EXECUTIVE SUMMARY

The U.S.-China Economic and Security Review Commission's 2010 Annual Report to Congress sets forth the Commission's analysis of the U.S.-China relationship in the topical areas designated by its Congressional mandate. These areas are China's proliferation practices, the qualitative and quantitative nature of economic transfers of U.S. production activities to China, the effect of China's development on world energy supplies, the access to and use of U.S. capital markets by China, China's regional economic and security impacts, U.S.-China bilateral programs and agreements, China's record of compliance with its World Trade Organization (WTO) commitments, and the implications of China's restrictions on freedom of expression. Our analysis, along with recommendations to Congress for addressing these identified concerns, is chronicled in the Report's six chapters and summarized herein.

OVERALL ASSESSMENT OF U.S.-CHINA ECONOMIC AND SECURITY RELATIONS

Congress gave the Commission the mission of evaluating "the national security implications of the bilateral trade and economic relationship between the United States and the People's Republic of China" and required of the Commission an annual report of its evaluation and findings. The Commission adopts a broad interpretation of "national security" in evaluating how the U.S.-China relationship affects the economic health and industrial base of the United States and the state of U.S. economic and security interests and influence in Asia.

As in its previous Annual Reports, the Commission sees progress on some issues, notably the environment and Taiwan, but the intensification of a number of troubling trends. The Commission also notes that it continues to stand behind both its conclusions as enunciated in the previous Reports to Congress and its recommendations to Congress contained in those Reports, and it does not routinely repeat either its conclusions or recommendations contained in prior Reports.

KEY CONCLUSIONS AND RECOMMENDATIONS

The Report presents its conclusions, analyses, and recommendations to Congress in 13 sections organized into six chapters. The Commission has attempted to take an integrated approach to its assessments, believing that economic, security, and other issues are interrelated. The intersections of U.S. geopolitical, economic, security, diplomatic, and cultural interests form a complex web of concerns that are connected to the overall relationship between the United States and the People's Republic of China.

The Commission's conclusions are incorporated in this Executive Summary. At the end of this summary, the Commission's ten key recommendations are listed. The Commission makes a total of 45 recommendations to Congress in this Report, with those pertaining to each of the chapters appearing at the conclusion of the chapter. A comprehensive list is provided beginning on page 271.

The U.S.-China Trade and Economic Relationship

Despite the effects of the global financial crisis, China's economy has continued to grow rapidly in 2010, surpassing Japan as the world's second largest economy this year. As a result, China has grown more assertive in pressing its interests in economic fora such as the International Monetary Fund (IMF) and the Group of Twenty nations (G-20). China maintains an export-driven economy through policies such as undervaluation of its currency, the renminbi (RMB), and support for domestic companies to the detriment of foreign competitors. The Chinese government has been reluctant to revalue its currency due to its expressed concerns that it may damage its exporting industries, thus threatening social stability and continued economic growth.

In order to support its export-promoting economic policies and suppress the value of the RMB, the Chinese government has continued channeling its foreign exchange earnings into U.S. government debt, becoming the single largest foreign purchaser of U.S. Treasuries. Although the size of China's holdings has raised concerns about the degree of influence China has on the U.S. economy, the lack of alternatives and the potential detrimental impacts on China's economy make it unlikely that China would stop buying U.S. debt or liquidate its holdings altogether.

Since China joined the WTO in 2001, trade between the United States and China has grown rapidly, but this growth has been very unbalanced, with the United States running record trade deficits. Many American companies have taken advantage of investment incentives, subsidies, and lower labor costs to shift production to China. Within the last year, the Chinese government has initiated new industrial policies, such as "indigenous innovation," which have further slowed the pace of economic reform and affected the ability of American companies to operate and compete in China. Such policies have also harmed U.S. exporters and import-sensitive domestic firms. To resolve these trade imbalances, the United States has sought remedial action through the WTO, but the lengthy process has at times done irreparable harm to U.S. companies before relief has been granted. WTO cases, while important, are frequently inadequate to address the full range of trade-distorting aspects of China's industrial policies.

Conclusions

The U.S.-China Trade and Economic Relationship's Current Status and Significant Changes During 2010

• For the first eight months of 2010, China's goods exports to the United States were \$229.2 billion, while U.S. goods exports to China were \$55.8 billion, with the U.S. trade deficit in goods at \$173.4 billion, an increase of 20.6 percent over the same period in 2009 (\$143.8 billion). This constitutes a four-to-one ratio of Chinese exports to its imports from the United States.

- The U.S. trade deficit with China is a major drag on the U.S. economy. Despite the global financial crisis, China gained an even greater share of the U.S. trade deficit, while the overall U.S. trade deficit declined. The deficit in goods with China is by far the largest among U.S. trading partners: 45 percent of the total in 2009 and 41.5 percent of the total for the first eight months of 2010.
- China's government policies limit the ability of foreign companies to obtain Chinese government procurement contracts and to make sales to China's state-owned enterprises, most recently through China's new "indigenous innovation" policy. Companies in the United States and Europe have protested this discriminatory treatment.
- Since June 19, 2010, the RMB appreciated by just 2.3 percent against the dollar (as of October 2010). The RMB remains substantially undervalued against the dollar, which subsidizes Chinese exporters to the detriment of U.S. domestic producers. China's undervalued currency also helps attract foreign companies to locate production in China.
- China continues to pursue a long-term goal of making the RMB a more international currency, starting with the introduction of several policies designed to make trade and bond issuance in the RMB easier, particularly among China's Asian neighbors. China's reforms thus far have had little effect on the RMB's use in international trade.
- As in previous years, the United States engaged China at several bilateral and multilateral negotiations, including the Strategic and Economic Dialogue and meetings of the Group of 20, to address China's discriminatory trade policies, but again failed in 2010 to secure any significant agreements or Chinese policy changes.

The Implications and Repercussions of China's Holdings of U.S. Debt

- The United States need not fear a large sale of U.S. bonds by China nor a wholesale switch by China to investing in the bonds of another country. Because China holds such a large amount of dollar-denominated investments, including the bonds of U.S.-government owned Fannie Mae and Freddie Mac, and because the alternative investments in the euro and the yen are so limited, China has few alternatives to the dollar for its foreign reserves.
- Over the past decade, the government of the People's Republic of China has become the largest purchaser of U.S. debt. China implements a deliberate economic policy that relies on exports and foreign investment capital to amass a large current account surplus with the United States. That trade surplus is loaned back to the United States as part of China's deliberate policy.
- China manipulates the value of its currency, the RMB, by requiring its citizens, businesses, and exporters to trade their dollars for RMB. By limiting the dollars in circulation within China, the

government can then set a daily exchange rate between the RMB and the dollar. China maintains an artificially low value for the RMB that is estimated to be between 20 percent and 40 percent lower than it would otherwise be, if it were allowed to respond to market forces.

- China's export-led growth strategy requires China to continue to run large trade surpluses with the United States and to recycle its accumulated dollars through the purchase of U.S. dollar-denominated securities. Recycling dollars back into the U.S. economy helps China to maintain the artificially low value of the RMB. China's currency policy harms U.S. exporters and importsensitive manufacturers in the United States, though the policy aids consumers in the United States by keeping interest rates and prices low.
- A relaxation of China's currency policy would require China to end its capital controls. Easing China's capital controls would help to rebalance the economic relationship between the two countries.

Evaluating China's Past and Future Role in the World Trade Organization

- Since China's accession to the WTO in 2001, the annual U.S. current account deficit with China has grown from \$89 billion in 2001 to \$264 billion in 2009. Predictions of a more balanced trade relationship between the two countries as a result of China's membership in the WTO have proven false. Since China's entry into the WTO in 2001, the United States has run a cumulative deficit in goods with China of over \$1.76 trillion.
- Predictions that China's WTO accession would lead to the transformation of China's authoritarian government and enhance U.S. national security have not been borne out.
- Though China's implementation of its WTO commitments has led to a reduction in tariffs, the elimination of some nontariff barriers, and improved market access for some U.S. companies, in other areas significant problems persist. These can be traced to China's pursuit of policies that rely on trade-distorting government intervention intended to promote China's domestic industries and protect them from international competition.
- China, the biggest producer of rare earth elements in the world, has introduced measures aimed at restricting exports to foreign markets, to the detriment of foreign producers of a variety of cutting-edge technologies, including green and clean technologies and weapons systems. Such export restrictions provide an unfair advantage to Chinese technology producers.
- China's progress toward market liberalization has slowed in some sectors and has been reversed in others, such as government procurement and financial services.
- The U.S. government has filed a variety of WTO cases against China's barriers to trade. These WTO cases, while important, frequently fail to deal with the underlying causes of the U.S.-China

trade deficit. WTO dispute resolution may be a poor tool for addressing such issues as China's currency manipulation and the trade-distorting aspects of China's industrial policy.

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

As a component of its overall desire to field a modern military, China is modernizing its air and missile forces and improving its capabilities to conduct offensive air and missile operations. Recent modernization efforts have centered on developing modern combat and combat support aircraft, expanding its conventional ballistic and cruise missile arsenal, and improving the professionalism and training of its personnel. These improvements have expanded China's ability to operate outside its borders and reach U.S. regional allies, such as Japan, as well as U.S. forces in the region.

In order to improve its military aircraft as well as develop a globally competitive aviation manufacturing industry, China is providing strong fiscal and political support and guaranteed market access to domestic aviation manufacturing firms. Foreign aviation manufacturing firms, such as Boeing and Airbus, are compelled to provide technology and know-how offsets in return for market access. In addition, advances in China's commercial aviation sector bolster progress in China's military aviation manufacturing industry.

Conclusions

China's Growing Air and Conventional Missile Capabilities

- Over the past decade, as part of its overall military modernization, China has significantly modernized its air and missile capabilities. This modernization process is across the board, to include foreign purchases and indigenous production of aircraft, weapons, and equipment. In addition, institutional changes such as organizational, personnel, and training reforms continue to improve the People's Liberation Army (PLA) Air Force's capacity to conduct operations.
- Augmenting its modernization efforts, Beijing has expanded the PLA Air Force's focus in recent years from solely concentrating on territorial defense operations to now include extraterritorial offensive operations.
- Simultaneous with the modernization of China's Air Force, Beijing has also strengthened the PLA's ability to conduct conventional missile strikes. Improvements include fielding increased numbers and types of more accurate conventional ballistic and land-attack cruise missiles.
- As China's air and missile modernization efforts progress, Beijing's ability to threaten U.S. forward deployed forces and bases in the region is improving. Any PLA missile strikes and air raids against U.S. bases, if successful, could force the temporary closure of regional U.S. bases and inhibit the U.S. military's ability to operate effectively in East Asia. In addition, the future deployment of an antiship ballistic missile could seriously interfere with the U.S. military's freedom of access to the region.

Developments in China's Commercial and Military Aviation Industry

- Given the close integration of China's commercial and military aviation sectors, advances in China's commercial aviation industry gained through interactions with western aviation manufacturers directly benefit China's defense aviation industry. As China's commercial aircraft manufacturing capabilities improve, newly acquired technology and know-how, such as composite materials production, are directly transferred to the defense aviation sector.
- Over the past decade, China's aviation industrial base, with the strong support of the Chinese government, has improved substantially. China currently is capable of developing and producing both advanced commercial and military aircraft and seeks to compete with foreign aviation manufacturing companies in the near future. Despite these advances, however, the industry continues to experience some problems, most notably in producing advanced engines.
- China's aviation industrial base benefits from several practices that bear watching. In particular, the industry enjoys strong government support that favors domestic firms over foreign firms and also benefits from technology and know-how offsets from western aviation firms in exchange for market access.
- Developments in China's aviation industry pose both benefits and challenges to the United States. In the near term, U.S. aviation manufacturing firms stand to benefit from increased aviation exports to China. However, as China's aviation manufacturing firms improve, U.S. aircraft and aviation component manufacturing companies will likely face increased competition from these aviation firms in China's domestic, third country, and U.S. markets.

China in Asia

In recent years, China's rise is increasingly evident in Asia. In Southeast Asia, Beijing has combined economic, diplomatic, and security engagement to increase its influence in the region. However, China's recent assertiveness in the region, including its maritime claims in the South China Sea and its construction of controversial dams along the Mekong River, have led many Southeast Asian nations to engage more actively with the United States.

China has also increased its economic and diplomatic interactions with Taiwan, through more numerous official visits and the June 2010 signing of a historic trade liberalization pact, the Economic Cooperation Framework Agreement. Nevertheless, China's continued military buildup against Taiwan has resulted in a balance that increasingly favors the mainland, especially in regard to Taiwan's air defense capabilities.

During the Commission's July 2010 fact-finding trip to Hong Kong, meetings with Hong Kong and U.S. government officials and private sector representatives highlighted the rising economic and political influence of China within Hong Kong. Hong Kong has benefited economically from its integration with mainland China, but concerns over political freedoms, rule of law, and pollution from the mainland continue to be of growing concern in the relationship.

Conclusions

China in Southeast Asia

- China's political, economic, energy, and security interactions with Southeast Asia have increased significantly in recent years and are expected to increase in the future.
- Tensions in the South China Sea and East China Sea, dam construction along the Mekong River, and Southeast Asian historical mistrust may limit China's influence in the region.
- Many Southeast Asian nations are looking to increase their relationships with the United States in order to hedge against China's growing presence in the region.
- China's assertiveness in the South China Sea constitutes a potential threat to U.S. interests, including the freedom of navigation.

Taiwan

- Over the past year, China and Taiwan have continued to improve their overall bilateral relationship. This improvement builds upon a trend begun at least in May 2008, with the inauguration of Taiwan President Ma Ying-jeou.
- The improvements in the cross-Strait relationship are not even across the board. Most improved are the bilateral economic ties, as demonstrated by the recent signing of a cross-Strait free trade agreement between China and Taiwan. Diplomatic relations, while less improved than the economic relationship, have also seen progress over the past year. Periodic meetings and negotiations between Taipei and Beijing have become the norm.
- The cross-Strait security situation is still of serious concern. China's continued military buildup across from Taiwan is increasing the gap in military capabilities between the two sides. In particular, Taiwan's air defense capabilities are degrading as its air force ages and the PLA's air and missile capabilities improve.

Hong Kong

- In 2010, efforts to transition elections for Hong Kong's Legislative Council to universal suffrage, agreed to in the Joint Declaration, were once again delayed, which was met with controversy among Hong Kong's democracy supporters. Also in 2010, the freedom of the press in Hong Kong remains an ongoing struggle.
- Hong Kong is facing a number of environmental problems due to its proximity to the manufacturing hub of the Pearl River Delta.
- Hong Kong's economy has noticeably recovered from the 2009 downturn due to a targeted economic stimulus that focused on small- and medium-sized enterprises.

China's Green Energy Policies and Efforts to Promote Alternative Energy Sectors

China has taken significant steps to increase the use of cleaner forms of energy as its leaders have realized that the country's current energy structure is directly affecting its economy and security. Chinese leaders view the promotion of green energy and environmental policies as a means to curb demand and increase energy security. In addition, Beijing hopes that promoting green technology can help to mitigate the polluting effects of China's increasing energy use and help to establish a new, internationally competitive, green energy industry. Despite noteworthy accomplishments, China's green energy efforts are and have been hampered by problems with enforcement as well as by increases in China's incessant energy demands.

In order to promote green energy and increase China's global market share, China has added alternative and renewable technologies to its growing list of favored and subsidized industries. China also intends to establish certain alternative energy industries as "national champions," able to dominate domestic and export markets. To that end, China has made its own renewable energy market increasingly difficult for foreign companies to enter and to compete against Chinese firms. As a result of China's comprehensive programs of subsidies and domestic market protections, many U.S. companies are at a strategic disadvantage in the global alternative and renewable energy markets.

Conclusions

China's Environmental and Green Energy Policies

- China has devoted a significant amount of money and has developed legislation in an effort to find alternative sources for energy, improve energy efficiency, protect the environment in the country, and build sectors of its economy.
- Despite progress in reducing pollutants and increasing green energy over the short term, significant problems such as lack of compliance at the local level and China's economic development plans may make it harder to sustain this progress over the long term.
- China's domestic legislation on green energy has been more substantive than its commitments in international climate change negotiations. Despite the fact that China believes it is in its domestic interest to curb energy inefficiency and carbon emissions, Beijing is reluctant to be held accountable for reductions on the international stage.
- The United States and China share many similar challenges in their quest for green energy and could have much to gain from cooperation on these issues.

U.S. and Chinese Efforts to Promote Alternative Energy Manufacturing

- China is developing a leading wind turbine and solar panel manufacturing sector. These sectors are intended to become the dominant world suppliers while serving China's growing domestic market.
- China has set ambitious goals for the level of solar, wind, and nuclear power generation through its Renewable Energy Law and 11th Five Year Plan. This effort includes a substantial renewable portfolio standard, requiring that China's power supply further diversify by 2020 to emphasize noncoal and nonnuclear power sources.
- China has a well-developed, long-term strategy for investment in the green technology manufacturing sector, which gives it a competitive advantage.
- Ohio is one of 30 states that have adopted renewable portfolio standards designed to spur the deployment of renewable energy projects.

China and the Internet

The Chinese government continues to maintain a sophisticated Internet filtering system to restrict freedom of speech. Beyond filtering, the Chinese government has increasingly sought to direct public discussion over the Internet. Beijing outsources much of its censorship activities to the private sector. Moreover, the penetration of Google's computer network this year has renewed concerns about the Chinese government's tolerance or possible sponsorship of malicious computer activity.

Conclusions

China's Domestic Internet Censorship Practices

- Chinese authorities have managed skillfully to balance their perceived need to limit speech on the Internet with the Chinese public's need to feel a part of an ongoing and participatory discourse about the country's social conditions. The Chinese government has used all available means to bind the content and scope of this conversation. At the same time, the government has been selectively responsive and has attempted to remediate some of the nation's most serious irritants in order for the Chinese Communist Party to maintain power. This confluence of conditions might be termed "network authoritarianism."
- China's leadership views information and communications technologies as presenting opportunities for economic development and enabling the distribution of propaganda at home and abroad in support of Chinese Communist Party interests. Conversely, the Chinese government views these technologies as a threat to regime stability and the Party's ability to control the flow of information and freedom of expression.

- Beijing continues to institutionalize and promote strict Internet governance through numerous laws and regulations as well as rigorous oversight and enforcement from government organizations. Chinese authorities also influence and guide the nature and tone of discussions online.
- The Chinese government outsources much of its censorship activities to the private sector. The popular search engine Baidu serves as a useful case study of this dynamic. The firm, established in part with the help of U.S. capital, plays a key role in China's censorship regime. With Google's smaller presence in China, Baidu and its American investors stand to reap greater profits.
- China's Internet censorship activities have broad implications for the United States. Impeded information flows are destabilizing, particularly in the context of a crisis. Moreover, censorship in some respects is actually a barrier to trade, thereby undermining U.S. businesses' ability to operate in China.

External Implications of China's Internet-related Activities

- China's government, the Chinese Communist Party, and Chinese individuals and organizations continue to hack into American computer systems and networks as well as those of foreign entities and governments. The methods used during these activities are generally more sophisticated than techniques used in previous exploitations. Those responsible for these acts increasingly leverage social networking tools as well as malicious software tied to the criminal underground.
- Recent high-profile, China-based computer exploitations continue to suggest some level of state support. Indicators include the massive scale of these exploitations and the extensive intelligence and reconnaissance components.
- In 2010, China's "Great Firewall" affected select U.S. Internet users, and a state-owned Chinese Internet Service Provider "hijacked," or inappropriately gained access to, select U.S. Internet traffic. Other nations were also affected in these incidents.
- Chinese authorities are tightening restrictions on foreign hightechnology firms' ability to operate in China. Firms that fail to comply with the new regulations may be prohibited from doing business in Chinese markets. Firms that choose to comply may risk exposing their security measures or even their intellectual property to Chinese competitors.

Information Control

The Chinese government uses various tools to control access to information beyond Internet censorship. China's state and trade secrets legal and regulatory framework raises questions about foreign firms' ability to operate safely in China, specifically the potential for flexible and arbitrary enforcement of state secrets-related laws. Another major concern is the lack of information about China disclosed by Chinese companies that seek to raise capital in U.S. markets.

Conclusions

- The Chinese government refined its state and trade secrets regime in 2010. This effort yielded some clarifications, but several laws and regulations still contain broad language that allows for ambiguous interpretation and arbitrary enforcement. In recent years, Chinese authorities have enforced these provisions on U.S. citizens doing business in China.
- For U.S.-listed Chinese firms, China's state secrets laws could conceivably conflict with U.S. disclosure requirements. If the firms defer to the Chinese laws, U.S. investments could be at increased risk.
- Official filings from U.S.-listed Chinese companies may not adequately disclose material information that relates specifically to China, such as the pervasiveness of Chinese Communist Party influence in the day-to-day operations of state-owned enterprises and their subsidiaries.

THE COMMISSION'S KEY RECOMMENDATIONS

The Commission believes that ten of its 45 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 45 recommendations appears at the Report's conclusion on page 271.

- The Commission recommends that Congress urge the administration to respond to China's currency undervaluation by
 - a. Working with U.S. trading partners to bring to bear on China the enforcement provisions of all relevant international institutions; and
 - b. Using the unilateral tools available to the U.S. government to encourage China to help correct global imbalances and to shift its economy to more consumption-driven growth.
- The Commission recommends that Congress examine the efficacy of the tools available to the U.S. government to address market access-limiting practices by China not covered by its WTO obligations, and, as necessary, develop new tools.
- The Commission recommends that Congress direct the Department of the Treasury to fully account for all sales of U.S. government debt to foreign governments and holdings of U.S. government debt by foreign governments.
- The Commission recommends that Congress require the Department of Defense, as part of the appropriate Combatant Commander's annual posture statement to Congress, to report on the adequacy of the U.S. military's capacity to withstand a Chinese air and missile assault on regional bases, as well as a list of concrete steps required to further strengthen their bases' capacity to survive such an assault and continue or resume operation.

- The Commission recommends that Congress assess the adequacy of resources available to Department of Defense programs that seek to counter China's antiaccess capabilities. Key programs include long-range strike platforms, electronic warfare systems, and advanced air-to-air platforms and weapons, such as fifth generation fighters and air-to-air missiles.
- The Commission recommends that Congress direct the Department of Defense to address the issue of Taiwan's air defense capabilities, to include a more detailed net assessment of Taiwan's needs vis-à-vis China's growing military air and missile capabilities and an assessment of the impact that further deterioration in Taiwan's air defense capabilities could have on U.S. forces in the event of U.S. involvement in a cross-Strait scenario.
- The Commission recommends that Congress reauthorize the U.S.-Hong Kong Policy Act of 1992, which expired in 2007.
- The Commission recommends that if the United States is to compete successfully in green technology manufacturing, Congress should examine domestic programs available to U.S. producers to ensure that these policies are an adequate response to China's strategic promotion of the green technology sector.
- The Commission recommends that Congress request that the administration periodically issue a single report about the volume and seriousness of exploitations and attacks targeting the information systems of all federal agencies that handle sensitive information related to diplomatic, intelligence, military, and economic issues. To the extent feasible, these reports should indicate points of origin for this malicious activity and planned measures to mitigate and prevent future exploitations and attacks.
- The Commission recommends that Congress direct the Securities and Exchange Commission to require that disclosure documents filed by companies seeking to list on the U.S. exchanges identify the Chinese Communist Party affiliation of board members and senior corporate officials.