization of Super 301 to assist in the identification of the policies and practices that China pursues that create the greatest impediment to U.S. exports entering the Chinese market and the most important policies or practices that unfairly or unjustifiably harm U.S. producers and workers in the U.S. market. Priority should be given to addressing such practices by the United States Trade Representative under such legislation.
18. The President should direct USTR to move aggressively to bring cases to the WTO to enforce intellectual property rights.

***Section 4: China's 12th Five-Year Plan and Technology Development and Transfers to China***

The Commission recommends that:

19. Congress hold hearings to assess the success of the Strategic and Economic Dialogue and the Joint Committee on Commerce and Trade in addressing Chinese actions to implement its WTO commitments, including with regard to the issue of technology transfers. In preparation for such hearings, Congress should request that the Government Accountability Office prepare an inventory of specific measures agreed to as part of these bilateral discussions and the implementation efforts of the Chinese.
20. Congress direct the Government Accountability Office to undertake an evaluation of investments and operations of U.S. firms in the Chinese market and identify what federally supported R&D is being utilized in such facilities and the extent to which, and on what terms, such R&D has been shared with Chinese actors in the last ten years.

***Section 5: China's Internal Dilemmas***

The Commission recommends that:

21. The administration work with the Chinese leaders in the Strategic and Economic Dialogue and the Joint Commission on Commerce and Trade talks to identify specific commodities and products in the case where supply does not adequately meet demand in China and where enhanced access for U.S. goods

might help alleviate inflationary pressures. Specific attention should be given to agricultural commodities and Chinese barriers that may limit access to the Chinese market for American goods and products.

22. Congress direct the Government Accountability Office to conduct a review of efforts by the Chinese government to censor content on the Internet and identify the extent to which any foreign technology providers may be assisting the government in its efforts.

## **Chapter 2: China's Activities Directly Affecting U.S. Security Interests**

### ***Section 2: China's "Area Control Military Strategy"***

The Commission recommends that:

23. The relevant Congressional committees investigate the adequacy of security for the Department of Defense's logistics data system, the time-phased force deployment data system, to ensure that the data therein are secure from a cyberattack.
24. Congress assess the adequacy of Department of Defense capabilities to conduct major operations in a degraded command, control, communications, computer, intelligence, surveillance, and reconnaissance environment for an extended period of time.
25. Congress direct the Government Accountability Office to evaluate the Department of Defense's early warning systems to ensure that the department will have sufficient timely warning of a PLA attack in the event of a conflict.
26. Congress require that the Department of Defense conduct periodic peaceful naval and air exercises in the East Asian maritime region to demonstrate the U.S. commitment to freedom of navigation.
27. Congress assess the adequacy of funding for Department of Defense programs that ensure the military's ability to operate effectively against China's Area Control Strategy measures. Such programs could include, at a minimum, robust theater ballistic missile defense, antisubmarine warfare, advanced air-to-air combat, command and control, and electronic warfare capabilities.
28. Congress encourage the administration to continue to work diplomatically and militarily with regional allies and friends to improve their capacity to resist China's Area Control Strategy capabilities.

### ***Section 3: The Implications of China's Civil and Military Space Activities***

The Commission recommends that:

29. Congress mandate that the Department of Defense (and other government space operators, as appropriate) assess and report



upon their preparedness for potential Chinese counterspace activities. To the extent that commercial entities provide essential services, assessments should also cover their systems.

30. Congress assess the adequacy and regularity of U.S. military exercises and training activities that simulate the destruction, denial, degradation, or manipulation of U.S. space assets. In addition, Congress should periodically evaluate whether the Department of Defense is taking sufficient measures to diversify its traditionally space-oriented capabilities, such as in navigation, communications, intelligence, surveillance, and reconnaissance.

### **Chapter 3: China's Foreign Policy**

#### ***Section 1: An Overview of China's Relations with North Korea and Iran***

The Commission recommends that:

31. Congress investigate whether U.S. sanctions have been imposed on all Chinese firms that have violated the sanction laws by investing in Iran's petroleum industry or providing Iran with refined petroleum products or advanced conventional weapons.
32. Congress, in light of China's continued investments in North Korea, hold hearings to evaluate the effectiveness of expanding North Korean sanctions to cover foreign firms investing in North Korea's natural resource industry.

#### ***Section 2: Actors in China's Foreign Policy***

The Commission recommends that:

33. Congress investigate the extent to which the People's Liberation Army is becoming a more influential actor in China's foreign policy-making.
34. Members of Congress make an effort to engage with multiple official and unofficial foreign policy actors during their trips to China in order to better understand and establish channels of communication with these actors.

#### ***Section 3: Taiwan***

The Commission recommends that:

35. Congress urge the administration to sell Taiwan the additional fighter aircraft it needs to recapitalize its aging and retiring fleet.
36. Congress request from the administration an update on the Taiwan submarine program that was approved for sale by the U.S. government in 2001.
37. Congress explore in hearings the implications for the United States and the region of closer China-Taiwan relations.

***Section 4: Hong Kong***

The Commission recommends that:

38. Congress reauthorize Section 301 of the Hong Kong Policy Act of 1992, which requires the U.S. secretary of State to submit an annual report to Congress on political, social, and economic developments in Hong Kong as they relate to the United States. This should include reporting on China's measures to use Hong Kong as a platform for the internationalization of the renminbi.
39. Members of Congress, when visiting mainland China, also visit Hong Kong and that Congress encourage senior administration officials, including the secretary of State, to make visits to Hong Kong part of their travel.
40. Congress encourage its Members to raise the issue of preserving Hong Kong's special status when meeting with members of China's National People's Congress.

**Chapter 4: China's Public Diplomacy Initiatives Regarding Foreign and National Security Policy**

The Commission recommends that:

41. Congress evaluate the effectiveness of U.S. government public diplomacy programs in the East Asian region.
42. Congress urge the administration to seek clarification on the Chinese government's views as to what represents a "core interest" as well as what this formulation means for U.S.-China relations, and the implications for U.S. allies and friends.
43. Congress ensure that its own Members are made fully aware of the Chinese institutional actors engaged in exchange programs involving officials of the U.S. Government.

## ADDITIONAL VIEWS OF COMMISSIONERS WILLIAM REINSCH AND ROBIN CLEVELAND

We support this year's report despite our opposition to several of its recommendations because we think it adequately captures many of the dilemmas and difficulties that currently beset our relationship with China. At the very time our own country is faced with a vast range of difficulties and appears divided on the correct solutions, we must also deal with a rising China that appears to have ignored or forgotten then-U.S. Trade Representative Robert Zoellick's call for China to be a "responsible stakeholder."

On the economic front, the report details the growing number of problems the U.S.—and other developed economies—has with China such as its indigenous innovation policy, its continued failure to adequately protect intellectual property, subsidies, barriers to market access, discriminatory regulations, and its undervalued currency.

It is clear that China has made a sharp turn in its economic policy over the past five years in the direction of more state control and less free market competition. This comes as a huge disappointment to the American business community which supported Chinese WTO accession as a means to integrating it into the Western market trading system. Ten years later evidence is piling up to suggest that China wants to enter the system solely on its own terms, even when they are incompatible with WTO rules or modern business practices. Many of these practices will be litigated in the WTO, where we will likely win, but the damage will by that time be done.

On the military front, the Commission has rightly focused much of its attention in this report on China's activities in the South China Sea and on its relations with North Korea and Iran. While its policies with respect to the last two are not helpful, they are also not new, and the Commission has commented on them in the past. In the South China Sea, China's vigorous assertion of its exaggerated claims has been a destabilizing force in the region that threatens to grow worse. Ironically, this has helped enhance an appreciation among the other littoral states for a strong U.S. presence there, to which we believe the Administration has responded skillfully.

China's military buildup, which we have commented on in past reports, continues, and a number of the Commission's recommendations have correctly focused on the adequacy of U.S. preparation for an enhanced Chinese presence and capability.

It is on the economic side where we believe the Commission's recommendations go astray. As we said last year in our additional views,

"The United States, recovering too slowly from the worst recession in 80 years, seems tempted to act out of fear, blaming China for our economic problems just as 20 years ago we blamed the Japanese. While blame is tempting—and often well-placed—it is *our* destiny we control, not theirs. Faulting them for doing things in their own interest is emotionally satisfying but ultimately an empty gesture. Our politicians serve our people best when they act

in our interests and when they persuade the Chinese to work with us in pursuit of common interests.”

This means that the right answers lie in policies we should pursue to make ourselves more competitive rather than policies to hold the Chinese back. Many of those policies lie outside the Commission’s mandate, not to mention its competence. However, our inability to provide the right answers does not mean that we should suggest the wrong ones instead.

One such wrong answer is the Commission’s recommendation on tracking Chinese investment in the United States. We already have a process for blocking investments that raise national security issues. Recently updated by the Congress, it appears to be working smoothly. No doubt, there will be proposed Chinese investments that will be blocked, but there are also investments that will bring jobs and economic growth to our country, and we should welcome those as a constructive means of returning some of the dollars that China has accumulated. The recommendation is only for reporting, but it encourages a climate of paranoia about Chinese activities here that does not serve us well economically and does not dignify us as a people.

Likewise, the Commission’s recommendations for a GAO study of U.S. firms’ operations in China and a report on possible procurement of Chinese goods and services through federally subsidized contracts will contribute to the same climate while providing little useful information.

These recommendations are not in and of themselves fatal flaws in our report, but they reflect a disturbing trend in our country towards economic nationalism that focuses on finding people to blame for our problems rather than on what we must do to solve them. While this report is hardly the worst example of this trend, the Commission has missed an opportunity to rise above it and emphasize constructive rather than confrontational solutions.

In the long run, a constructive approach will be required. China is in the process of assuming a global role commensurate with its size, potential, and aspirations. As it does so, it is in our interest, as well as China’s and everyone else’s, that it take on the obligations of leadership, which require a degree of self-abnegation. China’s leaders have demonstrated that they have a clear understanding of what is in their immediate interest. Their challenge will be to demonstrate they also understand what is in the larger interest of the global system of which they are a part, that the health of that system is inextricably tied with their own, and that they are prepared to act on that understanding. The Commission’s job is to continue to make that point.

## **ADDITIONAL VIEWS OF COMMISSIONERS ROBIN CLEVELAND AND WILLIAM A. REINSCH**

The Commission's report provides a frank assessment of China's economic and political policies designed to protect the Communist Party's agenda of stability, growth and self-preservation. U.S. and European policy makers and investors have expressed well founded concern about China's increasing efforts to protect and promote domestic industries by relying on market barriers, pressure to transfer technology, and capital control policies. Notwithstanding these concerns, US foreign direct investment continues to grow year on year as China continues to be viewed as a key market opportunity.

As noted in the report, US economic growth and export strength relies on the production of advanced technology and equipment including aircraft, medical and scientific equipment and energy related machinery. Since 2004, China has captured a larger share of the advanced technology market as evidenced by the fact that US imports of Chinese advanced technology exceeded \$10 billion, while American exports fell slightly under \$2 billion. While troubling, not all of this trade imbalance can be explained by China's aggressive mix of corporate subsidies, tax incentives, protectionism and industrial policy as the report might lead any reader to conclude.

In briefings and conversations with American corporate leaders, opportunity in China is viewed both in terms of "pull" and "push". The pull is obvious; the Chinese attract direct investment with various commercial incentives and the prospect of market opportunities. What the report fails to discuss are the reasons US companies feel pushed to move productive capacity to China. For example, in two sections in the report, GE is singled out for its decision to establish a joint venture in integrated modular avionics with the Aviation Industry Corporation of China. While several other companies are involved in similar aviation related joint ventures, the report irresponsibly relies on anonymous sources from press accounts to make a case that there are unique risks of diversion of GE's civilian technology for Chinese military purposes, notwithstanding the fact that the US government approved the transaction. As is the case with much of the report, the Commission's emphasis on China's aggressive acquisitive strategy and pursuit of security interests has the effect of presenting US companies in the unfair light of appearing to facilitate Chinese goals. The report fails to discuss key elements of business decisions GE and other companies have offered as reasons they are pushed to move production and jobs overseas.

In both hearings and meetings, witnesses have cited increasing and excessive US regulation and onerous tax burdens as among the principal business-based reasons for moving abroad. While the Commission views its primary responsibility as serving the Congress by evaluating China's security and economic policies and their impact on the United States, that focus, unfortunately, only provides a partial accounting of the reasons for our significant trade imbalances and weakening manufacturing base. Criticizing US companies for making business based decisions to prosper and drawing attention to China's aggressive and often unfair policies and practices alone will not reverse the dangerous trends in US-



China economic ties. To assure Members of Congress have a full and balanced set of options, the Commission's report should include witness' policy views and recommendations addressing the domestic factors which push US companies to move production and jobs to China.

**ADDITIONAL VIEWS OF COMMISSIONERS  
CAROLYN BARTHOLOMEW AND  
DR. LARRY WORTZEL**

In previous reports, the Commission has examined some of China's influence operation tools, including its mass media outlets, lobbyists, think tanks, and academic institutions. This year, chapter 4 looks at how China is using intelligence organizations in quasi-official (track two) policy and academic exchanges.

We believe that the Commission's research reveals that the Chinese government, through the intelligence component of the People's Liberation Army (PLA), targets retired U.S. senior-ranking flag officers as a means to convey propaganda messages and conduct perception management. This dissent expresses our disappointment that the Commission did not include in this report a vigorous explanation of this effort by the PLA and its China Association for International Friendly Contact (CAIFC).

One venue for this targeting is track two exchanges. Track two exchanges can serve useful purposes, facilitating dialogue between scholars and former government officials, increasing communication and understanding. They can also serve other, less laudable goals. Chinese participants in track two activities are vetted by, approved by, and controlled by, the Chinese Communist Party; these participants include the former chief of intelligence for the PLA, the former commander of the Nanjing Military Region (which is opposite Taiwan), and the former commander of the PLA Navy's East Sea Fleet (whose operational area includes the waters around Taiwan).

Some of the U.S. participants in these exchanges have business interests in China, which they expand through close contact with Chinese officials and former officials. Track two exchanges are useful venues to cultivate those contacts. The retired U.S. senior-rank officers also have continuing relationships with high-ranking U.S. officials with whom they previously served and with whom some communicate about their track two findings.

Inquiries made to a Commissioner by House and Senate offices and witness testimony led Commission staff to examine one particular track two exchange, the Sanya initiative. The research raises some serious questions.

The Sanya initiative was started by Admiral William Owens (USN-ret) and the China Association for International Friendly Contact. CAIFC is a front organization for the International Liaison Department of the People's Liberation Army's General Political Department, which is responsible both for intelligence collection and conducting People's Republic of China propaganda and perception management campaigns, particularly focused on foreign military forces. Admiral Owens is the former vice chairman of the Joint Chiefs of Staff. He started consulting for Huawei, the Chinese telecommunications company, in September 2009, and founded Amerilink Telecom, a start-up helping Huawei to gain access to the U.S. market. Some Members of Congress and Commissioners have voiced concern about possible Huawei ties to the Chinese military and state security apparatus and the national security implications of its participation in the U.S. market. (For example, Huawei's

chairwoman, Sun Yafang, worked for the Ministry of State Security's Communications Department before joining the company.)

The Commission's research documented participants in Sanya initiative exchanges, Chinese foreign policy propaganda messages, and follow-up meetings that some of the former U.S. military participants held with currently serving officials. It also reviewed articles published by these U.S. participants and tracked how the articles reflected Chinese government messaging. It is possible, of course, that the U.S. participants were only espousing views that they already held. We need to ensure, though, that they are not using their former positions in violation of the public trust and the positions they once held to the detriment of U.S. national security all for the benefit of their own financial interests.

We are disappointed that the Commission, while in possession of the facts, chose not to include this information in the 2011 Report. We believe that the issue warrants a deeper and more thorough investigation by the U.S. Congress.

## 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 Ex-

ecutive 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 Democratic Leader Harry Reid for a term expiring December 31, 2011. 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, Mr. 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. Mr. 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 300 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 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 KHI Services, Incorporated. 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*.

#### **Daniel M. Slane, Vice Chairman**

Daniel Slane was reappointed to the Commission by House Republican Leader John Boehner for a two-year term expiring on December 31, 2011. Vice Chairman Slane was elected as the Commission's vice chairman for the 2011 report cycle and served as the Commission's chairman for the 2010 report cycle.

Vice Chairman 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. Vice Chairman Slane worked in The White House during the Ford Administration.

In 1996, Vice Chairman Slane became a member of the board of trustees of The Ohio State University and was chairman from 2005 to 2006. 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. Vice Chairman Slane serves on the board of two financial institutions and a number of nonprofit organizations.

Vice Chairman 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, Vice Chairman 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.

Vice Chairman 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. Vice Chairman Slane is a member of the Ohio Bar and formerly a partner in the law firm of Grieser, Schafer, Blumenstiel, and Slane.

### **Carolyn Bartholomew**

Carolyn Bartholomew was reappointed to the Commission by House Speaker Nancy Pelosi for a two-year term expiring on December 31, 2011. She previously served as the Commission's chairman for the 2007 and 2009 report cycles and 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. Currently, she serves on the board of directors of the Kaiser Aluminum Corporation and the nonprofit organizations Polaris Project and 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.

### **Daniel A. Blumenthal**

Daniel Blumenthal was reappointed to the Commission by Senate Republican Leader Mitch McConnell for a two-year term expiring December 31, 2011. Commissioner Blumenthal served as the Commission's vice chairman for the 2007 report cycle.

Commissioner Blumenthal was the country director for China, Taiwan, and Hong Kong in the Office of the Assistant Secretary of Defense for International Security Affairs, later becoming a senior director for China, Taiwan, Hong Kong, and Mongolia during the first term of President George W. Bush. Commissioner Blumenthal developed and implemented defense policy toward China, Taiwan, Hong Kong, and Mongolia. Commissioner Blumenthal was awarded the Office of the Secretary of Defense Medal for Exceptional Public Service.

Prior to joining the Defense Department, Commissioner Blumenthal was an associate attorney in the Corporate and Asia Practice Groups at Kelly Drye & Warren LLP. Earlier, he was an editorial and research assistant for *Near East Policy*.

Today, Commissioner Blumenthal is the director of Asian Studies and a resident fellow at the American Enterprise Institute for Public Policy Research, and a research associate with the National Asia Research Program. He is a member of the Academic Advisory Group of the Congressional U.S.-China Working Group and has been a member of the Project 2049 Institute's board of advisors since 2008. In addition, Commissioner Blumenthal has written extensively on national security issues. He has written articles and op-eds for the *Washington Post*, the *Wall Street Journal*, the *Weekly Standard*, *National Review*, and numerous edited volumes.

Commissioner Blumenthal received a Master of Arts in International Relations and International Economics from The Johns Hopkins University School of Advanced International Studies and a Juris Doctorate from Duke University.

#### **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, 2011. Commissioner Brookes is currently a senior fellow for National Security Affairs at The Heritage Foundation. Prior to Heritage, he served in the George W. Bush Administration as the deputy assistant secretary of Defense for Asian and Pacific Affairs, with the Committee on International Relations in the U.S. House of Representatives, at the Central Intelligence Agency, at the State Department at the United Nations, in the defense industry, and in the U.S. Navy. He is a doctoral candidate at Georgetown University, and a 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 to the Commission by Senate Republican Leader Mitch McConnell for a two-year term expiring December 31, 2012. After three decades of government service, Commissioner Cleveland is now serving as a professional school counselor. Previously, Commissioner Cleveland worked for U.S. Senator Mitch McConnell in a number of senior positions 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, as the associate director of the Office of Management and Budget at The White House, and as principal with Olivet Consulting, LLC.

During her tenure in The White House, Commissioner Cleveland co-led the interagency effort to develop two presidential initiatives: the Millennium Challenge Corporation and the President's Emergency Plan for AIDS Relief. These efforts reflect her experience linking 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.

**The Honorable C. Richard D'Amato**

Dick D'Amato was reappointed to the U.S.-China Economic and Security Review Commission by Senate Majority Leader Harry Reid on December 8, 2010, for a two-year term expiring December 31, 2012. He previously served on the Commission from March 2001 to December 2007, serving as the chairman and vice chairman of the Commission from April 2001 through December 20, 2005. He is an attorney and a member of the Maryland and DC Bars. He is a former delegate to the General Assembly of the State of Maryland (1998–2002), representing the Annapolis, Maryland, region, and served on the Appropriations Committee. He is also a retired captain in the United States Navy Reserve, served two tours of duty in the Vietnam theatre aboard the *USS KING* (DLG-10), and three years as an assistant professor of Government at the U.S. Naval Academy. He served on the Trade Deficit Review Commission, a Congressional advisory body, as a member from 1999 to 2000.

He served as vice president for development of Synergics, Inc., an international energy company and developer of alternative energy projects, particularly wind energy. He also serves as an official presenter and participant in former Vice President Gore's climate project, serves as a member of Maryland Governor O'Malley's commission on climate change, and is a trustee of St. Mary's College of Maryland.

From 1988 to 1998, Commissioner D'Amato was the Democratic counsel for the Committee on Appropriations of the U.S. Senate. He was responsible for coordinating and managing the annual appropriations bills and other legislation on policy and funding of U.S. defense, foreign policy, trade, and intelligence matters. He served from 1980 to 1988 as senior foreign policy and defense advisor to the former Democratic Senate leader, Senator Robert C. Byrd. In this position, he supervised work on major foreign policy, national security, and trade policies and was the co-director for the Senate Arms Control Observer Group, a bipartisan leadership organization, which served as liaison with The White House on all arms control negotiations with the Soviet Union. He also served on the Senate delegation to the Kyoto negotiations on global warming.

Mr. D'Amato began his career as legislative director for Congressman James Jeffords (Ind.-VT) from 1975 to 1978 and then as chief of staff for Senator Abraham Ribicoff (D-CT) until 1980.

He has been active in other aspects of public service, having founded the annual Taste-of-the-Nation dinner in Annapolis as part of the nationwide "Share Our Strength" hunger relief organization and created an annual scholarship for college-bound African-American women in Anne Arundel County, Maryland. He currently serves on the boards of the Annapolis Symphony Orchestra, the Annapolis Maritime Museum, The Johns Hopkins Cuba Exchange Program, and the University of Oxford Congressional Visitors program. He is a founding member of the National Sailing Hall of Fame.

Commissioner D'Amato received his B.A. (cum laude) from Cornell University in 1964 and served on the Cornell board of trustees' Advisory Council. He received his M.A. from the Fletcher School of Law and Diplomacy in Boston in 1967, and received his legal education from Harvard Law School and from the Georgetown Univer-



sity Law Center (J.D., 1980). He resides in Annapolis with his wife, Dee.

### **Jeffrey L. Fiedler**

Commissioner Fiedler was reappointed to the Commission by House Speaker Nancy Pelosi on December 16, 2009, for a third term expiring December 31, 2011. 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 a 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.

### **The Honorable Patrick A. Mulloy**

Commissioner Patrick Mulloy has served four two-year terms as a commissioner and was reappointed in 2009 by Senate Democratic Leader Harry Reid for a new two-year term expiring December 31, 2011.

Commissioner Mulloy served as assistant secretary of Commerce for Market Access and Compliance in the department's International Trade Administration during the second Clinton Administration. As assistant secretary, Commissioner Mulloy directed a trade policy unit of over 200 international trade specialists, which focused worldwide on removing foreign barriers to U.S. exports and on ensuring that foreign countries complied with trade agreements negotiated with the United States. This activity involved discus-

sions both in the World Trade Organization and with individual governments. Commissioner Mulloy traveled extensively, meeting with foreign leaders to advance market-opening programs in the European Union, China, India, Taiwan, Indonesia, Canada, and Central and South America. He was also appointed by President Clinton to serve as a member of the Commission on Security and Cooperation in Europe.

Before becoming assistant secretary, Commissioner Mulloy held various senior positions on the staff of the U.S. Senate Banking Committee, including chief international counsel and general counsel. In those positions, he contributed to much of the international trade and finance legislation formulated by the committee, such as the Foreign Bank Supervision Enhancement Act of 1991, the Export Enhancement Act of 1992, the Defense Production Act Amendments of 1994, and titles of the Omnibus Trade and Competitiveness Act of 1988 that dealt with foreign bribery, investment, exchange rates, and export controls.

Prior to his work in the Senate, Commissioner Mulloy was a senior attorney in the Antitrust Division of the Department of Justice, where he directed a staff of lawyers and economists who supervised participation of U.S. oil companies in the Paris-based International Energy Agency (IEA). In earlier duties at the Justice Department, he represented the United States in a variety of cases related to federal environmental laws, including criminal and civil enforcement actions in various U.S. district courts, several circuit courts of appeal, and the U.S. Supreme Court.

Commissioner Mulloy began his public service career as a foreign service officer, where he served in the Department of State's Office of United Nations Political Affairs, the Office of International Environmental and Oceans Affairs, and as vice counsel in the U.S. Consulate in Montreal, Canada.

Today, Commissioner Mulloy is a consultant to the president emeritus of the Alfred P. Sloan Foundation and is an adjunct professor of International Trade Law at the law schools of Catholic University and George Mason University. He is a member of the Asia Society and the Washington International Trade Association and serves on the advisory boards of the Center for the Study of the Presidency and Congress and of the Coalition for a Prosperous America. He has several times testified on international trade and investment matters before committees of the U.S. Senate and the House of Representatives.

Commissioner Mulloy, a native of Kingston, Pennsylvania, holds an LL.M. from Harvard University Law School, a Juris Doctorate from The George Washington University Law School, a Master of Arts from the University of Notre Dame, and a Bachelor of Arts from King's College. Commissioner Mulloy is a member of the District of Columbia and Pennsylvania Bars. He resides in Alexandria, Virginia, with his wife Marjorie, and they have three adult children.

#### **The Honorable Dennis C. Shea**

Commissioner Dennis Shea was reappointed by Senate Republican Leader Mitch McConnell for a two-year term expiring December 31, 2012. An attorney with 25 years of experience in govern-

ment and public policy, he is the founder of Shea Public Strategies LLC, a government relations 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.

Commissioner 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, Commissioner Shea's service with Senator Dole was interrupted when he ran for Congress in the Seventh District of New York.

During the 1996 elections, Commissioner 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, Commissioner 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, Commissioner Shea was confirmed as assistant secretary for Policy Development and Research at the U.S. Department of Housing and Urban Development. As assistant secretary, Commissioner Shea led a team responsible for conducting much of the critical analysis necessary to support the department's mission. In 2005, Commissioner Shea left to serve as senior advisor to Senator Elizabeth Dole in her capacity as chairman of the National Republican Senatorial Committee.

Commissioner 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. He currently resides in Alexandria, Virginia, with his wife Elizabeth and daughter Juliette.

### **Michael R. Wessel**

Commissioner Michael R. Wessel, an original member of the U.S.-China Economic and Security Review Commission, was reappointed by House Speaker Nancy Pelosi for a two-year term expiring December 31, 2012.

Commissioner Wessel served on the staff of 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, where 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.

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 Bar of the District of Columbia and 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 House Republican Leader John Boehner for a two-year term expiring December 31, 2012. Dr. Wortzel has served on the Commission since November 2001 and 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. He also 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 1989 Tiananmen Square 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 and served 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 21<sup>st</sup> Century*; and *Dictionary of Contemporary Chinese Military History*. Commissioner Wortzel regularly publishes articles on Asian security matters.

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, Christine, live in Williamsburg, Virginia. They have two married sons and three grandchildren.

### **Michael R. Danis, Executive Director**

Before joining the U.S.-China Commission, Michael Danis served as an intelligence officer with the Defense Intelligence Agency for 25 years. Mr. Danis managed the agency's technology transfer division. This division is 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-technology corporations. Mr. Danis 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](http://www.uscc.gov).

**January 27, 2011: Public Hearing on “China’s Active  
Defense Strategy and its Regional Impact”  
Washington, DC**

Commissioners present: Hon. William A. Reinsch, Chairman; Daniel M. Slane, Vice Chairman; Carolyn Bartholomew (Hearing Co-Chair); Hon. C. Richard D’Amato; Hon. Patrick A. Mulloy; Hon. Dennis C. Shea; Larry M. Wortzel (Hearing Co-Chair).

Congressional Perspectives: Hon. Rob Wittman, U.S. Representative from the state of Virginia; Hon. Daniel Inouye,\* U.S. Senator from the state of Hawaii.

Witnesses: Oriana Skylar Mastro, Princeton University; Roger Cliff, The RAND Corporation; Cortez A. Cooper, The RAND Corporation; Martin C. Libicki, The RAND Corporation; Dean Cheng, The Heritage Foundation; Balbina Y. Hwang, Georgetown University; Stacy A. Pedrozo, Council on Foreign Relations; Jim Thomas, Center for Strategic and Budgetary Assessments; David A. Deptula,\* The Deptula Group, LLC.

**February 25, 2011: Public Hearing on “China’s Internal  
Dilemmas” and Roundtable on “China’s Internal Dilemmas  
and Implications for the United States”  
Washington, DC**

Commissioners present: Hon. William A. Reinsch, Chairman (Hearing Co-Chair); Daniel M. Slane, Vice Chairman; Daniel A. Blumenthal; Peter T.R. Brookes; Robin Cleveland (Hearing Co-Chair); Hon. C. Richard D’Amato; Jeffrey L. Fiedler; Hon. Patrick A. Mulloy; Hon. Dennis C. Shea; Michael R. Wessel.

Witnesses: Elizabeth Economy, Council on Foreign Relations; Martin K. Whyte, Harvard University; Murray Scot Tanner, CNA; Yukon Huang, Carnegie Endowment for International Peace; Steven Dunaway, Council on Foreign Relations.

Roundtable Participants: James Mann, The Johns Hopkins University, SAIS; Martin K. Whyte, Harvard University; Murray Scot Tanner, CNA; Yukon Huang, Carnegie Endowment for International Peace; Steven Dunaway, Council on Foreign Relations.



**March 10, 2011: Public Hearing on “China’s Narratives  
Regarding National Security Policy”  
Washington, DC**

Commissioners present: Hon. William A. Reinsch, Chairman; Daniel M. Slane, Vice Chairman; Carolyn Bartholomew; Daniel A. Blumenthal; Peter T.R. Brookes; Hon. C. Richard D’Amato; Jeffrey L. Fiedler (Hearing Co-Chair); Hon. Patrick A. Mulloy; Hon. Dennis C. Shea (Hearing Co-Chair); Michael R. Wessel; Larry M. Wortzel.

Witnesses: David M. Lampton, The Johns Hopkins University, SAIS; Gilbert Rozman, Princeton University and Woodrow Wilson Center; Christopher A. Ford, The Hudson Institute; Jacqueline A. Newmyer Deal, Long Term Strategy Group and Foreign Policy Research Institute; Ashley Esarey, Whitman College, Harvard University, and University of Washington; Mark A. Stokes, Project 2049 Institute; John S. Park, U.S. Institute of Peace; Abraham M. Denmark, Center for a New American Security; Alison Kaufman,\* CNA; Gary D. Rawnsley,\* University of Leeds (UK); Andrew Scobell,\* The RAND Corporation.

**March 30, 2011: Public Hearing on “Chinese State-Owned  
Enterprises and U.S.-China Bilateral Investment”  
Washington, DC**

Commissioners present: Hon. William A. Reinsch, Chairman; Daniel M. Slane, Vice Chairman (Hearing Co-Chair); Carolyn Bartholomew; Daniel A. Blumenthal; Peter T.R. Brookes; Robin Cleveland; Hon. C. Richard D’Amato; Hon. Patrick A. Mulloy; Hon. Dennis C. Shea; Michael R. Wessel (Hearing Co-Chair); Larry M. Wortzel.

Congressional Perspectives: Hon. Rosa L. DeLauro, U.S. Representative from the state of Connecticut; Hon. Maurice Hinchey, U.S. Representative from the state of New York; Hon. Michael A. Michaud,\* U.S. Representative from the state of Maine.

Witnesses: Barry J. Naughton, University of California; Derek Scissors, The Heritage Foundation; Theodore H. Moran, Georgetown University and Peterson Institute for International Economics; Robert E. Scott, Economic Policy Institute; K.C. Fung, University of California at Santa Cruz; Daniel H. Rosen, Rhodium Group and Peterson Institute for International Economics; Karl P. Sauvant, Columbia University.

**April 13, 2011: Public Hearing on “China’s Foreign Policy:  
Challenges and Players”  
Washington, DC**

Commissioners present: Hon. William A. Reinsch, Chairman; Daniel M. Slane, Vice Chairman; Carolyn Bartholomew (Hearing Co-Chair); Daniel A. Blumenthal; Peter T.R. Brookes (Hearing Co-Chair); Robin Cleveland; Hon. C. Richard D’Amato; Jeffrey L. Fiedler; Hon. Patrick A. Mulloy; Hon. Dennis C. Shea; Michael R. Wessel; Larry M. Wortzel.

Congressional Perspectives: Hon. Dana Rohrabacher, U.S. Representative from the state of California; Hon. Bill Johnson,\* U.S. Representative from the state of Ohio.

Witnesses: Daniel J. Kritenbrink, U.S. Department of State; David Helvey, U.S. Department of Defense; J. Peter Pham, Atlantic Council; Alan M. Wachman, Tufts University; Andrew Small, German Marshall Fund of the United States; Victor D. Cha, Georgetown University and Center for Strategic and International Studies; John W. Garver, Georgia Institute of Technology; Richard Weitz, The Hudson Institute; Yu-Wen Julie Chen, University of Virginia; Erica S. Downs, The Brookings Institution; Susan V. Lawrence, Congressional Research Service.

**May 4, 2011: Public Hearing on “China’s Intellectual Property Rights and Indigenous Innovation Policy”  
Washington, DC**

Commissioners present: Hon. William A. Reinsch, Chairman; Daniel M. Slane, Vice Chairman; Carolyn Bartholomew, Peter T.R. Brookes; Hon. C. Richard D’Amato (Hearing Co-Chair); Jeffrey L. Fiedler; Hon. Patrick A. Mulloy; Hon. Dennis C. Shea (Hearing Co-Chair); Michael R. Wessel.

Congressional Perspectives: Hon. Thomas Slade Gorton, former U.S. Senator from the state of Washington; Hon. Brad Sherman, U.S. Representative from the state of California.

Witnesses: Michael Schlesinger, International Intellectual Property Alliance; Ken Wasch, Software & Information Industry Association; Thea Mei Lee, AFL-CIO; Alan Wm. Wolff, Dewey & LeBoeuf, LLP.

**May 11, 2011: Public Hearing on “The Implications of China’s Military and Civil Space Programs”  
Washington, DC**

Commissioners present: Hon. William A. Reinsch, Chairman; Daniel M. Slane, Vice Chairman; Carolyn Bartholomew; Daniel A. Blumenthal (Hearing Co-Chair); Robin Cleveland; Hon. C. Richard D’Amato; Jeffrey L. Fiedler; Hon. Patrick A. Mulloy; Hon. Dennis C. Shea; Michael R. Wessel (Hearing Co-Chair); Larry M. Wortzel.

Congressional Perspective: Hon. Frank Wolf, U.S. Representative from the state of Virginia.

Witnesses: Gregory L. Schulte, U.S. Department of Defense; Mark A. Stokes, Project 2049 Institute; Bruce W. MacDonald, U.S. Institute of Peace; Barry Watts, Center for Strategic and Budgetary Assessments; Scott Pace, The George Washington University; James Clay Moltz, Naval Postgraduate School; Alanna Krolikowski, The George Washington University Space Policy Institute and University of Toronto; Dean Cheng,\* The Heritage Foundation.

**June 15, 2011: Public Hearing on “China’s Five-Year Plan,  
Indigenous Innovation and Technology Transfers,  
and Outsourcing”  
Washington, DC**

Commissioners present: Hon. William A. Reinsch, Chairman; Daniel M. Slane, Vice Chairman (Hearing Co-Chair); Carolyn Bartholomew; Daniel A. Blumenthal; Peter T.R. Brookes; Robin Cleveland; Hon. C. Richard D’Amato; Hon. Patrick A. Mulloy (Hearing Co-Chair); Hon. Dennis C. Shea; Michael R. Wessel.

Witnesses: Willy C. Shih, Harvard Business School; Eswar S. Prasad, Cornell University and The Brookings Institution; Adam Segal, Council on Foreign Relations; John Neuffer, Information Technology Industry Council; Dieter Ernst, East-West Center; Ralph E. Gomory, NYU Stern School of Business and Alfred P. Sloan Foundation; Leo Hindery, Jr., New America Foundation; Philip I. Levy, American Enterprise Institute.

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\*Submitted material for the record.

**APPENDIX IIIA**  
**LIST OF WITNESSES TESTIFYING BEFORE**  
**THE COMMISSION**  
**2011 Hearings**

Full transcripts and written testimonies are available online at the Commission's website: <a href="http://www.uscc.gov">www.uscc.gov</a> .
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**Alphabetical Listing of Panelists Testifying before the USCC**

Panelist Name	Panelist Affiliation	USCC Hearing
Cha, Victor D.	Georgetown University and Center for Strategic and International Studies	April 13, 2011
Chen, Yu-Wen Julie	University of Virginia	April 13, 2011
Cheng, Dean	The Heritage Foundation	January 27, 2011 May 11, 2011 *
Cliff, Roger	The RAND Corporation	January 27, 2011
Cooper, Cortez A.	The RAND Corporation	January 27, 2011
DeLauro, Rosa L.	U.S. Representative from the state of Connecticut	March 30, 2011
Denmark, Abraham M.	Center for a New American Security	March 10, 2011
Deptula, David A. *	The Deptula Group, LLC	January 27, 2011
Downs, Erica S.	The Brookings Institution	April 13, 2011
Dunaway, Steven	Council on Foreign Relations	February 25, 2011
Economy, Elizabeth	Council on Foreign Relations	February 25, 2011
Ernst, Dieter	East-West Center	June 15, 2011
Esarey, Ashley	Whitman College, Harvard University, and University of Washington	March 10, 2011
Ford, Christopher A.	The Hudson Institute	March 10, 2011
Fung, K.C.	University of California at Santa Cruz	March 30, 2011

**Alphabetical Listing of Panelists Testifying before the USCC**  
***Continued***

<b>Panelist Name</b>	<b>Panelist Affiliation</b>	<b>USCC Hearing</b>
Garver, John W.	Georgia Institute of Technology	April 13, 2011
Gomory, Ralph E.	NYU Stern School of Business and Alfred P. Sloan Foundation	June 15, 2011
Gorton, Thomas Slade	Former U.S. Senator from the state of Washington	May 4, 2011
Helvey, David	U.S. Department of Defense	April 13, 2011
Hinchey, Maurice	U.S. Representative from the state of New York	March 30, 2011
Hindery Jr., Leo	New America Foundation	June 15, 2011
Huang, Yukon	Carnegie Endowment for International Peace	February 25, 2011
Hwang, Balbina Y.	Georgetown University	January 27, 2011
Inouye, Daniel *	U.S. Senator from the state of Hawaii	January 27, 2011
Johnson, Bill *	U.S. Representative from the state of Ohio	April 13, 2011
Kaufman, Alison *	CNA	March 10, 2011
Kritenbrink, Daniel J.	U.S. Department of State	April 13, 2011
Krolikowski, Alanna	The George Washington University Space Policy Institute and University of Toronto	May 11, 2011
Lampton, David M.	The Johns Hopkins University, SAIS	March 10, 2011
Lawrence, Susan V.	Congressional Research Service	April 13, 2011
Lee, Thea Mei	AFL-CIO	May 4, 2011
Levy, Philip I.	American Enterprise Institute	June 15, 2011
Libicki, Martin C.	The RAND Corporation	January 27, 2011
MacDonald, Bruce W.	U.S. Institute of Peace	May 11, 2011
Mann, James	The Johns Hopkins University, SAIS	February 25, 2011
Mastro, Oriana Skylar	Princeton University	January 27, 2011
Michaud, Michael A.*	U.S. Representative from the state of Maine	March 30, 2011
Moltz, James Clay	Naval Postgraduate School	May 11, 2011

**Alphabetical Listing of Panelists Testifying before the USCC**  
*Continued*

<b>Panelist Name</b>	<b>Panelist Affiliation</b>	<b>USCC Hearing</b>
Moran, Theodore H.	Georgetown University and Peterson Institute for International Economics	March 30, 2011
Naughton, Barry J.	University of California	March 30, 2011
Neuffer, John	Information Technology Industry Council	June 15, 2011
Newmyer Deal, Jacqueline A.	Long Term Strategy Group and Foreign Policy Research Institute	March 10, 2011
Pace, Scott	The George Washington University	May 11, 2011
Park, John S.	U.S. Institute of Peace	March 10, 2011
Pedrozo, Stacy A.	Council on Foreign Relations	January 27, 2011
Pham, J. Peter	Atlantic Council	April 13, 2011
Prasad, Eswar S.	Cornell University and The Brookings Institution	June 15, 2011
Rawnsley, Gary D.*	University of Leeds (UK)	March 10, 2011
Rohrabacher, Dana	U.S. Representative from the state of California	April 13, 2011
Rosen, Daniel H.	Rhodium Group and Peterson Institute for International Economics	March 30, 2011
Rozman, Gilbert	Princeton University and Woodrow Wilson Center	March 10, 2011
Sauvant, Karl P.	Columbia University	March 30, 2011
Schlesinger, Michael	International Intellectual Property Alliance	May 4, 2011
Schulte, Gregory L.	U.S. Department of Defense	May 11, 2011
Scissors, Derek	The Heritage Foundation	March 30, 2011
Scobell, Andrew*	The RAND Corporation	March 10, 2011
Scott, Robert E.	Economic Policy Institute	March 30, 2011
Segal, Adam	Council on Foreign Relations	June 15, 2011
Sherman, Brad	U.S. Representative from the state of California	May 4, 2011
Shih, Willy C.	Harvard Business School	June 15, 2011
Small, Andrew	German Marshall Fund of the United States	April 13, 2011



**Alphabetical Listing of Panelists Testifying before the USCC**  
***Continued***

<b>Panelist Name</b>	<b>Panelist Affiliation</b>	<b>USCC Hearing</b>
Stokes, Mark A.	Project 2049 Institute	March 10, 2011 May 11, 2011
Tanner, Murray Scot	CNA	February 25, 2011
Thomas, Jim	Center for Strategic and Budgetary Assessments	January 27, 2011
Wachman, Alan M.	Tufts University	April 13, 2011
Wasch, Ken	Software & Information Industry Association	May 4, 2011
Watts, Barry	Center for Strategic and Budgetary Assessments	May 11, 2011
Weitz, Richard	The Hudson Institute	April 13, 2011
Whyte, Martin K.	Harvard University	February 25, 2011
Wittman, Rob	U.S. Representative from the state of Virginia	January 27, 2011
Wolf, Frank	U.S. Representative from the state of Virginia	May 11, 2011
Wolff, Alan Wm.	Dewey & LeBoeuf, LLP	May 4, 2011

\*Submitted material for the record.

**APPENDIX IV**  
**INTERLOCUTORS' ORGANIZATIONS**

**Asia Fact Finding Trips**  
**December 2010 and August 2011**

**SINGAPORE AND INDONESIA, DECEMBER 10–18, 2010**

**During the visit of a U.S.-China Commission delegation to Singapore and Indonesia in December 2010, the delegation met with representatives of the following organizations:**

***In Singapore***

**U.S. Government**

- U.S. Embassy in Singapore

**Government of Singapore**

- Ministry of Foreign Affairs
- Ministry of Defense
- Republic of Singapore Navy
- Economic Development Board

**Research Organizations**

- Rajaratnam School of International Studies
- East Asian Institute

***In Indonesia***

**U.S. Government**

- U.S. Embassy in Jakarta

**Government of Indonesia**

- Indonesia Investment Coordinating Board (BKPM)
- Ministry of Foreign Affairs (KEMLU)
- National Economic Committee
- Ministry of Trade (KEMDAG)
- Ministry of Defense (KEMHAN)
- National Resilience Institute of Indonesia (LEMHANAS)

**Universities and Research Organizations**

- Center for Strategic and International Studies, Jakarta
- University of Indonesia

**Private Enterprise**

- PT Indika Energy
- Van Zorge, Heffernan & Associates

**Intergovernmental Institutions**

- ASEAN Secretariat
- World Bank Office Jakarta

**CHINA, HONG KONG, AND TAIWAN, AUGUST 6–18, 2011**

**During the visit of a U.S.-China Commission delegation to China, Hong Kong, and Taiwan in August 2011, the delegation met with representatives of the following organizations:**

***In China*****U.S. Government**

- U.S. Embassy in Beijing
- U.S. Consulate in Shanghai

**Government of the People's Republic of China**

- China Investment Corporation
- China Institute of International Studies
- The Chinese People's Institute of Foreign Affairs

**Research and University Organizations**

- Shanghai Scholar Roundtable
- Fudan University
- Shanghai Jiaotong University
- Shanghai Institute for International Studies
- Tongji University

**Private Enterprise**

- China Aerospace Science and Technology Corporation
- China Great Wall Industry Corporation
- Shanghai Academy of Spaceflight Technology
- American Chamber of Commerce Beijing
- American Chamber of Commerce Shanghai
- U.S.-China Business Council
- Korea Business Consultants
- Koryo Tours
- Pan Asia Technical Automotive Center (Shanghai)

***In Hong Kong*****U.S. Government**

- U.S. Consulate in Hong Kong

**Government of the Hong Kong Special Administrative Region**

- Hong Kong Economic and Trade Office

**Private Enterprise**

- American Chamber of Commerce Hong Kong
- Goldman Sachs

**Political Enterprise**

- Hong Kong Pan-Democrats

*In Taiwan*

**U.S. Government**

- American Institute in Taiwan

**Government of Taiwan**

- President Ma Ying-Jeou
- Legislative Yuan
- Ministry of Foreign Affairs
- Ministry of Defense
- Ministry of Economic Affairs
- National Security Council
- Mainland Affairs Council

**Political Enterprise**

- Taiwan Democratic Progressive Party



**APPENDIX V**  
**LIST OF RESEARCH MATERIAL**  
**Contracted and Staff Research Reports**  
**Released in 2011**

*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**

***An Analysis of State-owned Enterprises and State Capitalism in China***

Prepared for the USCC by Andrew Szamosszegi and Cole Kyle/  
Capital Trade, Inc.

October 2011

[http://www.uscc.gov/researchpapers/2011/10\\_26\\_11\\_CapitalTradeSOEStudy.pdf](http://www.uscc.gov/researchpapers/2011/10_26_11_CapitalTradeSOEStudy.pdf)

***China's Program for Science and Technology Modernization: Implications for American Competitiveness***

Prepared for the USCC by Micah Springut, Stephen Schlaikjer, and  
David Chen/CENTRA Technology, Inc.

April 2011

[http://www.uscc.gov/researchpapers/2011/USCC\\_REPORT\\_China%27s\\_Program\\_forScience\\_and\\_Technology\\_Modernization.pdf](http://www.uscc.gov/researchpapers/2011/USCC_REPORT_China%27s_Program_forScience_and_Technology_Modernization.pdf)

***Ready for Takeoff: China's Advancing Aerospace Industry***

Prepared for the USCC by Roger Cliff, Chad J.R. Ohlandt, and  
David Yang/RAND Corporation

March 2011

[http://www.uscc.gov/researchpapers/2011/RAND\\_Aerospace\\_Report%5b1%5d.pdf](http://www.uscc.gov/researchpapers/2011/RAND_Aerospace_Report%5b1%5d.pdf)



***The Evolving Role of China in International Institutions***

Prepared for the USCC by Stephen Olson and Clyde Prestowitz/  
The Economic Strategy Institute

January 2011

<http://www.uscc.gov/researchpapers/2011/TheEvolvingRoleofChinainInternationalInstitutions.pdf>

**Staff Research Reports and Backgrounders**

***China's Foreign Assistance in Review***

Written by USCC staff members Jonathan Weston,  
Caitlin Campbell, and Katherine Koleski

September 2011

[http://www.uscc.gov/researchpapers/2011/9\\_1\\_%202011\\_ChinasForeignAssistanceinReview.pdf](http://www.uscc.gov/researchpapers/2011/9_1_%202011_ChinasForeignAssistanceinReview.pdf)

***The Confucian Revival in the Propaganda Narratives of the Chinese Government***

Written by USCC Research Coordinator John Dotson

July 2011

[http://www.uscc.gov/researchpapers/2011/Confucian\\_Revival\\_Paper.pdf](http://www.uscc.gov/researchpapers/2011/Confucian_Revival_Paper.pdf)

***The Chinese People's Liberation Army Delegation Visit to the United States, May 2011: A Summary of Key Actors and Issues***

Written by USCC Research Fellow Amy Chang

June 2011

[http://www.uscc.gov/PLA\\_Delegation\\_Visit\\_to\\_U.S.\\_May\\_2011\\_Backgrounder.pdf](http://www.uscc.gov/PLA_Delegation_Visit_to_U.S._May_2011_Backgrounder.pdf)

***Backgrounder: China's 12th Five-Year Plan***

Written by USCC Research Assistant Katherine Koleski and  
Research Fellow Joseph Casey

June 2011

[http://www.uscc.gov/researchpapers/2011/12th-FiveYearPlan\\_062811.pdf](http://www.uscc.gov/researchpapers/2011/12th-FiveYearPlan_062811.pdf)

***Backgrounder: China in Latin America***

Written by USCC Research Assistant Katherine Koleski  
May 2011

[http://www.uscc.gov/Backgrounder\\_China\\_in\\_Latin\\_America.pdf](http://www.uscc.gov/Backgrounder_China_in_Latin_America.pdf)

***Going Out: An Overview of China's Outward Foreign Direct Investment***

Written by USCC Policy Analyst Nargiza Salidjanova

March 2011

<http://www.uscc.gov/researchpapers/2011/GoingOut.pdf>

***The National Security Implications of Investments and  
Products from the People's Republic of China in the  
Telecommunications Sector***

Prepared by USCC staff with the support of Reperi LLC  
January 2011

*<http://www.uscc.gov/RFP/2011/FINALREPORT> TheNational  
SecurityImplicationsofInvestmentsandProductsfromThePRC  
intheTelecommunicationsSector.pdf*



## APPENDIX VI

### ACRONYMS AND ABBREVIATIONS

AFL–CIO	American Federation of Labor–Congress of Industrial Organizations
ASEAN	Association of Southeast Asian Nations
CAIFC	China Association for International Friendly Contact
CBRC	China Banking Regulatory Commission
CCTV 7	China Central Television 7
CFIUS	Committee on Foreign Investment in the United States
CIC	China Investment Corporation
CIRC	China Insurance Regulatory Commission
CNOOC	China National Offshore Oil Corporation
CNPC	China National Petroleum Corporation
CCP	Chinese Communist Party
CRS	Congressional Research Service
CPD	Center for Peace and Development
CSRC	China Securities Regulatory Commission
CZ	Chang Zheng (family of rockets)
DoD	Department of Defense
EEZ	Exclusive economic zone
EOS	Earth observation system
EU	European Union
FDI	Foreign direct investment
GDP	Gross domestic product
GPA	WTO Agreement on Government Procurement
Km	Kilometer
MLP	Medium- and Long-Term Plan for the Development of Science and Technology
NDRC	National Development and Reform Commission
OECD	Organization for Economic Cooperation and Development
PLA	People’s Liberation Army
PRC	People’s Republic of China
R&D	Research and development
RMB	Renminbi
SASAC	State-owned Assets Supervision and Administration Commission
SCO	Shanghai Cooperation Organization
SEI	Strategic Emerging Industry
Sinopec	China Petroleum and Chemical Corporation
SOE	State-owned enterprise
UN	United Nations
USTR	United States Trade Representative
VAT	Value-added tax

WAPI	Wired Authentication and Privacy Infrastructure Standard
WTO	World Trade Organization

**2011 COMMISSION STAFF**

MICHAEL R. DANIS, *Executive Director*  
 KATHLEEN J. MICHELS, *Associate Director*  
 DANIEL M. HARTNETT, *Senior Policy Analyst Military and Security Issues*  
 PAUL C. MAGNUSSON, *Senior Policy Analyst Economics and Trade Issues*  
 JOHN D. DOTSON, *Research Coordinator*  
 JONATHAN G. WESTON, *Congressional and Public Affairs Coordinator*

CAITLIN E. CAMPBELL, *Policy Analyst for Energy and Foreign Affairs*  
 DOUGLAS G. FEHRER, *Human Resources Coordinator*  
 CHRISTOPHER P. FIORAVANTE, *Travel and Procurement Assistant*  
 M.L. FAUNCE, *Administrative-Program Specialist*  
 RICHARD KOMAIKO, *Senior Staff Research Fellow, Economics and Trade Issues*  
 TIMOTHY L. LIPKA, *Administrative-Program Assistant*  
 NARGIZA SALIDJANOVA, *Policy Analyst for Economics and Trade Issues Policy*  
 ROBERT G. SHELDON, *Policy Analyst for Military and Security Issues Policy*  
 KATHLEEN WILSON, *Budget and Accounting Specialist*

**ACKNOWLEDGEMENTS**

The Commission would like to express its deep appreciation to those who testified before the Commission as expert witnesses, the researchers and analysts who prepared research papers under contract to the Commission, and others who assisted with the Commission's work by briefing the Commissioners on a wide array of economic and security issues. All these efforts helped inform the Commission's and the public's debate on issues vital to ongoing U.S.-China relations.

The Commission offers its special thanks to The Honorable Kurt M. Campbell, Assistant Secretary of State for East Asian and Pacific Affairs and staff for their outstanding support of the Commission's fact-finding trip to China, Hong Kong, and Taiwan in August 2011. The Members of the Commission also owe a deep debt of gratitude and thanks to the following officials of the State Department, U.S. Embassies and Consulates: U.S. Embassy Beijing Deputy Chief of Mission Robert S. Wang, and staff for their outstanding support during the Commission's delegation visit to Beijing and Shanghai, including Carl T. Watson and Amanda H. King in Beijing, and David C. Ng in Shanghai, who were instrumental in arranging and helping the Commission to meet its schedule of meetings with officials in Beijing and Shanghai. The Honorable Stephen M. Young, U.S. Consul Hong Kong, and staff, including Kim Liao and Stephanie Boven for their technical assistance and logistical support in setting up meetings with government officials and political and opinion leaders. Their advice and assistance were instrumental in the success of the Commission's visit to Hong Kong. And finally, a special thanks to The Honorable William A. Stanton, American Institute-Taiwan, and staff members Jennifer Health and Justin G. Miller, for the outstanding assistance and technical support provided during the Commission's delegation visit to Taiwan, which was instrumental in the Commission's ability to meet with government officials and political leaders.

The Commissioners also wish to thank Admiral Robert F. Willard, Commander U.S. Pacific Command; and other key officials, including Rear Admiral Thomas K. Shannon, Deputy Chief of Staff for Operations, Training and Readiness, U.S. Pacific Fleet; Brigadier General Michael A. Keltz, Deputy Director of Operations, Plans, Programs and Requirements, Headquarters Pacific Air Forces; Colonel James Reilly, Chief of Staff, U.S. Marine Corps Forces Pacific; and staff members James Seatris, Charlie Johnson, William Chambliss, and Tim Roy for their outstanding assistance, which was instrumental in the success of the Commission's visit to Hawaii. The Commissioners are also grateful to the agencies of the intelligence community that briefed Commissioners on key issues of importance to the U.S.-China relationship.

The Commissioners also express their special thanks to former program staff members Lee Levkowitz, Foreign Affairs and Energy Analyst; Katherine Koleski, Research Assistant; and Daniel Neumann, Economics and Trade Analyst. A special thanks also to current and former interns and fellows, who assisted the Commissioners and staff during this Report cycle by preparing research material and background information and by providing administrative and program support for the 2011 briefings and public hearings. They include Nathan Beauchamp-Mustafaga, Joseph Casey, Wilfred Chan, Amy Chang, Jeffrey Chivers, Benjamin Cmejla, Brendan Cooley, Kathleen Crowe, Elizabeth Flora, Ashley Johnson, Cory Johnson, Lauren Sprott, Jesse Walter, Olivia Wang, Gavin Williams, Lisa Zhang, and Shelly Zhao.



The Commissioners are especially grateful to Michael R. Danis, executive director, for his efforts in organizing the work of the Commission and in the preparation of the final Report to Congress, and offer special thanks to Senior Policy Analysts Daniel M. Hartnett, Paul C. Magnusson, and John D. Dotson for their exceptional expertise and guidance provided to the staff analysts during the drafting of the Report, and to Rona Mendelsohn, who served as technical editor. They also express their thanks to the policy analyst staff for their exemplary assistance in framing the debate and assisting in the writing and editing of the final report.