

**2005**  
**REPORT TO CONGRESS**  
*of the*  
**U.S.-CHINA ECONOMIC AND  
SECURITY REVIEW COMMISSION**

ONE HUNDRED NINTH CONGRESS  
FIRST SESSION

NOVEMBER 2005

Printed for the use of the  
U.S.-China Economic and Security Review Commission  
Available via the World Wide Web: <http://www.uscc.gov>



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WASHINGTON : 2005



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

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The Commission was created in October 2000 by the Floyd D. Spence National Defense Authorization Act for 2001 sec. 1238, Public Law 106-398, 114 STAT. 1654A-334 (2000) (codified at 22 U.S.C. sec. 7002 (2001)), as amended, and the "Consolidated Appropriations Resolution of 2003," Public Law 108-7, dated February 20, 2003. Public Law 108-7 changed the Commission's title to U.S.-China Economic and Security Review Commission.

The Commission's full charter is available via the World Wide Web: <http://www.uscc.gov> and begins in Appendix I, page 221.

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

NOVEMBER 9, 2005

The Honorable TED STEVENS,  
*President Pro Tempore of the U.S. Senate, Washington, D.C. 20510*  
The Honorable J. DENNIS HASTERT,  
*Speaker of the House of Representatives, Washington, D.C. 20515*

DEAR SENATOR STEVENS AND SPEAKER HASTERT:

On behalf of the U.S.-China Economic and Security Review Commission, we are pleased to transmit the Commission's third Annual Report to the Congress, pursuant to Public Law 106-398 (October 30, 2000), as amended by Division P of P.L. 108-7 (February 20, 2003), responding to the mandate for the Commission "to monitor and 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." The Commission has again reached a broad and bipartisan consensus, approving the Report by a vote of 11 ayes to 1 nay.

The report includes detailed treatment of our investigations of the areas identified by the Congress for our examination and recommendations in the amendments of 2003. These areas are China's proliferation practices; China's economic and security impacts in Asia (we included a review of the Six-Party Talks to secure a termination of North Korea's nuclear weapons programs); China's economic reforms and U.S. economic transfers to China; China's energy needs; China's impact on the process known as "globalization;" the security implications of Chinese firms' access to U.S. capital markets; U.S. investment in China; U.S.-China bilateral programs and agreements; China's record of compliance with its World Trade Organization (WTO) commitments; and the Chinese government's media control actions.

The Commission conducted its work through an extensive set of 14 hearings, taking testimony from over 150 witnesses from the Congress, the executive branch, industry, academia, policy groups, and other experts. It conducted those hearings in Washington, D.C. and in various other locales—Seattle, Washington; Palo Alto, California; Akron, Ohio; and New York City—to assess China's impact in various sectors, industries, and regions of the United States. Commissioners also conducted official visits to China (hosted by the Chinese Ministry of Foreign Affairs), Japan, Taiwan, Hong Kong, Brussels, and Geneva. In all these visits, the Commission delegation met with the official U.S. government representatives, officials of the host government, representatives of U.S. and foreign business interests, representatives of American news media, and outside local experts. For each of its hearings, the Commission produced a transcript and a letter of transmittal to the Congress containing findings and recommendations. These documents are posted on the Commission's Web site (<http://www.uscc.gov>). The Commission also relied substantially on briefings by the intelligence community, the work of its excellent professional staff, and outside research in specialized areas supported by the Commission.

We believe the level of bipartisan consensus the Commission achieved is noteworthy, given the range of important matters the Congress directed us to investigate, and the growing concern over the general direction of the U.S.-China relationship. We believe that China and the United States are the chief protagonists on the world stage, and will remain so for the foreseeable future. Therefore it is crucial that American policymakers in both branches of government reach a strong national consensus about the approach and policies that must be crafted to address the opportunities and challenges that characterize our relations with China. Certainly the adage that political partisanship should end at the water's edge applies to this important relationship, which is affecting the international economic, political, and strategic systems—not only in Asia but worldwide. It will take all of America's political skills, on a bipartisan basis, not only to meet the challenges China presents but also to transform them into opportunities for the common good.

The Report maintains that over the past year, far too little, if any, progress has been made on balance in addressing the major economic and security issues in play in the U.S.-China relationship.

The Commission has continued to operate on the basis of the central principle of its Congressional mandate: that U.S. economic health and well-being are a fundamental national security matter, and that this includes maintenance of a strong manufacturing base, healthy employment levels and economic growth rates, vigorous research and development activity, strong global competitiveness, and a capacity to field robust military forces. During the year, several events occurred which highlighted the generic linkage between economic health and strategic strength, including the attempted acquisition of the American oil company Unocal by the oil concern CNOOC that is partly owned by the Chinese government. The Commission recommended that Congress oppose this acquisition on national security grounds.

Also during the past year, along the lines of Commission recommendations to Congress, a Congressional consensus emerged over the strategic consequences for the U.S. economy of China's continued manipulation of its currency. Indeed, across the range of important elements of the relationship, from China's rapid modernization of its military forces to its focused and aggressive economic policies, the Congress has become a central and active player in fashioning America's policies toward China. In the economic arena, this activism is most appropriate given the fact that the U.S. Constitution gives exclusive power to the Congress to regulate foreign commerce (Article I, Section 8).

The Commission was established in response to the debate that led the Congress to approve Permanent Normal Trade Relations (PNTR) for China and China's admission to the WTO. During that debate the Administration argued strongly that including China in the world trading system would lead to development of a market economy and to political reform and a more open Chinese society. Unfortunately, during the past year it has become clear that the Chinese leadership will not countenance progress on any important features of political reform, human rights, government openness and transparency, media freedom, building democratic institutions, or implementation of the rule of law. Indeed, the opposite is more

often the case as the regime has tightened up in these areas, especially media freedom. While it is unrealistic to expect the United States to fundamentally transform the beliefs, structure, and governing dynamics of China's authoritarian leadership, the Commission believes the United States should continue to strongly advocate democratic values and institution building, remembering that in the past our nation's efforts of this kind were instrumental in facilitating establishment of democracies elsewhere in Asia, including Japan, South Korea, and Taiwan.

The Report includes over fifty recommendations for Congressional action, ranging from providing for fair dealing in a range of economic arenas, to instituting policies on media openness, to enhancing the security of American interests, alliances, and friendships in the Pacific region. Our ten most important recommendations appear on page 14 at the conclusion of the Executive Summary. Among these are two recommendations for bold U.S. initiatives to engage the Chinese and promote cooperation in both the strategic and economic areas: First, we propose that the Congress encourage U.S. initiation of discussions aimed toward obtaining agreement to develop military confidence building measures (CBMs) in the Pacific region and to create bilateral institutions to regularize interaction of the two nations' military forces and provide a mechanism to manage a crisis if it erupts between them. Second, the Commission recommends that Congress mandate the establishment of a U.S.-China Energy Working Group to facilitate cooperative development of technologies and practices to reduce the dependence of both nations on imported oil; and that Congress encourage Administration efforts to persuade China to end its mercantilist practices of acquiring oil at the wellhead throughout the world, purchase oil on the open market, and involve itself in the International Energy Agency's efforts to manage oil supply disruptions.

We offer this third Annual Report to the Congress in the hope that it will be useful as an updated baseline for assessing progress and challenges in the U.S.-China relationship. We believe the current relationship is still in a relatively early stage and the United States is in a position to help influence China to move in directions that will benefit both its own development and cooperative relations with the United States, the rest of Asia, and the entire world community. We are persuaded that our nation's policies toward China are more likely to succeed if they spring from a bipartisan consensus in both the Congress and the Administration. We offer this Report and the continued work of the Commission in the spirit of facilitating and informing that process.

Yours truly,

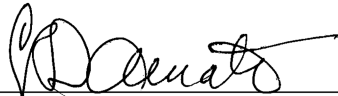


C. Richard D'Amato  
*Chairman*



Roger W. Robinson, Jr.  
*Vice Chairman*

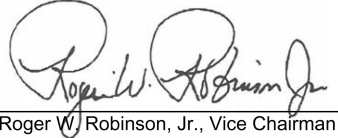
**Commissioners Approving the Report**



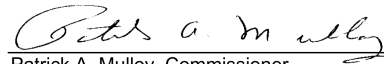
C. Richard D'Amato, Chairman



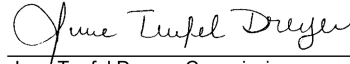
Thomas Donnelly, Commissioner



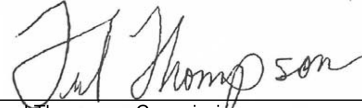
Roger W. Robinson, Jr., Vice Chairman



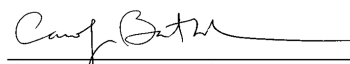
Patrick A. Mulloy, Commissioner



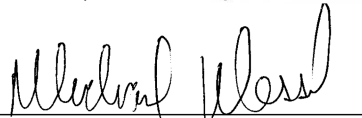
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Fred Thompson, Commissioner



Carolyn Bartholomew, Commissioner



Michael R. Wessel, Commissioner



George Becker, Commissioner




Larry M. Wortzel, Commissioner



Stephen D. Bryen, Commissioner

**Commissioner Dissenting from the Report**



William A. Reinsch, Commissioner

# CONTENTS

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	Page
TRANSMITTAL LETTER TO THE CONGRESS .....	iii
COMMISSIONERS APPROVING THE REPORT .....	vii
EXECUTIVE SUMMARY .....	1
KEY RECOMMENDATIONS TO CONGRESS .....	14
INTRODUCTION .....	19
 <b>2005 REPORT TO CONGRESS OF THE U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION</b> 	
<b>Chapter 1: U.S.-China Trade and Economic Relationship .....</b>	<b>25</b>
Introduction .....	25
1. Impact of U.S.-China Trade and Investment on the U.S. Economy .....	27
2. Assessing and Enforcing China's Compliance with World Trade Organiza- tion Commitments .....	45
3. China's Strategy and Objectives in Global Capital Markets .....	53
4. China's Role in a Globalized Economy and the U.S. Response .....	65
Recommendations .....	69
<b>Chapter 2: China's High-Technology Development and Implications for the U.S. Defense Industrial Base .....</b>	<b>85</b>
Introduction .....	85
1. China's High-Technology Development .....	86
2. Implications for the U.S. Defense Industrial Base .....	97
Recommendations .....	108
<b>Chapter 3: China's Military Power and America's Interests .....</b>	<b>115</b>
Introduction .....	115
1. China's Effort to Dominate the Asia Pacific Region and its Impact on U.S. Interests .....	117
2. The Cross-Strait Political and Economic Relationship .....	129
Recommendations .....	134
<b>Chapter 4: China's Global and Regional Activities and Geostrategic Developments .....</b>	<b>143</b>
Introduction .....	143
1. China's Regional Activities and Their Economic and Security Impacts .....	144
2. China's Proliferation Practices and Record .....	153
3. China's Involvement in Resolving the North Korean Nuclear Crisis .....	161
4. China's Energy Needs and Strategies .....	164
Recommendations .....	172
<b>Chapter 5: China's Media and Information Controls .....</b>	<b>191</b>
Recommendations .....	197
<b>Comprehensive List of the Commission's Recommendations .....</b>	<b>201</b>
<b>Additional Views of Commissioners .....</b>	<b>215</b>
<b>Appendices:</b>	
Appendix I: U.S.-China Economic and Security Review Commission Charter ..	221
Appendix II: Background on Commissioners .....	229
Appendix III: Public Hearings of the Commission .....	241
Appendix IV: List of Research Material .....	255
Appendix V: Abbreviations .....	259
<b>Commission Staff and Acknowledgements .....</b>	<b>263</b>



## **EXECUTIVE SUMMARY**

This Report sets forth the Commission's analysis of the U.S.-China relationship in the topical areas designated in the Commission's Congressional mandate: the areas for the Commission to consider and about which it is to make recommendations to the Congress. These include China's proliferation practices, its economic reforms, U.S. economic transfers to China, China's energy needs, its firms' access to the U.S. capital markets, U.S. investments in China, China's economic and security impacts in Asia, U.S.-China bilateral programs and agreements, China's record of compliance with its World Trade Organization (WTO) commitments, and its government's media control efforts. Our analysis, along with recommendations to the Congress for addressing identified concerns, is chronicled in the Report, and summarized herein.

### **OVERALL ASSESSMENT OF ECONOMIC AND SECURITY CHALLENGES**

Congress gave the Commission the overarching 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 (PRC)," and reporting its evaluation to Congress annually together with its observations specifically concerning the topical areas listed above. The Commission takes a broad view of "national security" in making its assessment and has attempted to evaluate how the U.S. relationship with China affects the economic health of the United States and its industrial base, the military and weapons proliferation dangers China poses to the United States, and the United States' political standing and influence in Asia.

Based on its analyses of developments during the period since its 2004 Annual Report, the Commission concludes that, on balance, the trends in the U.S.-China relationship have negative implications for the long-term economic and security interests of the United States. To prevent or reduce the negative impacts of these trends, the United States needs to establish and implement policies that provide course corrections.

The U.S.-China relationship is not inescapably destined to be adversarial, and certainly not violently so. However, while some encouraging changes are occurring in China, it is vital for the United States to recognize that in many respects China has different interests, goals, and values than the United States, and to reflect those differences in the way it deals with China. In areas where China poses challenges to the United States, the United States must meet the challenges with a variety of tools and approaches, and as aggressively as necessary to protect important U.S. interests.

Perhaps the greatest challenge that faces the United States is to develop a coherent strategic framework for approaching China in a way that does protect vital U.S. interests while recognizing legiti-

mate Chinese aspirations, minimizing the likelihood of conflict, building cooperative practices and institutions, and advancing both countries' long-term interests wherever that is possible. It then is critical for the United States to use the substantial leverage it has—because of its role as a major purchaser of Chinese exports and a major supplier of technology China wants for its economy, and because of the current U.S. status as the sole superpower—to persuade China to engage productively in the U.S.-China relationship and to work with the United States to resolve differences. This surely will test U.S. creativity and diplomatic skill.

### COMMISSION FINDINGS

The Report presents its findings, analysis, and recommendations to Congress in thirteen sections, organized in five chapters, capturing the major themes of the Commission's Congressional mandate. While the Report has been divided in this manner, all these areas interrelate in any assessment of the overarching question of how the U.S.-China economic relationship affects U.S. economic and national security interests. The Commission recognizes that the United States' vast economic transfers to China are inseparable from the larger geopolitical and military developments at issue.

The Commission's findings are included in this Executive Summary. The ten key recommendations the Commission makes to Congress in the Report are listed at the conclusion of the Executive Summary. The Commission makes 57 recommendations to the Congress in this Report; the complete list of the recommendations pertaining to each of the five Report chapters is provided at the conclusion of the chapter, and a comprehensive list appears on p. 201.

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

The U.S.-China economic relationship has continued over the past year to expand at a rapid pace. New U.S. foreign direct investment in China totaled nearly \$4 billion. The trade relationship grew markedly, with U.S. imports from China outpacing U.S. exports to China by more than five to one. The result was a bilateral goods trade deficit that reached \$162 billion in 2004—a 31 percent increase over the previous year—and is on pace to considerably exceed \$200 billion in 2005.

U.S. manufacturers in a broad array of industries are under increasing competitive pressures from domestic and foreign-invested, China-based manufacturers. Although each U.S. industry has a unique set of competitive concerns with China, the principal cross-cutting concerns are China's undervalued currency, extensive system of government subsidies (particularly those favoring export-oriented production), weak intellectual property rights protections, and repressive labor practices. Many of these appear to act as a strong inducement for U.S. and other foreign firms to invest in and relocate to China to serve the Chinese domestic market and to use China as an export platform.

China remains in violation of many critical commitments it made in order to obtain agreement that it could enter the World Trade Organization—on a transitional basis due to the extensive economic reforms necessary for its economy to conform to the market practices of WTO members. China's continued recalcitrance is caus-

ing material injury to U.S. companies, workers, and communities. It also is contributing to a highly skewed bilateral economic relationship marked by a soaring U.S. trade deficit and a weakening competitive position for many U.S. firms.

Foreign investment, mostly in the form of foreign direct investment, has underwritten much of China's economic development. However, a growing proportion of foreign funds has been accumulated via the debt and equity offerings of Chinese firms in international capital markets and, to a lesser extent, in China's weak domestic capital markets. No Chinese firms have listed in 2005 on the New York Stock Exchange, with the most frequently cited reason being their reluctance to meet the requirements of the Sarbanes-Oxley Act of 2002, particularly the requirement that the CEO and the CFO certify the company's annual and quarterly reports. However, Chinese high technology and telecommunications firms are continuing to list on the NASDAQ Exchange. These firms tend to be incorporated in offshore locations and have been able to meet U.S. standards for disclosure and corporate governance. A variety of Chinese firms, including banks and state-owned enterprises, are increasingly listing on the Hong Kong Exchange.

The Commission retains the concerns voiced in its 2004 Annual Report that transparency and disclosure by Chinese firms remain inadequate—a deficiency that is most pronounced in the case of state-run firms. This poses a substantial risk for investors, including those from the United States participating in the markets where Chinese firms are listing. It also makes it very difficult to determine the possible links of the listing firms to weapons proliferation activity and to People's Liberation Army or other Chinese defense-related activities. Although it consequently is impossible to know the full range of such involvement by Chinese firms, it is certain that some listed firms have been involved.

As trade and investment between the United States and China have expanded in importance and scope, the impact of this relationship on the global economy has grown to enormous proportions. It also remains reasonable to believe, as the Commission indicated in its 2004 Report, that "U.S.-China economic relations will help shape the rules of the road for broader global trade relations."

As China, India, and the states of the former Soviet Union have commenced active participation in the global economy in the past ten to twenty years, the global market's work force has doubled, placing major downward pressure on wages around the world. This is a function of what has been termed the "law of one price:" when capital is relatively unencumbered and the factors of production are mobile, capital will gravitate to regions with the highest rate of return. This has been occurring and continues to occur in China and elsewhere, and it is resulting in the movement of jobs, especially manufacturing jobs but increasingly service jobs as well, from the United States to China and the other countries offering higher rates of return on capital.

***Findings:***

- China's exchange rate reform announced in July—that included a modest revaluation of the renminbi (RMB) against the U.S. dollar and the linking of the RMB's value going forward to a basket

of international currencies—was an extremely limited step, amounting to a 2.1 percent change in value. Most economists believe that the RMB is undervalued by 15 to 40 percent. China's currency manipulation acts as a subsidy for Chinese exports to the United States and a tax on imports from the United States, and serves as an incentive for U.S. and foreign firms to move production to China.

- U.S. producers of advanced technology products are also subject to the growing pressures posed by China. In 2004, the U.S. trade deficit in advanced technology products with China grew to \$36.3 billion.
- While China has made progress toward meeting some of its commitments, it remains in violation of its WTO commitments in a number of important areas, many very significant for U.S. industries. As a result, U.S. firms continue to face market access barriers in China and unfair trade practices in U.S. and third-country markets.
- U.S. laws and the WTO provide remedies and safeguards for firms facing unfair trade practices and import surges from China. These trade tools remain underutilized and ineffective. Antidumping duties have gone uncollected; countervailing duties are presently inapplicable to China due to a Department of Commerce practice. The U.S. government has been slow to implement the China-specific textile safeguard and then the safeguard has been immobilized by litigation at a crucial time. Relief under the China product-specific (Section 421) safeguard has never been granted by the President despite three International Trade Commission decisions authorizing relief for the parties.
- China has effectively marginalized the WTO's annual review of its progress in meeting its WTO accession commitments—the Transitional Review Mechanism (TRM). It may be more productive to rely on the Trade Policy Review Mechanism (TPRM), applicable to all WTO members, to review China's WTO compliance. The first TPRM review of China will be conducted in April 2006.
- Inadequate corporate governance, disclosure, and accountability, poor regulatory supervision, rampant insider trading, frequent government intervention, and corruption continue to hinder the development of China's domestic capital markets. A related lack of confidence in China's domestic stock markets in Shanghai and Shenzhen has led to falling share values, which in June 2005 hit eight-year lows.
- Chinese firms continue to look to international capital markets to raise needed capital and enhance their global profile, though the location of such fundraising has been shifting significantly toward listing on the Hong Kong Stock Exchange. In 2004, Chinese companies listing in Hong Kong raised \$12 billion, up from \$7.5 billion in 2003.
- In 2005, Chinese companies have largely forgone listings on the New York Stock Exchange (NYSE), primarily due to the enhanced corporate reporting provisions of the Sarbanes-Oxley Act

of 2002. Privately owned Chinese companies have concentrated their U.S. listings on the NASDAQ exchange.

- China is taking a dual approach to raising capital to shore up its principal state-owned banks, which have non-performing loan levels estimated at \$350 billion to \$550 billion. While China is preparing its largest state-owned banks for overseas stock market listings, it is also selling stakes in the banks to Western banks eager to gain a foothold in the Chinese banking sector.
- China's fundraising in global capital markets has national security implications for the United States. The U.S. Treasury Department has identified a Chinese bank alleged to be involved in money laundering related to activities that could be financing North Korea's nuclear weapons programs and, according to press reports, is also investigating the Bank of China and another Chinese bank because of similar alleged activities. This raises concerns about the nexus between Chinese banks listing on international capital markets and security-related abuses.
- Because the links between military and civilian control and production by Chinese state-owned enterprises remain opaque, investors can rarely be sure whether their investments are tied to the People's Liberation Army or other Chinese defense-related activities to which some publicly traded firms appear to have been tied.
- While many U.S. firms have responded to global competitiveness challenges by outsourcing and offshoring, these individual corporate decisions do not address, and in some cases may conflict with, efforts to maintain productive capacities in industries important to U.S. economic leadership and vitality. This distinction between private and national interests is particularly pertinent with regard to the U.S. economic relationship with China, where the market may produce outcomes that are contrary to the U.S. national interest.
- The opening of the Chinese, Indian, and former Soviet bloc economies has led to more than a doubling of the global market's work force and likely will put downward pressure on U.S. wages for workers at all levels, including higher levels of the wage scale. Mobile capital and technology flows accelerate this trend.
- China has adopted an economic growth strategy that emphasizes strategic accumulation of productive capacity and access to resources. An important part of this strategy is attracting foreign investment and know-how to assist China's export-led growth.
- China obtains a competitive advantage from political and economic systems where workers are often denied fundamental workers' rights. China's paucity of environmental protections similarly functions to benefit some Chinese industries.
- The U.S. international tax regime favors investment abroad in comparison to domestic investment, providing a disincentive to companies for maintaining production facilities in the United States.

### **China's Technology Development and Implications for the U.S. Defense Industrial Base**

China's comprehensive and coordinated strategy for technology development guides the rapid pace by which it is establishing itself as a center of technology production and, increasingly, technology innovation. Through a mix of preferential trade and investment policies, government subsidies, and other policies favoring domestic industries and production, China has made the development of its technology sectors a national priority. Attracting U.S. and other investment into China has been an important component of this strategy, particularly where transfers of technology and know-how have accompanied this investment.

U.S. technology industry leaders increasingly have warned of the challenges that China and other developing economies pose to U.S. technology leadership and called for a national strategy to maintain U.S. technology competitiveness—which is vital to the long-term health of the U.S. economy and to U.S. military superiority. The increasing reliance of the U.S. military on the private sector for certain technology developments, coupled with the movement offshore of much of the private sector's industrial and technology production, and some of its design work and research and development (R&D) activities in which China increasingly is engaging, raises the prospect of future U.S. dependence on China for certain items critical to the U.S. defense industry as well as to continued U.S. economic leadership. The Department of Defense may not be adequately considering the long-term effects on the defense industrial base of the offshoring of industries that, while not classified as critical technologies, nonetheless may have a substantial impact on defense and homeland security operations, such as the software and integrated circuits industries.

Between 1998 and 2004, the United States moved from equilibrium in trade with China of items with the highest R&D and engineering content to a deficit in advanced technology products (ATP) of \$36 billion. Foreign investment in China continues to grow markedly—with Taiwan still the largest external investor, followed by South Korea, Japan, and the United States—and much of that foreign investment is drawn to technology sectors. With this being a prominent enabling factor, China is making remarkable strides in technology production and is moving into high technology product design and R&D.

#### ***Findings:***

- Science and technology (S&T) development is the centerpiece of China's comprehensive strategy to build national power. As a result, the Chinese government has a comprehensive, coordinated strategy for S&T development, which it began to implement in the mid 1980s. Government policies encourage growth and investment in key industries, among which are the software and integrated circuit industries. Such policies include foreign investment incentives, tax incentives, government subsidies, technology standards, industrial regulations, and incentives for talented Chinese students and researchers studying and working overseas to return to China. Many of these policies make it difficult, if not impossible, to achieve a level playing field in this area of U.S.-

China trade and jeopardize long-term U.S. leadership in this vital sphere.

- China has become central to the global supply chain for technology goods of increasing sophistication, and its technology research and development activities are steadily and substantially expanding. This central role grants China increased leverage in global systems of technology production.
- The technology that China is developing and producing is increasing in sophistication at an unexpectedly fast pace. China has been able to leap frog in its technology development using technology and know-how obtained from foreign enterprises in ways other developing nations have not been able to replicate. This rapid advancement is evident in the level of technologies that make up China's fast-growing trade surplus with the United States in advanced technology products (ATP), which increased by 72 percent from 2003 to reach \$36 billion in 2004.
- External investment is an important source of capital, management, and technology for China's technology sector. While total U.S. investment in China has been significant, Taiwan remains China's largest external investor, accounting for about half of total FDI in China; Japan and South Korea also are major external investors in China. Taiwan's investment in China remains concentrated in the technology sectors.
- China has made virtually no discernable improvement in the enforcement of its intellectual property rights (IPR) laws, despite the fact that the Chinese government has enacted laws to strengthen protection of IPR. Pirated IP provides cheap inputs to fuel further technological growth, but some analysts state that as China develops its own technologies, domestic parties may insist on better IP protection. However, as China's domestically designed technologies grow, there are also concerns that the government may selectively protect domestic IP while providing inadequate resources to protect foreign IP.
- Advances in China's technology infrastructure and industries, along with similar advances in other developing countries, pose a significant competitive challenge that is eroding U.S. technology leadership.
- China's approach to high technology development also includes aggressive use of industrial espionage.
- The U.S. defense establishment is increasingly reliant on the private sector for its technologies. As industries such as software and integrated circuits developed faster in the private sector than in the defense sector, the Department of Defense (DoD) turned toward the private sector to acquire state-of-the-art technologies.
- China and other foreign governments provide incentives to attract investment from the United States and other countries in advanced technology industries, which results in transfers of technology and production capacity offshore. Partly as a result of such incentives, the U.S. technology sector has moved offshore much of its production and is beginning to move offshore some

of the design for civilian technologies with applications in the defense sector.

- China’s incentives for technology industries are part of a coordinated, strategic effort to obtain dual-use technologies. This strategy is focused on the software and integrated circuits industry—the two industries the U.S. defense establishment identifies as vital to today’s information-based, network-centric warfare.
- While the U.S. defense industrial base is not dependent on Chinese imports at the present time, the Chinese government’s coordinated strategy of utilizing incentives and subsidies to spur development of domestic capacity in dual-use technology industries is weakening the health of key U.S. commercial sectors on which the U.S. defense establishment relies.
- DoD’s “trusted” and “assured” supply of high-performance microchips is in jeopardy due to the restructuring of the U.S. commercial integrated circuit industry that has moved operations offshore to Taiwan, Singapore, and China.

### **China’s Military Power and America’s Interests**

China’s methodical and accelerating military modernization presents a growing threat to U.S. security interests in the Pacific. While Taiwan remains a key potential flashpoint, China’s aggressive pursuit of territorial claims in the East and South China Seas points to ambitions that go beyond a Taiwan scenario and poses a growing threat to nations, including U.S. alliance partners, on China’s periphery. Recent and planned military acquisitions by Beijing—mobile ballistic missiles, and improved air and naval forces capable of extended range operations—provide China with the capability to conduct offensive strikes and military operations throughout the region. China’s arms purchases have prompted the U.S. Secretary of Defense to publicly question the ultimate purpose of China’s military buildup.

For a variety of reasons, unification with Taiwan remains one of the most important priorities for the Chinese Communist Party (CCP). This objective is of such significance that the Chinese government threatens to achieve it—and prevent any substantial contrary movement—by force if that is necessary. China’s very public and frequently stated commitment to this goal has left little room for negotiation or trade-offs in the event of an emerging crisis over Taiwan. In March of 2005, China promulgated the Anti-Secession Law (ASL), a legal document that codified China’s claimed authority to use force to counter further moves by Taiwan toward separation, and, as a consequence, placed additional pressure on Chinese leaders to take forceful actions in a time of crisis with Taiwan.

The failure of the two sides to agree on a formula for negotiating a solution to their differences has led Beijing to heighten its discussion of and preparations for possible military options to achieve unification. Rather than persuading Taiwan to move toward unification, the growing threat posed by China’s military deployments directed at Taiwan has added to fears on the island. In a wider context, the growing volume and credibility of Beijing’s threats against Taiwan constitute a serious challenge to long-established U.S. security and political interests.



In the early 1990s, China began a military transformation that abandoned its reliance on massive forces and outdated weapons in favor of a modern military armed to compete and win in a high-tech battlefield environment. In turn, Taiwan requested and received equipment that helped redress the imbalance resulting from the capabilities of new Chinese weapons. In subsequent years, however, a booming economy and generous government funding have permitted China to take long strides toward modernizing its air, naval, and missile forces. Today, China has accumulated a formidable force of ballistic and cruise missiles, advanced strike aircraft, and modern naval combatants with long range and truly lethal combat power. Since Taiwan has not adequately responded, the military balance across the Strait is shifting strongly in China's favor and poses a growing challenge to U.S. military forces and political interests in the Pacific.

In contrast to the military picture on both sides of the Strait, the economic and social ties at many levels continue to increase between China and Taiwan. Taiwan is the largest external investor in China's economy, and the number of Taiwan firms manufacturing and conducting other business in China is steadily growing. Nonetheless, the starkly different political systems and issues of self-identification pull them in opposite directions and perpetuate the tensions that have characterized the region for 50 years.

The complex and evolving set of relations among the United States, China, and Taiwan requires careful diplomacy, a strong U.S. military presence in the region, and continued U.S. monitoring of the military balance across the Taiwan Strait. The United States seeks a stable, peaceful, and prosperous Asia-Pacific region, and U.S. officials repeatedly have expressed their opposition to actions by either China or Taiwan that would jeopardize the peace by unilaterally altering the status quo.

***Findings:***

- China is in the midst of an extensive military modernization program aimed at building its force projection capabilities to confront U.S. and allied forces in the region. A major goal is to be able to deter, delay, or complicate a timely U.S. and allied intervention in an armed conflict over Taiwan so China can overwhelm Taiwan and force a quick capitulation by Taiwan's government.
- The combination of a U.S. policy of strategic ambiguity and Taiwan's hesitation in responding to China's aggressive military buildup sends signals of weakness and ambivalence to China, undermines U.S. deterrence efforts, leaves Taiwan vulnerable if attacked, and increases the risk that U.S. forces may be called upon to act.
- The U.S. government has not laid adequate groundwork to allow a rapid response to a provocation in the Taiwan Strait. Almost any possible scenario involving U.S. military support to Taiwan would require extensive political and military coordination with the Taiwan government and regional allies, but the foundations for such coordination have not been laid. For example, self-imposed restrictions against visits to Taiwan by senior U.S. mili-

tary officers and other government officials undermine efforts to conduct advance planning for contingencies. Additionally, failure to gain advance approvals for access by U.S. forces to foreign airfields and ports in the Western Pacific might jeopardize execution of U.S. contingency plans.

- The lack of adequate and effective confidence building measures between the United States and China increases the risk of misjudgment and miscalculation, especially in crisis situations, and therefore increases the risk that a misunderstanding or minor disagreement will lead to a serious armed conflict.
- The increasing frequency of Chinese military incursions into Japanese territory sets a dangerous course and unnecessarily increases the potential for a military clash in Northeast Asia that could engulf the United States.

### **China's Global and Regional Activities and Geostrategic Developments**

China's foreign policy has changed dramatically over the past ten years. China's regional and multilateral goals are influenced by the need to obtain resources, particularly energy resources, and to gain access to export markets; the desire to isolate Taiwan; and the intention of diluting an international system it sees as dominated by the United States. In order to achieve its goals, China employed a more proactive and creative diplomacy and increasingly used aid, development and investment packages, and diplomatic support to win favor in regions such as Africa and Latin America. During the past year, China's global presence and influence continued to grow. It sought out new export markets for its products, and trade increased between China and many regions of the world; trade with Europe, for example, grew rapidly. China also reached out to regions such as Africa, the Americas, and the Middle East to secure the energy and raw materials its economy requires. Since the Commission's previous Annual Report (issued in June 2004), China has become the world's second largest national consumer of petroleum (behind the United States).

Certain international activities by China throw a shadow on its global rise. China continues to be a source of WMD- and missile-related technologies to countries of concern such as Iran. Despite China's enactment of tougher export control laws and constant complaints and sanctions by the United States, Chinese companies and organizations have continued to proliferate. All countries, including China, should be concerned about the grave consequences should WMD be acquired by countries of concern or terrorist groups, but China gives evidence that this is not among its highest concerns. In part in order to obtain access to energy resources and raw materials, China has utilized and expanded relationships with nations such as Iran, Sudan, and Zimbabwe that have earned international opprobrium for objectionable human rights, terrorism support, and other activities. In these interactions, China focused on its narrow interests while dismissing international concerns.

China's actions pertinent to the North Korea nuclear crisis have been contradictory, but offer some basis for optimism. Because it is Pyongyang's principal patron and provides significant amounts of fuel and food to North Korea, China has considerable leverage with

the North Korean regime. During 2004, in fact, the two countries enjoyed an historic level of bilateral trade. Yet China has failed to use its leverage effectively to obtain denuclearization by North Korea. In the latter half of 2005, China took welcome steps to achieve progress in the Six-Party Talks aimed at eliminating North Korea's nuclear weapons and nuclear weapons programs but has not yet exerted its full leverage over Pyongyang to solve this problem. Now it is critical that Beijing exert as much influence as will be needed to ensure that North Korea eliminates its nuclear threat.

The future success of China's economic and political policies is tied to the success of its energy policies. Two thirds of China's energy needs are met by coal, but China's demand for oil resources needed to fuel its economic growth is rapidly increasing, putting China on course to compete with the United States and other oil importing nations for global supplies. China's policy of attempting to obtain control of oil resources at the wellhead rather than participating in the international petroleum market threatens to exacerbate tensions with the United States and other countries that are market participants. The attempt by a Chinese oil firm partly controlled by the central government to purchase California-based Unocal exemplified its policy and caused considerable U.S. concern before the attempt was abandoned.

***Findings:***

- China has increased its presence in many geographic regions during the past decade.
- China's decisions to become involved in specific countries and regions, the nature of its involvements, and its regional and multilateral goals appear to be frequently influenced by its need for resources, particularly energy-related resources, the search for export markets, and a desire to increase its geopolitical leverage and influence and advance national objectives. Diplomatic aims include marginalizing Taiwan and increasing China's leverage in multilateral institutions by strengthening relations with other countries.
- China's regional strategies generally appear to be complementary and consistent and to reflect a larger global foreign policy strategy.
- China's regional approaches appear to be value-neutral; they are not influenced by ideology or human rights concerns and focus only on achieving China's practical objectives. China approaches countries that have histories and reputations of behavior and activities objectionable to the world community—such as proliferation, human rights abuses, aggression against other nations or less direct efforts to undermine their interests, support of terrorism, etc.—without requiring or even exerting pressure for changes in policy or behavior.
- China's proliferation activities are broad ranging; it continues to provide equipment and technology, including dual-use goods and technologies, related to WMD and their delivery systems to countries such as Iran as well as conventional armaments to countries like Sudan.

- China continues to be governed by a Communist party hierarchy that controls major aspects of the government, society, and economy. Party cadres are selected by the leadership to serve as key executives of state-owned corporations and many smaller firms and subsidiaries and to enforce the leadership policy. Beijing is also placing more party members in the ranks of newer private companies. Through this and other methods, many proliferation actions of Chinese companies are either effectively controlled or tacitly condoned by certain levels of the central government. In a number of cases, China uses proliferation to raise revenue or gain diplomatic influence.
- Continuing proliferation undermines the public commitment Beijing has made by becoming a party to, or participating in, various multilateral nonproliferation treaties, regimes, and organizations, and by promulgating strengthened export control laws.
- As China improves its nuclear and missile capabilities, the potential damage from its proliferation action increases. Given China's poor track record on preventing proliferation, the presumption is that it will continue to allow transfers of improved WMD- and missile-related technology to countries of concern.
- Numerous U.S. sanctions have been imposed to punish Chinese companies for their proliferation activities, but they appear to be largely ineffective. A significant reason for this is that many sanctions regimes do not extend penalties to a parent company, which may have business connections in the United States, for the proliferation activities of its subsidiaries unless a parent company had demonstrable knowledge of the transaction.
- The extent of Chinese cooperation in the Six-Party Talks to achieve a complete, verifiable, and irreversible dismantling of North Korea's nuclear weapons and nuclear weapons programs is a critical test of the U.S.-China relationship.
- China is North Korea's principal patron and has very substantial economic leverage with that country. It is important for China to use its considerable influence with North Korea, including economic and energy assistance, as leverage to press Pyongyang to dismantle its nuclear weapons, nuclear weapons programs, and long-range delivery systems. China's recent efforts to bring North Korea back to the Six-Party Talks and its circulation of a now-agreed set of principles that the parties signed in September 2005 are new and commendable steps. However, the effort to get North Korea to abandon its nuclear weapons programs, nuclear weapons, and nuclear weapons material has a considerable distance yet to go. It is imperative that China, with its leverage over North Korea, take substantial responsibility for the ultimate success of this effort.
- China's energy demand continues to grow at a rapid pace as its economy expands. Roughly 40 percent of all new world oil demand is attributable to China's rising energy needs.
- The United States and China currently follow different energy security policies regarding oil procurement. The United States secures its supplies via open international markets while China wants to own oil at the wellhead.

- China's energy acquisition efforts are expanding internationally, and specifically in Africa, the Western Hemisphere, Central Asia, and the Middle East.
- China appears to trade influence and assistance, including weapons technologies, arms, and other aid, for access to oil and gas in terrorist-sponsoring states such as Sudan and Iran, greatly compromising U.S. efforts to combat terrorism, weapons proliferation, and human rights abuses.
- The United States should seek to influence China's energy policies and lessen the potential for future energy-related conflict by conducting joint research and development (R&D) programs with China to improve its energy efficiency and protect the environment.
- Both China and the United States are self-sufficient in coal. Clean coal and coal-to-liquids technologies are possible areas for mutually profitable joint R&D efforts and areas where the United States could provide technological assistance that could benefit both nations and enhance environmental protection.

#### **China's Media and Information Control**

The Chinese government's extensive and persistent controls over the flow of information in the media and over the Internet pose an ongoing security concern for the United States. Through these controls, which have grown markedly in size and sophistication over the last two years to become the most sophisticated Internet control system in the world, China's government plays a commanding role in forming public opinion about the United States and U.S. policies, which can in turn undermine U.S. diplomatic efforts. These practices also risk creating an environment prone to misunderstanding and miscalculation in the bilateral relationship, particularly during times of crisis.

China's control of information media exacerbates and perpetuates a xenophobic—and at times particularly anti-American—Chinese nationalism. The long-term effects of these practices on a new generation of Chinese citizens, who have been persistently subjected to a highly controlled and manipulated information environment, may be deleterious to U.S. efforts to prevent the U.S.-China relationship from becoming hostile.

#### ***Findings:***

- China's economic reforms have not led to fundamental changes in its policy of controlling the flow of information. The government's Internet filtering system is the most sophisticated in the world, and uses numerous techniques to minimize Chinese citizens' exposure to topics the Chinese Communist Party sees as threatening to its rule, including official corruption, freedom, and democracy, or to its standards of decency. In addition to technical controls, China discourages free expression by encouraging collective responsibility and self-censorship, reinforced by occasional high-profile incarcerations.
- The Chinese government encourages nationalist sentiment in the news media and online. Anti-U.S., anti-Japanese, and anti-democratic views are rarely censored while anti-government senti-

ments are heavily monitored and removed as soon as they are spotted by the government Internet police.

- Some U.S. firms that wish to establish, maintain, or expand their presence in the Chinese market have assisted the government in its effort to control speech and have assisted in official actions against Internet users. The companies have defended their involvement in these actions by indicating they must comply with Chinese law and the dictates of China's government.

### **THE COMMISSION'S KEY RECOMMENDATIONS**

#### **Addressing China's Currency Manipulation**

- China's recent exchange rate policy reforms have to date resulted in only a 2.1 percent appreciation of the renminbi (RMB) against the U.S. dollar, leaving the RMB highly undervalued. In the absence of immediate steps to allow the RMB to appreciate by at least 25 percent against the U.S. dollar or a transparent, trade-weighted basket of international currencies, the Commission recommends that Congress pursue a four-track policy to move China to take appropriate action to revalue the RMB:
  - Congress should press the Administration to file a WTO dispute regarding China's exchange rate practices. These practices continue to violate a number of its WTO and IMF membership obligations, including the WTO prohibition on export subsidies and the IMF proscription of currency manipulation. Congress should press the Administration to respond to China's violation of its international obligations by working with U.S. trading partners to bring to bear on China the mechanisms of all relevant international institutions.
  - Congress should consider imposing an immediate, across-the-board tariff on Chinese imports at the level determined necessary to gain prompt action by China to strengthen significantly the value of the RMB. The United States can justify such an action under WTO Article XXI, which allows members to take necessary actions to protect their national security. China's undervalued currency has contributed to a loss of U.S. manufacturing, which is a national security concern for the United States.
  - Congress should reduce the ability of the Treasury Department to use technical definitions to avoid classifying China as a currency manipulator by amending the 1988 Omnibus Trade Act to (i) include a clear definition of currency manipulation, and (ii) eliminate the requirement that a country must be running a material global trade surplus in order for the Secretary of the Treasury to determine that the country is manipulating its currency to gain a trade advantage.
  - Congress should urge the Treasury Department to maintain a high level of pressure on China to take more significant actions expeditiously to revalue its currency and, if such actions are not forthcoming by the time Treasury issues its next exchange rate report, to designate China as a currency manipulator and initiate bilateral and IMF negotiations.

### **Challenging China's IPR Violations**

- The Commission recommends that Congress support the U.S. Trade Representative in taking immediate action under U.S. law and in international venues pertaining to China's violation of IPR obligations, particularly China's failure to meet the requisite standards of effective enforcement, including criminal enforcement, explicitly imposed by the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement.

### **Coordinating with the European Union and Japan on China Trade and Security Matters**

- The Commission recommends that Congress work with the Administration to undertake more active efforts to coordinate with the European Union (EU), Japan, and other interested nations as appropriate to address mutual trade- and security-related concerns with China. Among these areas should be the following:
  - European governments and Japan share U.S. concerns about continuing large-scale IPR violations in China. Brussels, Tokyo, and Washington should coordinate their strategies on improving Chinese IPR compliance, particularly through joint action in the WTO.
  - U.S., EU, and Japanese officials should work together within the International Monetary Fund (IMF), the WTO, and other appropriate fora to move China toward a more meaningful upward revaluation of the Chinese RMB that is more reflective of current economic realities.
  - U.S., EU, and Japanese officials should work to enhance the effectiveness of the TRM within the WTO and consider undertaking an annual joint assessment of China's compliance record, in conjunction with China's other major trade partners if possible, that could serve as an alternative mechanism for measuring and improving China's compliance shortfalls.
  - U.S. and EU officials should engage with each other to evaluate China's progress toward meeting U.S. and EU criteria for market economy status with the goal of arriving at a consistent analysis that ensures that China will have taken concrete and irreversible steps to earn market economy status before the benefits of such status are conferred.
  - U.S., EU, and Japanese officials should develop coordinated responses to shared security concerns. Among the issues that should be considered is the EU's arms embargo on China, a major concern of both Japan and the United States.

### **Penalizing Chinese Firms Involved in Proliferation**

- The Commission recommends that Congress encourage the Administration to use Executive Order 13382 to freeze the assets of Chinese firms involved in WMD or missile-related proliferation, or Chinese companies or financial institutions that may be assisting or lending to such proliferators. Congress also should encourage the Administration to expand the provisions of Executive Order 13382 so the U.S. property of a parent company can be frozen if the parent knows or has reason to know about the pro-

liferation activities undertaken by its subsidiaries, or so the U.S. property of financial institutions can be frozen if they know or have reason to know of the involvement of their lending customers in proliferation activities.

### **Developing a National Strategy for Technology Competitiveness**

- As recommended in the Commission's 2004 Report to Congress, the U.S. government must develop a coordinated, comprehensive national technology competitiveness strategy designed to meet China's challenge to U.S. scientific and technological leadership. America's economic competitiveness, standard of living, and national security depend on such leadership. The Commission therefore recommends that Congress charge the Administration to develop and publish such a strategy in the same way it is presently required to develop and publish a national security strategy that deals with our military and political challenges around the world. Such a strategy should:
  - Identify future technology base goals;
  - Recommend policies for directing funds toward maintaining the U.S. technology base;
  - Initiate a national educational program similar to the programs developed in the post-Sputnik era to enhance the level of math and science education at the K-through-12, undergraduate, and graduate levels in the United States;
  - Recommend appropriate tax and investment policies to encourage high-technology-related research, development, and manufacturing activities in the United States.

### **Responding to China's Military Development and Reducing the Risk of Conflict**

- The Commission believes that there is an urgent need for Congress to encourage increasing U.S. military capabilities in the Western Pacific in response to growing Chinese capabilities and deployments in the area.
- The Commission recommends that Congress and the Administration review the issue of defense coordination with Taiwan. The Commission believes that the arms sales package should remain on offer, and further believe that Congress should take steps to facilitate strong working relationships through such measures as authorizing the exchange of general and flag officers, conducting interactive combat data exchange with Taiwan defense forces, providing increased opportunities for Taiwan officers to be trained in the United States, and establishing institutional relationships with the Legislative Yuan to improve the oversight of defense matters.
- The Commission recommends that Congress enact legislation instructing the President and the appropriate officials of his cabinet to seek initiation of discussions with China with the objective of developing and implementing new confidence building measures (CBMs) that facilitate resolution of tensions that may develop between the two nations and to minimize misunder-



standing between the nations' civilian and military leaders at the strategic, operational, and tactical levels. These CBMs could include communications mechanisms, opportunities for opposite number leaders to meet and establish relationships with each other, regular information-sharing devices, and hot lines between DoD and the PRC's Ministry of Defense.

### **Urging the European Union to Maintain the Embargo on Weapons Sales to China**

- The Commission recommends that Congress encourage the President and the Secretaries of State and Defense to continue to press their European counterparts to maintain the EU's embargo on weapons sales to China. U.S. officials must emphasize in the starkest terms that removal of the embargo is not merited by significant improvements in China's human rights actions. They also must stress that flows of weapons to China that might result from lifting the embargo could increase the risk of conflict between China and the United States and also increase the likely cost to the United States of any such conflict in time, money, materiel, and casualties—and that, consequently, the United States will view lifting the embargo with grave concern.

### **Facilitating Mutually Beneficial Steps to Reduce Conflict Over Energy**

- The Commission recommends that Congress:
  - Mandate the establishment of a U.S.-China Energy Working Group in which both nations are represented by senior government officials, supported by an advisory group composed of representatives of relevant industry, environmental, academic, research, and nongovernmental organizations and members of Congress. The Group should have the responsibility to (1) identify areas where both nations can most profitably work together for mutual benefit on energy issues and challenges; (2) identify and rank areas and issues with respect to which there is a significant possibility that U.S.-China energy-related conflicts will develop; (3) offer recommendations to both governments for resolving energy-related problems and disagreements; (4) offer recommendations to both governments for promoting development and use of conservation and efficiency mechanisms, alternative fuels, and other means of securing energy self-sufficiency and reducing the need for imported energy sources, especially oil; and (5) oversee and make recommendations to both governments concerning joint research and development activities in energy-related fields;
  - Encourage the initiation of new cooperative efforts with China to (1) increase the efficiency of its energy use, including energy use intensity reduction, clean coal technologies, coal-to-liquids technologies, and combustion efficiency improvements; (2) shift some current reliance on oil to coal (using advanced clean coal technology) and natural gas; and (3) explore and pursue the economic, technical, and logistical feasibility of using renewable energy sources in lieu of some portion of the projected increase in oil use. At the same time, China should be strongly

encouraged to (1) abandon its policy of acquiring oil at the wellhead or field in a mercantilist fashion; (2) procure oil and gas according to international practices (i.e., purchasing it on the open international marketplace); and (3) cease providing assistance, arms, and proliferation-related technologies to problematic states in possible return for access to their energy resources; and

- Urge the Administration to use all available bilateral and multilateral diplomatic means to persuade China to change its approach to energy security with respect to oil resources by (1) purchasing oil for import in the open international oil market; (2) coordinating its activities with the International Energy Agency (IEA); and (3) engaging in the IEA's efforts to build oil stocks and release them on a coordinated basis in the event of supply disruptions or speculation-driven oil price spikes.

## INTRODUCTION

The U.S.-China relationship is complex and of such scale that it will have an increasing impact on our economic, national security, strategic, and political interests in the Asian region and around the globe in the coming years. The pace at which the change is occurring and the rapid growth of China's influence are challenging many U.S. interests and demand greater attention from policymakers. This Report, building on the Commission's work since its inception in 2001, highlights a number of salient characteristics of this rapidly evolving relationship.

The Report responds to our nine-point mandate from Congress and overall charge to review the national security consequences of our nation's economic relationship with China. It is the result of 14 extensive hearings in Washington, D.C. and around the country that included more than 150 witnesses, intelligence briefings, and the independent work of a skilled professional staff and outside researchers.

**The Commission concludes that over the past year, on balance, the trends in the U.S.-China relationship have negative implications for our long-term national economic and security interests.**

America's approach to China needs a coherent strategic framework based on an understanding of the challenges and the opportunities for cooperation in the U.S.-China relationship. It must also be grounded in a clear-eyed understanding of how the Chinese political and military leadership leads the country, how decisions are made, and how the country's economy works. Far too often, policymakers expect reflections of their own set of values and decision-making approaches when projecting how China will act under different conditions and scenarios. China is an authoritarian regime and has a non-market, command economy still controlled by the Communist Party. The central goal of its leadership is maintaining its own power, at any cost.

While some encouraging changes are occurring in China, the basic differences between our countries must be neither forgotten nor underestimated. China has different interests, goals, and values underlying its decisions, and these differences present enormous challenges to U.S. interests around the globe. The Chinese government uses the system in ways that produce advantages for it and all too often fails to honor its commitments when they are inconvenient for China.

The current U.S.-China relationship is in its relatively early stages. Every effort must be made to influence and mold it with the goal of reaching cooperative approaches to resolve problems and allow us to pursue common interests. The accelerating pace of change and China's dramatic rise on the world stage require that bold initiatives be developed to engage China positively in many

areas where common interests exist or can be developed. The Commission's Report offers several new initiatives in the economic and security fields to help advance this effort.

In areas where China poses challenges to the United States, the United States must be prepared to meet them with a variety of tools and approaches. But, due to the accelerating pace of change and the enormity of many of these challenges, the United States must be prepared to respond more aggressively to China's behavior and actions when they run counter to our interests. There is no one approach to responding to these problems; a range of actions must be taken. The United States has enormous leverage to achieve its results, and it must assert its own interests.

U.S. national and economic security interests are inextricably intertwined. The Commission's greatest concern is that the United States has not developed a fundamental assessment of how American national interests are affected by our relationship with China. A detailed architecture that advances all areas of cooperation with China while reducing negative impacts on American economic and security interests still does not exist. In the absence of a coherent articulation of U.S. policy toward China by the Administration, Congress is filling the vacuum. It is taking the formulation of elements of such a policy into its own hands, for example, by acting on the proposed CNOOC-Unocal deal, China's subsidies of its industries, and continued Chinese manipulation of its currency.

China's leadership has a coordinated national strategy for dealing with the United States. It knows what it wants to obtain from the United States—most significantly, a market for its exports, investment, technology, and management skill—and it tailors its economic and diplomatic policies to achieve these goals. China is willing to achieve its goals through means that threaten many U.S. interests: it continues to proliferate components for weapons of mass destruction and ballistic missiles to countries of concern. It refuses to support many U.S. initiatives in the United Nations and other international bodies and is seeking to reduce U.S. presence and influence in the Asian region. In short, China is focused on the most effective ways to develop its comprehensive national power and further promote its position in the world.

Unfortunately, the United States has no coordinated, national strategy for dealing with China. We need one that specifies and prioritizes what we want to accomplish, what outcomes are and are not acceptable, and how to reach those goals.

There can be no higher value than the protection and enhancement of U.S. security interests. U.S. security policy toward China must strive to deter any impulse to aggression or adventurism. As documented in this Report, China is engaged in a major military modernization program, the motives of which are opaque and unexplained. It is building a modern navy and air force along with precision-strike weapons, deploying hundreds of missiles aimed at Taiwan, upgrading its nuclear-armed ICBM force, and beginning to operate in a power projection mode. It has markedly expanded its information warfare operations to a level that is clearly designed to disrupt American systems.

One of the few successes has been the engagement of the Chinese to make progress on the issue of North Korea's nuclear weapons

programs. The success of establishing at least the beginning of a Korean denuclearization settlement through an agreement on principles is a result in part of a new Chinese diplomacy—an indication that U.S.-Chinese joint action has the potential to deliver important results to achieve the vital goal of nonproliferation. Implementation of this set of principles, which are designed to denuclearize the Korean peninsula, would enhance our security and political interests and advance the goal of worldwide nuclear nonproliferation. Implementation should be a top priority of the President and the Congress in the immediate future; this is an opportunity that should not be missed.

As a separate matter, despite periodic U.S. efforts, no institutionalized military confidence building measures (CBMs) have been put in place, which would help establish rules of the road for the operations of forces in proximity to each other, help mitigate crises or accidents when they occur, and perform other useful functions. The Commission believes it should be a high priority for the Administration to vigorously engage the Chinese in an attempt to develop such CBMs as the forces of the two powers operate more frequently in close proximity.

China continues to focus much of its strategic and diplomatic energies on Taiwan. Beijing is continuing its massive military build-up, including missile and other weapons systems directed at the island. In 2005, China passed the Anti-Secession Law, which sent a clear and direct message that it is willing to use force, if necessary, to ensure that Taiwan does not pursue independence. As well, China has continued to press other nations to isolate Taiwan in the world community. China has also strengthened economic ties with Taiwan in an effort to deepen Taiwan's reliance on China as a source of economic growth and, at least in part, increase Taiwan's dependence on its trading ties with the mainland. The Commission believes that the United States has deep and abiding strategic and political interests in Taiwan's status, including its position in the Asian region, and continues to affirm its commitments under the Taiwan Relations Act.

China is using diplomatic, military, security, economic, and political overtures in Asia to become an alternative or balancing power to U.S. preeminence in the region. The United States needs to expand its public diplomacy efforts, security assistance, trade relations, and diplomatic interactions in Asia.

Our national economic and security interests also intersect in the energy arena. This year, this issue has come to the forefront in the U.S.-China relationship as a result of efforts by CNOOC, a Chinese state-controlled company, to acquire U.S.-based Unocal, a major energy firm. China's mercantilist behavior is apparent in its worldwide quest to secure energy supplies by acquiring them at the well-head for its own use. China's practice contrasts with the practice of most other nations to buy energy supplies on the open market. As world energy demand rises, of which 40 percent is attributable to China alone, and supplies begin to peak, it is imperative that we convince China to work cooperatively to both develop alternative energy supplies and operate according to standard international practice. The alternative is heightened competition for scarce supplies with the increased danger of collisions over China's

quest for more supplies. The Commission proposes the establishment of a U.S.-China Energy Working Group at the senior government level to promote such cooperation.

Five years ago, Congress agreed to provide Permanent Normal Trade Relations (PNTR) status to China, paving the way for China to become a member of the World Trade Organization. Proponents of PNTR argued that bringing China into the international economic system and facilitating the development of a market economy would result in political reform and eventually democracy in China. Such transformations occurred across Asia in the last century, including in South Korea, Japan, and Taiwan.

China's track record to date on political reform is very disappointing. China continues to severely restrict human rights, workers' rights, and religious freedom. Freedom of speech is severely curtailed, with countless individuals having been imprisoned for criticizing the state. Official corruption is rampant. Last year, some 74,000 incidents of public unrest occurred across the country, many of which were met with deadly force. Labor unrest is on the rise, with similar responses by the government.

The economic imbalance between our two countries continued to increase over the past year. When China became a member of the World Trade Organization, our bilateral trade deficit was \$83 billion. In 2004, this deficit skyrocketed to \$162 billion and is on course to exceed \$200 billion this year—an increase of over 140 percent in only four years.

Investment flows, including high technology investment, from the United States to China continue at a high pace and are negatively affecting the American economy. Projections for market access have failed to meet expectations as China has failed to abide by its World Trade Organization accession commitments on a broad range of products and services.

We are concerned not only about the size of our bilateral deficit, but also its composition. Across the economic spectrum, China is rapidly becoming a world-class competitor. Last year, the United States had a deficit of \$36 billion in Advanced Technology Products with China, an increase of 500 percent since 2001. Software and semiconductor production and research are flowing to China. China is pursuing the development of its nanotechnology, biotechnology, and opto-electronics sectors.

As our trade balance continues to worsen and trading and sourcing patterns change, the imbalances become structural and increasingly difficult to address. Roughly 60 percent of China's exports to the United States come from foreign-invested firms and help fuel the rising trade deficit. These sourcing patterns are unlikely to change in the near future.

Our failure to correct such imbalances conveys to the Chinese that the United States is either unable or unwilling to use its economic power to encourage the proper adjustments. As the imbalances increase and the dependence on Chinese products and capital rises, the ability to act declines. China's unwillingness over the last year to make anything but cosmetic reforms to its system of manipulating its undervalued currency is an example.

But China's dependence on the American marketplace for the sale of its products and as a source of investment and technology

is so large as to make China's economic growth to a substantial extent dependent on the American economy. This provides the United States with enormous leverage to demand that China adopt greater reforms and abandon its mercantilist practices.

Unfortunately, the United States has pursued a policy of economic engagement with China that has not yielded results, while China has actively pursued its own interests. The result is that our corporate sector is increasingly looking to China as a source of profits, either in terms of offshoring or outsourcing, and it is becoming more and more an export platform for products. The transfer of manufacturing capacity to China has been joined by the creation of numerous and substantial research and development centers and capabilities, capabilities which affect the competitiveness of the American economy. As production and R&D move to China, the resulting pressure on remaining U.S. operations and the downward pressure on U.S. wages intensify.

In the absence of well-defined and effective public policies, corporate interests have been able to set the course of our economic relationship. The cycle intensifies as investments in and trading relationships with China increase. More companies are concerned that they will face retaliation by Chinese authorities and/or their related businesses. And, as the sourcing patterns of these companies change, their vested interests in protecting their investments increase, to the detriment of the U.S. standard of living. Elected officials must reclaim control of the policy agenda.

Advancing our interests requires that the United States, in cooperation with its allies, be willing to use many policy options. The World Trade Organization could prove to be an effective venue—to address China's illegal subsidies, forced transfers of technology by companies wishing to gain access to China's economy, rampant and exceedingly destructive intellectual property violations, and currency manipulation—yet the United States and its allies have largely refused to seek redress there. Recent indications that the U.S. Trade Representative may be preparing a case against China in the intellectual property arena are an encouraging sign. The Commission believes that the successful use of the WTO dispute settlement process could be an important mechanism to address China's unfair and mercantilist trading practices.

The Committee on Foreign Investment in the United States (CFIUS), designed to reject foreign acquisitions that damage our national security interests, has been used in only limited ways by this and past administrations. As China's financial reserves rise, largely as a result of its bilateral trade surplus with the United States, Beijing will increasingly seek to recycle those dollars by acquiring U.S. assets. Clearly, the United States must remain open to foreign investment and, indeed, the size of our twin deficits—budget and trade—demands that this be the case. But we must never allow our need for capital to jeopardize our security interests and the CFIUS process needs to be reformed and strengthened to protect our interests.

While China has built up substantial reserves, its efforts to attract funds in the United States and other international capital markets are accelerating. Hong Kong is presently the preferred venue for Chinese listings, particularly on the part of China's state-

owned enterprises. This is in part a function of the new corporate governance and other disclosure requirements in U.S. markets. The Commission continues to be concerned with the security dimensions of the growing Chinese presence in the U.S. debt and equity markets, especially as Beijing seeks to list or trade its major state-owned banks in this country. Customers of these banks could well include proliferators, defense-industrial firms, arms traders, environmental despoilers, and abusers of human and workers' rights.

Addressing the problems posed by China and the impact of globalization demands that America initiate new efforts and programs to advance our own national competitiveness. The nation needs a self-renewal on the scale of the post-Sputnik era, with major new educational programs to create new generations of scientists and engineers. We can remain competitive only if we address education, health care, community, transportation, and industrial infrastructure, job training, and other issues. We must learn the importance of balancing consuming, saving, and investing. To become competitive again, America must take responsibility for its future.

The debate about trade and globalization is framed by discussions about trade theories that do not adequately account for mobile factors of production such as technology and capital. The theory is intended to apply to free markets, a condition that does not exist with China, which is by definition and in reality a non-market, command economy. China can, and does through government actions, alter the trade equation and its outcomes on a daily basis.

China has adopted a model that emphasizes strategic accumulation of productive capacity, and an important part of this strategy is export-led growth, which constitutes a modern form of mercantilism. Export-led growth is an economic strategy in which China seeks to enhance its industrial growth through a variety of policy devices that promote exports while strategically restricting imports to items needed for domestic growth and export production such as technology and raw materials. These policy devices include wage repression, industrial subsidies, government procurement policies, closed distribution systems, performance requirements on foreign investors, and an undervalued exchange rate. This challenge is not new: Japan posed a similar problem for the United States and the world trading system in the 1980s. But the nature of China's approach and the size of its economy result in even greater threats to the U.S. economy and the world trading system.

Though China's economic growth profits from a liberal and open international economic order, it is far from certain that the Chinese government either accepts the rules of this system or intends to comply fully with them.

The challenge is to bring China into the international order as a responsible actor rather than, by inaction or acquiescence, condone its behavior within an international order it manipulates for its own accumulation of economic, political, and military power. We must carefully craft and articulate a U.S.-China policy based squarely on the national and economic security interests of the United States.



# **CHAPTER 1**

## **THE U.S.-CHINA TRADE AND ECONOMIC RELATIONSHIP**

### **INTRODUCTION**

Over the past year, the U.S.-China economic relationship has continued to expand at a rapid pace. New U.S. foreign direct investment (FDI) in China totaled nearly \$4 billion. The trade relationship grew markedly, with U.S. imports from China outpacing U.S. exports to China by more than five to one. The result was a bilateral goods trade deficit that reached \$162 billion in 2004—a 31 percent increase over the previous year—and is on pace to well exceed \$200 billion in 2005.

Moreover, the past year saw Chinese firms bid to take control of three major U.S. companies—the personal computer division of International Business Machines (IBM), the energy firm Unocal, and the appliance firm Maytag. Although only the IBM bid was concluded successfully for the proposed Chinese buyer, these U.S. corporate acquisition efforts by Chinese firms signal what may be the beginning of a steady stream of Chinese purchases of U.S. corporate assets, fueled in part by the Chinese government's efforts to invest some of its \$769 billion in foreign reserves, accumulated in great part through trade surpluses with the United States.

Chinese companies with varying degrees of state ownership and control continue to seek capital infusions from a variety of sources, including U.S. investors. Inadequate transparency and disclosure by Chinese firms prevent the U.S. government and investors from fully understanding the possible nexus between Chinese firms listing on U.S. and international capital markets and support for Chinese and other weapons proliferation activity.

As this chapter will highlight, China's economic policies and resulting industrial growth are increasingly affecting the competitiveness of U.S. firms across a wide spectrum of important industry sectors, with implications for long-term U.S. economic health. Moreover, Chinese firms are raising billions of dollars in the U.S. and international capital markets, often without adhering to Western norms of corporate governance and disclosure of operations and overseas involvements. Assessing the effectiveness of the WTO, U.S. trade laws, and U.S. government policies to deal with these challenges has been a key focus of the Commission's work over the past year.

Highlights of the economic relationship:

- In 2004, total U.S. goods trade with China was \$231 billion, making China the United States' third largest trading partner, behind Canada and Mexico. China was the United States' second highest source of imports, behind Canada, and its fifth largest

export destination, behind Canada, Mexico, Japan, and the United Kingdom.

- The U.S. goods trade deficit with China hit a record \$162 billion in 2004 and was the United States' largest bilateral trade deficit—more than twice that of the U.S. goods deficit with Japan, which ranked second. Imports from China reached \$197 billion and U.S. exports to China totaled \$35 billion. These figures represent an increase over 2003 in imports from China (28 percent), exports to China (22 percent) and the overall U.S. goods trade deficit with China (31 percent). Since 2001, the year that China joined the World Trade Organization (WTO), U.S. exports to China have increased 81 percent, and U.S. imports from China have increased 92 percent, leading to an increase in the U.S. bilateral goods deficit of 95 percent. From 1990 to the end of 2005, the United States will have accumulated over \$1 trillion in trade deficits with China.
- The United States remained China's top export market in 2004 and its fifth largest import supplier, behind Japan, the EU15,<sup>1</sup> Taiwan, and South Korea, according to Chinese government statistics. The United States accounted for 33 percent of China's total exports, whereas China accounted for 4.2 percent of total U.S. exports.
- According to China's Ministry of Commerce, nearly 60 percent of China's exports are now produced by foreign-funded corporations.
- The U.S. goods trade deficit with China represents nearly a quarter of the overall U.S. goods deficit and grew at a faster rate in 2004 (31 percent) than the overall U.S. goods trade deficit (22 percent). In fact, the increase in the U.S. goods trade deficit with China of \$38 billion in 2004 accounts for nearly one-third of the \$119 billion total expansion of the U.S. goods trade deficit during that year.
- The U.S. goods trade deficit with China is spread across nearly all major product categories. Of particular significance is the growing U.S. deficit with China in goods designated by the Department of Commerce as advanced technology products (ATP). U.S. ATP imports from China grew more than 55 percent in 2004, leading to a U.S. ATP deficit with China of more than \$36 billion. Since China joined the WTO, the U.S. ATP deficit with China has increased six-fold, from \$6 billion to \$36 billion.
- The U.S. enjoyed a modest trade surplus in services with China in 2003 of around \$2 billion, which did little to offset the enormous U.S. goods trade deficit. This level of surplus in U.S.-China services trade has remained relatively flat since China joined the WTO. The principal components of the U.S. surplus with China in 2003 were educational services and royalties and licensing agreements.
- For the first six months of 2005, the U.S. goods trade deficit with China has reached \$90.1 billion, an increase of 32 percent over the comparable period in 2004. At this rate, the full-year 2005 deficit will reach \$213 billion.
- As reported by the Chinese Ministry of Commerce, U.S.-utilized investment into China was around \$4 billion in 2004, representing approximately 6.5 percent of China's total utilized FDI. Since China joined the WTO, total FDI into China has increased

nearly 30 percent—from \$47 billion to \$61 billion—with the U.S. share decreasing from 10 percent to 6.5 percent.

- China’s foreign exchange holdings reached \$769 billion in September 2005, up from \$416 billion at the start of 2004, and including \$248 billion in U.S. Treasury securities.

## **SECTION 1: IMPACT OF U.S.-CHINA TRADE AND INVESTMENT ON THE U.S. ECONOMY**

### **Key Findings**

U.S. manufacturers in a broad array of industries are under increasing competitive pressures from domestic and foreign-invested China-based manufacturers. Although each U.S. industry has a unique set of competitive concerns with China, the principal cross-cutting concerns are China’s undervalued currency, extensive system of government subsidies (particularly those favoring export-oriented production), weak intellectual property rights protections, and repressive labor practices. Many of these factors—some of which violate China’s international trade commitments—may act as a strong inducement for U.S. and other foreign firms to invest in and relocate to China to serve the Chinese domestic market and to use as an export platform. China is accelerating and shaping the global shift in manufacturing.

- China announced exchange rate reforms in July that included a modest revaluation of the renminbi (RMB) against the U.S. dollar and the linking of the RMB’s value going forward to a basket of international currencies. This was an extremely limited step, amounting to a 2.1 percent change in value. Most economists believe that the RMB is undervalued by 15 to 40 percent. China’s currency manipulation acts as a subsidy for Chinese exports to the United States and a tax on imports from the United States, and serves as an incentive for U.S. and foreign firms to move production to China.
- U.S. producers of advanced technology products are also subject to the growing pressures posed by China. In 2004, the U.S. trade deficit in advanced technology products with China grew to \$36.3 billion.
- The U.S. government does not collect comprehensive data on how the offshore movement of U.S. production through overseas investment and outsourcing affects U.S. employment. The Commission funded two studies that utilized differing methodologies to assess such employment effects. One estimated that U.S. production shifts to China in 2004 alone resulted in a loss of 100,000 U.S. jobs. The other found that nearly 1.5 million U.S. job opportunities have been displaced over the period 1989–2003 due to U.S.-China trade deficits.

### **Overview**

During the 2004–05 reporting cycle, the Commission continued its examination of how the U.S.-China trade and investment relationship is affecting key U.S. industry sectors and different regions of the U.S. economy. The Commission held field hearings in Akron,

Ohio; Seattle, Washington; Palo Alto, California; and New York, New York and took testimony from representatives of a wide array of U.S. industries including automotive and auto parts, steel, glassware and ceramics, machine tools, aviation, aerospace, software, agriculture, paper and forest products, shipping and maritime, electronics, semiconductors, information technology, and entertainment.

While each of these industries has unique challenges and opportunities regarding China, they voiced many common concerns about China's industrial, financial, and labor practices that are putting them at a competitive disadvantage. Most made a point of citing China's undervalued currency as a major factor making U.S. exports less competitive and Chinese imports more attractive, and generally serving as an incentive for U.S. firms to relocate production to China. Industry representatives further cited China's extensive system of government subsidies as an unfair trade practice—including tax incentives, preferential access to credit and capital, non-commercial capital borrowing from state-owned financial institutions, and subsidized energy and utility costs. Another major concern is China's lack of effective protections for and enforcements of intellectual property rights, which allows Chinese firms to benefit from U.S. innovation at virtually no cost. In addition, China's economy continues to be characterized by widespread repressive labor practices that violate internationally-recognized workers rights and effectively hold down wages for Chinese workers to levels that make it virtually impossible for American workers, no matter how well-trained or productive, to compete.

The practices outlined above are key drivers of China's rapidly developing industrial base. They have made China an attractive location for U.S. and other foreign firms to relocate production, both to serve China's domestic market and as an export platform, and have led to the development of a "China Price" for many manufactured goods that has lowered profit margins and put downward pressure on wages for U.S.-based producers of the same items. Testimony to the Commission portrayed a landscape where China's government is pursuing policies to develop its industrial and technological base in many sectors that are key for the U.S. economy, which leaves many U.S. firms facing an insurmountable competitive challenge.

### **Industry Impact**

Through its field hearings in different regions of the country, the Commission has been assessing how the U.S.-China trade and investment relationship is affecting different sectors of the U.S. economy. Below is a synopsis of the principal concerns and competitive challenges raised by industry and labor representatives and by analysts of these industries.

#### ***Automobiles and Auto Parts***

China has designated the automobile industry as one of its pillar industries and taken steps to aggressively ramp up manufacturing capacity on a scale that appears to disregard the global demand outlook. In 2003, China's automobile production reached 4.4 million units, more than a third of U.S. total production of 12.1 million

units.<sup>2</sup> According to a 2004 study by the International Metalworkers Federation, China's major auto producing groups, including foreign joint ventures, are projected to produce 7.7 million units within three years.<sup>3</sup> The report cites conservative estimates that by 2007 Chinese production capacity for passenger cars will be twice that of domestic demand, resulting in excess production of more than three million units, and that this level of excess capacity will continue through at least 2010.<sup>4</sup> A similar assessment was provided to the Commission by an industry analyst from Morgan Stanley.<sup>5</sup>

The early migration of U.S. auto and auto parts manufacturers to China has resulted in the accelerated movement of production. For example, General Motors agreed, as part of its effort to obtain government approval to create an auto production facility in China, that it would swiftly increase its sourcing of auto parts from Chinese sources and assist them to become world-class producers through technological assistance. The other major U.S. auto producers and auto parts manufacturers such as Delphi have made large investments in China as well. The cost differential, resulting from subsidies, lower wage rates, and other factors, has put enormous pressure on domestic suppliers—both with any remaining manufacturing facilities in the United States in that corporate group, and with independent suppliers—to move their production to China. In short, U.S. investments and technology transfers have dramatically advanced China's production capabilities at the resulting expense of U.S. production and employment.

This leads to the critical question of where this excess production will go. Reportedly, China's Vice Minister of Commerce has announced a goal to export \$100 billion of vehicles and auto parts by 2010.<sup>6</sup> The initial stages of this potential export flow of finished cars are already underway. Honda began exporting cars from China to Europe earlier this year, along with the Chinese firm Jiangling Motors Co. Group.<sup>7</sup> The Chinese firm Geely Auto intends to begin selling low-priced cars in the U.S. market next year while Chery Automobile Co. has indicated plans to export as many as 250,000 units to the United States starting in 2007.<sup>8</sup> Notably, General Motors has accused Chery of illegally copying the design of one of its models and is seeking relief in Chinese courts. The "Big Three" U.S. auto firms have not made clear their long-term plans for exporting from China, but all are ramping up their China-based production. General Motors has announced that it will significantly ratchet up its investment in China and double production by 2007.<sup>9</sup> DaimlerChrysler is engaged in talks with a Chinese partner that could result in manufacturing a vehicle targeted in part at the U.S. market.<sup>10</sup> Ford has announced a \$1 billion expansion plan for China including a new engine assembly plant in Nanjing.<sup>11</sup>

Unlike the example of the Japanese automotive sector years ago, China has welcomed foreign investment and U.S. and other overseas automakers have played a key role in developing China's auto industry through investment and joint venture partnerships with Chinese firms. From 1996 until mid-2003, global automakers invested \$12 billion in China's automotive industry and some estimates suggest that another \$10 billion of foreign capital will be invested between 2003 and 2006.<sup>12</sup> Moreover, while Japanese manu-

facturers developed their own distribution systems and dealership networks here in the United States, Chinese manufacturers, through their U.S. partners, have a readily accessible distribution network that could accommodate large volumes of imports from China. While some observers downplay the potential for Chinese-made cars to compete with U.S. production due to the current substandard quality of many Chinese automobiles, the Commission heard testimony that this problem may well be satisfactorily addressed in the near term, potentially introducing enormous competitive pressures to the U.S. domestic auto market, as well as in auto markets in third countries.

While the export of cars from China is just getting underway, the Chinese auto parts sector is already a major exporter, with many U.S. firms significantly producing in or sourcing from China. U.S. auto companies increasingly are looking to suppliers that can price to the China level, and the recent bankruptcy of auto parts supplier Delphi may exacerbate changing sourcing patterns. Both Ford and General Motors have announced their intention to source \$10 billion annually in auto parts from China within the next few years to serve their operations both in China and abroad.<sup>13</sup> This trend has led to a U.S. trade deficit with China in auto parts that grew from \$121 million in 1993 to \$2.3 billion in 2003 despite the fact that U.S. auto parts exports to China more than doubled during that period.<sup>14</sup>

### ***Aviation and Aerospace***

China is projected to be the largest market for new aircraft in the next two decades, giving Chinese firms, which are backed by the government, a significant degree of buying leverage. With aircraft purchases controlled and vetted by the Chinese government, China has been methodically distributing aircraft orders between Boeing and Airbus, often based on near-term political considerations. Moreover, during purchase negotiations, Chinese firms have used their leverage to extract offsets—agreements to transfer some of the aircraft production along with related expertise and technology—as part of the deals. Where such offsets are required as a matter of government policy, they violate China's WTO commitments. Nonetheless, in practice, China aggressively requires offsets as a price of access to its market. More broadly, the prevalence of offset arrangements in aviation deals puts U.S. firms in the difficult position of increasingly having to outsource components of production in order to conclude a transaction and maintain a market for U.S.-based manufacturing. Over the long term, these dynamics undermine U.S. global leadership in aircraft manufacturing.

Boeing's Web site chronicles the following current and newly-concluded arrangements for "Boeing-China Industrial Cooperation":<sup>15</sup>

**Current Work Packages**

- Shanghai: 737 horizontal stabilizers
- Xi'an: 737 vertical fins and 747 trailing edge ribs, 747 floor beams for freighter modification
- Shenyang: 737 tail section modules
- Chongqing, Sanyuan: forgings
- BHA: components, secondary composite structure and interiors components; 737, 767

**New Work Packages**

- Chengdu: 787 rudder
- Hafei: 787 wing-to-body fairing panels
- Shenyang: 787 leading edge for the vertical fin
- Chengdu: 737 forward entry door, 737 over-wing exit door
- BHA: 777 interior panels for flight deck
- 737 wing-to-body fairing panels
- 737 tail cone
- Other opportunities are being evaluated

Highlighting the importance of the China market to Boeing, the company signed a preliminary agreement in January 2005 with six Chinese airlines for the purchase of 60 of its new 787 Dreamliner aircraft for \$7.2 billion and subsequently formalized the arrangement with four of the airlines for 42 of the aircraft.<sup>16</sup> As indicated in the chart above, production of several components of the 787 have already been offset to China.

In another indication of China's developing aviation sector, China Aviation Industry Corporation is in the process of developing a regional jet—the ARJ21. U.S. firms are providing the flight control systems, avionics, and engines to support the ARJ21 program.<sup>17</sup> This aircraft may eventually capture a significant share of the Chinese market and be exported to compete in the global aircraft market as well.

China nurtures its domestic aviation and aerospace industry by exploiting the international competition already present in the industry. By playing Airbus and Boeing off one another, China elicits agreements from each to shift new production and technology to China.

***Semiconductors***

China is currently the world's third largest semiconductor market, estimated at \$25 billion in 2003, and is projected to become the second largest by 2010.<sup>18</sup> U.S. semiconductor exports to China were \$2.4 billion in 2003 and \$2 billion for the first nine months of 2004, making them the second largest manufactured U.S. export to China.<sup>19</sup>

Yet despite the enormous market potential for U.S. exports, there is concern that the rapid development of semiconductor production within China may limit the long-term potential for U.S. ex-

porters. China has made development of this sector a national priority and fostered this development with policies such as preferential tax treatment, use of the technology standard-setting process to favor domestic firms, and government support for research and development. Some of these policies are inconsistent with China's WTO commitments. These efforts have borne fruit as some sources estimate that semiconductors designed, or partially designed, in China will account for nearly 15 percent of global semiconductor sales this year, making China the world's third most prolific nation for chip design.<sup>20</sup> The United States brought its first WTO case against China, the only WTO case that any country has brought, over its practice of providing a value added tax (VAT) rebate for companies that manufacture semiconductors in China while denying the rebate on imported chips. The case was settled in July 2004 after China agreed to eliminate the discriminatory rebate, though, as discussed in Chapter 2, there are concerns that China may be implementing new preferential policies for domestic semiconductor firms.

George Scalise, President of the Semiconductor Industry Association, gave the Commission a clear assessment of the trajectory of China's semiconductor industry. He testified that "[s]emiconductor technology has been making rapid strides in China by virtually any metric one can imagine" and that "[a]lthough China has chosen the low end of the foundry business as [its] entry vehicle into the global semiconductor industry, Chinese foundries are advancing rapidly to become world-class in leading-edge process technology."<sup>21</sup>

Scalise also made clear the challenge facing U.S. semiconductor firms:

*Chinese government policies, and not lower labor costs, are the major contributor to [ , over] 10 year[s], a one billion dollar cost differential, between building and operating a semiconductor plant in China compared to the U.S.*

\* \* \*

*The decision to locate new capacity in China is not driven primarily by low labor costs—semiconductor fabs are capital and technology intensive and even an 80 percent differential in wage rates results in barely a 10 percent difference in final costs. The difference lies mainly in government incentives such as favorable taxation and other benefits.<sup>22</sup>*

The current trends regarding the U.S. semiconductor industry are reminiscent to some degree of the 1980s when the U.S. semiconductor industry was losing market share to Japanese competition. At that time, there were also concerns that Japan was denying leading edge semiconductor manufacturing tools to the United States. In response to this competitive threat and the need to develop more advanced domestic semiconductor manufacturing capabilities, the U.S. government and the industry, both jointly and separately, undertook a range of policy responses. One key initiative was SEMATECH, which ensured leading edge semiconductor manufacturing tools were produced in the United States.<sup>23</sup> SEMATECH, jointly funded by the government and industry, effec-



tively mitigated the high cost and risks associated with advanced semiconductor technology and is often credited, along with export control liberalization and a market share agreement with Japan, as a factor in reviving the U.S. semiconductor industry.<sup>24</sup>

Chapter 2 includes a discussion of the importance of advanced microchips to the U.S. defense industrial base and how China's growth as a location of semiconductor production and design may be affecting the United States' trusted and assured supply of defense critical chips.

### ***Software***

The U.S. trade deficit with China in computer and electronic hardware has implications for the future of U.S.-based software development. First, there are concerns about the extent to which the outsourcing of software design and production to locations outside the United States ("offshoring") will follow the already considerable offshoring of hardware production. Second, there are concerns about China's development of indigenous technical standards and how they may operate as an incentive to move both software and hardware production to China.<sup>25</sup>

The U.S. software industry has been subject to strong incentives for offshoring, driven by cheaper labor costs in China and India. Moreover, offshoring is likely to expand in scale, scope, and skill level as China and India continue to graduate high numbers of technically proficient computer engineers. But U.S. software firms also are put at a disadvantage by China's continuing failure to enforce intellectual property rights and by Chinese government policies that favor domestic industries. As detailed later in this section, the U.S. software industry has lost billions of dollars in China due to IPR piracy, and this rampant piracy has stalled U.S. software exports to China. The use of pirated software is even widespread among Chinese government offices.<sup>26</sup> Chapter 2 details China's announced government procurement restrictions, currently delayed, that would limit government purchases of foreign company software and thereby shut U.S. firms out of a lucrative segment of the Chinese software market that has better IP protections than the general commercial market.

### ***Agriculture***

While U.S. agricultural exports to China increased significantly in 2004, with a total of \$5.5 billion in exports contributing to a sectoral trade surplus of \$3.9 billion, the U.S. agricultural industry continues to face market barriers to its exports to China and increasingly is facing competition from Chinese exports in the U.S. and third-country markets.

USTR's 2004 Report to Congress on China's WTO Compliance highlights China's non-transparent and non-scientific based application of sanitary and phytosanitary measures, arbitrary inspection-related requirements, and improper administration of tariff-rate quotas for bulk agricultural commodities as continuing trade barriers affecting U.S. exports of wheat, soybeans, raw poultry and meat, and processed food products.<sup>27</sup> U.S. agricultural products were subjected to new sanitary and phytosanitary measures in

2004,<sup>28</sup> demonstrating that non-tariff barriers can be raised in new areas even as they disappear in others.

At the same time, increased import competition from China is already significant for many U.S. agricultural producers. The Commission heard testimony regarding China's surging production of apples, apple juice concentrate, pears, and spearmint oil and corresponding decreases in U.S. exports of these products, with industry representatives pointing to China's government subsidies for agriculture, lower labor costs, and undervalued currency as principal competitive advantages.<sup>29</sup>

The example of the apple industry demonstrates the dramatic impact of China's surging agriculture growth on U.S. industry. China began ramping up its production and export of apple juice concentrate in the mid-1990s and quickly moved from a negligible share of the U.S. market in 1995 to 40 percent in 2003, leading U.S. concentrate producers to slash their prices and drastically reduce the price they pay for U.S. juice apples.<sup>30</sup> The U.S. apple industry filed a successful dumping suit against Chinese apple juice concentrate imports, but dumping duties were later rescinded with regard to several major Chinese exporters.<sup>31</sup> The U.S. industry is now concerned about competition with fresh apple imports from China in third-country markets and eventually in the U.S. market, for which China has requested USDA approval. According to industry testimony: "At a minimum, the U.S. apple industry expects Chinese fresh apple imports to add significant downward pressure on fresh apple prices. Should Chinese producers gain access to the U.S. market, major segments of the apple industry could be forced out of business by low apple prices."<sup>32</sup> In addition to these competitive issues, the industry also expressed concern about the health safety of apple imports from China and about Chinese apple exporters counterfeiting the trademarked brand names and logos of U.S. apple producers.<sup>33</sup>

### ***Paper and Forest Products***

The American Forest and Paper Association (AF&PA) issued a detailed report in 2004 documenting how China has used a mix of government subsidies and targeted policies to rapidly expand its forest products industry. According to the report, the Chinese government provided \$1.67 billion in financing and loan interest subsidies for renovation of 21 state-owned paper mills across China from 1998–2002 and has designated an additional \$1.73 billion for the development of fast-growth, high-yield plantations by 2015. This has been in addition to extensive below-market financing offered to domestic firms by Chinese banks. The Chinese government has further assisted the industry by providing tariff exemptions on the import of logs and other raw materials and high-grade paper machinery while maintaining tariffs on imported value-added wood and paper products and VAT rebates on the export of these items.<sup>34</sup> These industry-specific policies, in addition to the subsidy provided by China's undervalued currency, have resulted in a growing U.S. trade deficit with China in paper products.

China's furniture exports to the United States totaled \$8.9 billion in 2004, representing 42 percent of total U.S. furniture imports.<sup>35</sup> Furniture imports have forced the U.S. industry into a competition

that it has thus far been unable to withstand.<sup>36</sup> This competition has the potential to affect the roughly 570,000 workers employed by the U.S. industry.<sup>37</sup>

The full range of China's practices in this sector appears to be inconsistent with China's WTO commitments. As one witness explained: "[I]t is extremely hard to attract investment capital for our domestic pulp and paper facilities when it is common knowledge throughout our industry and Wall Street that China is coming on-line with a forest product manufacturing base that will be hard to deal with in the very near future."<sup>38</sup>

### **Ports and Shipping**

The Commission heard testimony from two Pacific Northwest port directors on how the exponential growth in U.S.-China trade has affected U.S. ports and shipping.

M.R. Dinsmore, Chief Executive Officer of the Port of Seattle, highlighted for the Commission the increasing importance of trade with China to the port's future:

*At the Port of Seattle, China became our largest trading partner last year—overtaking Japan—and it will continue to be one of our major customers in the years to come. In 2003 about \$8.8 billion in two-way trade passed through the port alone. We've spent more than \$800 million over the past few years upgrading our terminal facilities and we plan further expansion to accommodate the increased trade we know is heading our way.*<sup>39</sup>

Yet smaller ports like the Port of Portland have experienced dislocations from U.S.-China trade due to the growing imbalance between U.S. imports from and exports to China. Nathaniel Ruda, Marine Director of the Port of Portland, explained this dynamic to the Commission:

*In the transpacific trade, for every three import containers moving to the United States, there is only one full export container. The bulk of our "exports" are now empty containers being returned to Asia, notably China. This gap has been one of the contributors to recent losses in direct container service coverage to Portland. Our traditional export-dominated cargo no longer presents an economic value proposition to shipping companies sufficient to sustain multiple weekly port calls. Shippers, especially agricultural exporters, must use more expensive truck/rail services to Puget Sound ports in order to obtain ship capacity to Far East markets.*<sup>40</sup>

Despite these current problems facing the Port of Portland, Mr. Ruda indicated that increased exports of grain to China have helped the port's bulk shipping business, as contrasted with its container business, and he expressed cautious optimism that continued growth in U.S.-China trade eventually would lead to a recovery of service frequency to the Port of Portland.<sup>41</sup>

The increased inbound shipping traffic at U.S. ports from China raises serious port security challenges as well. This topic is discussed in Chapter 4.

### ***Trade Adjustment Assistance***

The above industries are only a small and incomplete sample of the sectors of the U.S. economy that are affected by trade with China. The primary goal of U.S. policy must be the retention and expansion of U.S. employment. As the ramifications of the U.S. trade policy toward China spread throughout the economy, it is important for the United States to have an effective Trade Adjustment Assistance (TAA) program. The TAA program now offers benefits, tax credits, and funds for training and job searches. It was expanded in November 2002 to cover trade beyond Canada and Mexico and to begin to assist with job losses among suppliers to companies harmed by trade. Still, the program does not cover the full range of workers affected by trade, particularly in sectors that have not traditionally been exposed to international competition.<sup>42</sup> And, for a substantial percentage of those dislocated workers who are covered under the current eligibility definition contained in the statute, assistance may be unavailable:

*Bureaucratic roadblocks, limited funding and restrictive legal requirements combine to render the benefits inaccessible to many—probably most—workers who lose their livelihoods as lower trade barriers open American markets to more foreign competition.*<sup>43</sup>

### **Cross-Cutting Competitiveness Concerns**

As the above discussion indicates, testimony to the Commission by U.S. company and labor representatives and industry analysts expressed escalating concerns about the challenges faced by U.S. firms in both labor-intensive and capital-intensive industries in competing with China's growing industrial base. While each industry has an array of specific trade concerns with China, there are a number of key structural elements of China's economy that undermine the competitiveness of virtually all U.S.-based industries facing Chinese competition: China's undervalued currency, its extensive system of government subsidies, its weak IPR protections and enforcement, and its repressive labor practices.

### ***China's Undervalued Currency***

Beginning with its 2002 Report to Congress, the Commission has been analyzing the impact on U.S. industries of China's undervalued currency. In its 2004 Report to Congress, the Commission concluded that China was systematically intervening in the foreign exchange market to keep its currency undervalued, in violation of its obligations as a member of both the WTO and the International Monetary Fund (IMF), and that this currency misalignment had undermined the competitiveness of U.S. manufacturers. This situation continues.

The undervaluation of the Chinese currency affects the U.S. economy in several important ways. First, by making U.S. exports relatively more expensive, it reduces demand and export opportunities in China for U.S. manufactured goods. Second, the undervaluation of the RMB against the dollar makes imports from China relatively less expensive, inducing U.S. consumers to switch from domestically produced manufactured goods to Chinese-produced

goods. Third, this exchange rate misalignment reduces the profitability of U.S.-based manufacturing by making foreign goods cheaper and reduces the incentive for U.S.-based firms to invest in new production capacity. Lastly, the advantages provided by an undervalued RMB to Chinese-based manufacturing gives U.S. firms a strong incentive to shift existing production to China and to locate new production facilities there. All these factors have contributed to the burgeoning U.S. bilateral trade deficit with China and movement of production.<sup>44</sup>

Given China's large trade surplus with the United States and large-scale inflows of foreign direct investment, there have been strong market and political pressures on China to revalue the RMB upward, with a growing consensus of economists generally assessing the RMB to be between 15 and 40 percent undervalued. Chinese authorities have resisted this pressure by persistently intervening in currency markets to prevent appreciation of the RMB. This has contributed to the massive increase in Chinese foreign exchange holdings, which totaled \$769 billion in September 2005. While other Asian trading partners such as Japan, South Korea, and Taiwan also run trade surpluses with the United States, they have allowed their currencies to appreciate in recent years to a much greater extent than China in order to facilitate the re-balancing process.<sup>45</sup> C. Fred Bergsten, Director of the Institute for International Economics, told the Commission that given China's high growth rate, its massive inflows of FDI, and its large global current account surplus (which exceeded 4 percent of GDP in 2004), "it is highly inappropriate, extremely counterproductive for the world economy, and extremely antisocial behavior for China to have become substantially more competitive over the last few years by engineering a significant decline in the exchange rate of its currency."<sup>46</sup>

On July 21, 2005, the central bank of China announced several changes in its exchange rate policies. First, the RMB was revalued upward by a modest 2.1 percent against the dollar. Second, the bank indicated that the Chinese currency would be allowed to trade within a band of 0.3 percent. Third, the reference point for trading the RMB was linked to a basket of international currencies rather than solely to the U.S. dollar. Now that this system has been in place for several months, it is apparent that China's government has continued to intervene in the exchange rate market to hold down the value of the RMB and that the new system does not represent a fundamental shift toward a strengthened value or more flexible valuation system for the RMB that is more in line with China's economic realities.

Notably, in releasing the May 2005 report, Treasury Secretary Snow called on China to take immediate steps to reform its currency practices "in a manner and magnitude that is sufficiently reflective of underlying market conditions."<sup>47</sup> The Commission does not believe China's July 2005 revaluation of the RMB meets this standard because it is insufficient to address current market distortions and to provide needed relief to U.S. exporters.

Some analysts argue that were China to significantly, upwardly revalue the RMB, Japan, South Korea, Taiwan and other Asian economies whose currencies remain undervalued despite some up-

ward movement in recent years would then allow their currencies to significantly appreciate and move toward adopting more flexible exchange rate policies, creating a positive multiplier effect for the U.S. economy. These other economies likely will be unwilling to make any significant movement without China taking the lead.

In its May 2005 Report to Congress on International Economic and Exchange Rate Policies, the Treasury Department plainly stated that China's exchange rate policies are "highly distortionary and pose a risk to China's economy, its trading partners, and global economic growth."<sup>48</sup> The report further indicated that "[c]oncerns of competitiveness with China also constrain neighboring economies in their adoption of more flexible exchange policies."<sup>49</sup> Notably, Treasury indicated that "[i]f current trends continue without substantial alteration," it was prepared to designate China as a country that manipulates the value of its currency to gain a competitive trade advantage under the provisions of the Omnibus Trade and Competitiveness Act of 1988 (the 1988 Trade Act).<sup>50</sup> This designation, in conjunction with a finding that China is running both a material global current account surplus and a significant bilateral trade surplus with the United States (which currently is the case), would require Treasury to initiate formal negotiations on an expedited basis, in the IMF or bilaterally, to ensure that China takes action to end its currency manipulation practices.<sup>51</sup> A formal designation under the 1988 Trade Act would put the United States on record as officially endorsing the view that China manipulates its currency for trade advantage and would require that Treasury act to end these practices. It would also increase pressure on the IMF to deal more forcefully with the issue.

The Commission believes that China must take immediate steps to allow the RMB to appreciate against the dollar or a transparent, trade-weighted basket of currencies by at least 25 percent.

### ***China's Extensive Government Subsidies***

The Commission has documented in past reports an array of practices by the Chinese government that constitutes subsidies to Chinese industries. These take the form of preferential tax treatment, subsidized and non-performing loans from state-owned banks, below market value costs for utilities, energy, land, and other infrastructure, and domestic input requirements.

In its WTO agreement, China committed to eliminate immediately all subsidies prohibited under Article 3 of the WTO Agreement on Subsidies and Countervailing Measures, which broadly covers subsidies contingent on export performance (export subsidies) and subsidies contingent on the use of domestic rather than imported goods (import substitution subsidies). The Subsidies Agreement further requires that China provide detailed information about its subsidy programs to the WTO on an annual basis.

According to USTR, "China has failed to make any of its required subsidy notifications since becoming a member of the WTO three years ago."<sup>52</sup> This has been the case despite repeated requests by USTR and other WTO member countries as part of China's annual transitional review in the WTO. This lack of transparency compounds the difficulties in addressing China's complex and pervasive

system of subsidies, as reported by USTR in its 2005 National Trade Estimate Report on Foreign Trade Barriers:

*A general lack of transparency makes it difficult to identify and quantify possible export subsidies provided by the Chinese government. China's subsidy programs are often the result of internal administrative measures and are not publicized. Many of the subsidies take the form of income tax reductions or exemptions that are de jure or de facto contingent on export performance. They can also take a variety of other forms, including mechanisms such as credit allocations, low-interest loans, debt forgiveness and reduction of freight charges. U.S. industry has alleged that subsidization is a key reason that Chinese exports are undercutting prices in the United States and gaining market share. Of particular concern are China's practices in the textiles industry as well as in the steel, petrochemical, high technology, forestry and paper products, machinery and copper and other non-ferrous metals industries.<sup>53</sup>*

The Commission believes that one of the most pervasive forms of subsidies in the Chinese economy is the low and no-cost financing often available to Chinese domestic firms from state-owned banks. This system of "policy lending" whereby capital is allocated for political or strategic reasons using subsidized interest rates and other noncommercial terms arguably amounts to a massive government subsidy for Chinese firms that is used both to bolster their operations and to fund acquisitions.<sup>54</sup> As discussed above, the American Forest and Paper Association has documented over \$3 billion in current and expected future government financing and loan interest subsidies for Chinese paper mills and forest plantations. This issue also arose in the context of the bid by China National Offshore Oil Corp. (CNOOC) for the U.S. petroleum firm Unocal. CNOOC's \$18.5 billion offer for Unocal reportedly included \$7 billion in low-interest or no-interest financing from its state-owned parent company and another \$6 billion in favorable financing from a state-owned bank. The immense scale of the past use by China of this form of government subsidy is revealed by the fact that China's state-owned banks are estimated to have upwards of \$500 billion in non-performing loans.

A significant hurdle in addressing Chinese government subsidies is the inability of U.S. firms to seek relief when competing against subsidized industries in China using U.S. countervailing duty (CVD) laws. The Department of Commerce has ruled that U.S. CVD laws are not applicable to non-market economies like China, a determination this Commission disputes. An analysis of this issue appears in Section 2 of this chapter.

The Commission further believes that both China's undervalued currency and its weak IPR protections and enforcement constitute additional forms of government subsidies. China's undervalued currency functions as a 15 percent to 40 percent subsidy for Chinese exports based on the estimated level of undervaluation. China's lack of adequate protections and enforcement for IPR also confers a government benefit on Chinese firms by allowing them to acquire U.S. technological and design know-how at no or little cost.

***China's Weak Intellectual Property Rights (IPR) Protections and Enforcement***

IPR piracy in China remains rampant and is a paramount trade concern for a broad array of U.S. firms whose intellectual property is central to their business success. U.S. exporters are concerned about the theft of their intellectual property and its reproduction and sale in China at a fraction of the cost, while U.S. producers are concerned about having to compete against Chinese firms that can make technology and design advances at low cost using pirated intellectual property.

Notwithstanding legal improvements, IPR violations in China continue virtually unchecked. Piracy rates in China remain above 90 percent across all copyright industries.<sup>55</sup> Counterfeiting in China has reached such epidemic proportions that two-thirds of the counterfeit products in the world are of Chinese origin.<sup>56</sup> Of the \$94 million worth of counterfeit goods seized at the U.S. border in 2003, 66 percent originated in China.<sup>57</sup>

Take the example of the U.S. software industry, an industry that should be enjoying enormous market opportunities in China. Instead, the Business Software Alliance estimated that losses to the U.S. software industry due to piracy in China amounted to \$1.47 billion in 2004.<sup>58</sup> According to industry testimony, U.S. software sales to China have stalled due to IPR concerns:

*Rampant piracy has effectively stalled growth in U.S. software exports to China, despite China's escalating use of computer and software technologies. Consider that in 1996 China was the sixth largest market for personal computers and the twenty-sixth largest for software; it is now the second largest market for personal computers but still only the twenty-fifth largest market for software. This growing gap between hardware and software sales is the inevitable consequence of a market that does not respect intellectual property rights or reward the significant investment required to develop and market innovative software products.*<sup>59</sup>

The U.S. entertainment industry is another whose competitiveness has been heavily affected by the current IPR situation in China. The Motion Picture Association of America (MPAA) reports that China's piracy rate reached 95 percent in 2004 and that during 2003 69 percent of the VCD and 85 percent of the DVD discs manufactured in China were pirated product.<sup>60</sup> The industry estimates that U.S. film companies have lost over \$1 billion in revenue due to piracy in China over the past seven years, with \$280 million of those losses coming in 2004.<sup>61</sup> Particularly troubling is the MPAA's finding that exports of pirated goods from China to the United States, the United Kingdom, and other countries have increased steadily over the past several years.<sup>62</sup> Commenting on its competitive concerns, the MPAA told the Commission that "[n]o legitimate supplier of films, whether local or foreign, can compete with pirates who pay no taxes, endure no censorship obligations, and bear none of the costs of running a studio."<sup>63</sup>

This past July, the Motion Picture Association (MPA), an international association with which MPAA is affiliated, entered into an agreement with China's Ministry of Culture (MOC) and State Ad-



ministration of Radio, Film and Television (SARFT) whereby every three months MPA will submit to MOC and SARFT a list of movies scheduled to be screened in China by its member companies and the Chinese agencies will focus IPR enforcement efforts on seizing and prosecuting pirated videos of these movies that enter the market before their video release date.<sup>64</sup> Both the industry and the Commission await evidence that the promises are being fulfilled. That the industry had to negotiate for its own protection is a troubling sign that the U.S. government has failed in its role as guarantor of the economic rights of its citizens and companies.

While China's domestically produced films also suffer from piracy, there is evidence that when the Chinese government has chosen to do so, it has been able to control piracy in certain areas. In the case of domestic films, where the government has a financial stake in the films or the theaters showing them, the government has reportedly been able to control piracy so the films can be viewed only in theaters, resulting in a large theater viewership that pirated films are generally unable to realize.<sup>65</sup> This suggests that the Chinese government has considerably more power to enforce IPR protections than it has exerted to date.

IPR violations in China go well beyond the software and entertainment industries, with many U.S. industrial firms now being heavily affected. As noted above, General Motors is suing Chinese automaker Chery for illegally copying the design of one of its models. IPR infringements have also affected products like pharmaceuticals and gauges, raising health and safety concerns. The Commission heard testimony on this from a U.S. gauge manufacturer:

*For the first time, to the best of my knowledge, Chinese counterfeiters have approached domestic customers for our product in an attempt to sell them copies of our instruments. I recently came into possession of one of these counterfeit gauges. These clones bear our name and address, as well as a label with a CE stamp on it certifying that the product has passed a battery of tests that are required in order for the product to carry this designation and be exported to the EU. In addition, the label on the case of the fake gauge also carries our catalog part number, and the initials of a calibrator as well as a final tester—all misrepresentations. When the product was checked on a test station it was found to be grossly inaccurate. One of the ramifications of this, beyond solely the ethical consideration, is that of creating a potential safety issue for whoever uses the faulty instrument.<sup>66</sup>*

China's lack of adequate IPR protections also give Chinese firms a competitive advantage over U.S. firms by allowing many to obtain key technology and design inputs—from software to assembly line design—at a fraction of the cost to their U.S. competitors. Removing the need to shoulder comparable production costs gives Chinese firms in many sectors the ability to heavily under-price U.S. firms, in capital-intensive as well as labor-intensive industries. Some observers contend that for these reasons the Chinese government views a lax IPR enforcement regime as part of its industrial policy:

*China's failure to police its intellectual property rules often looks less like ineffective government than a conscious policy to shift the highest value goods from other economies into the country. It is, in essence, the largest industrial subsidy in the world, and brilliantly, it costs the Chinese nothing. In 2005, China will most likely be the world's third-largest trading nation, and counterfeiters give the country's increasing number of globally competitive companies the means to compete against powerful foreign rivals that pay for their use of proprietary technologies.<sup>67</sup>*

The U.S. government has spent the last 15 years working with China to improve its IPR protection and enforcement regime with little to show in the way of concrete results. This has been the case despite the fact that bilateral agreements on IPR were concluded with China in 1992, 1995, and 1996, China's accession to the WTO and its accompanying agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS), and high-level IPR enforcement commitments by China in the 2004 meeting of the U.S.-China Joint Commission on Commerce and Trade (JCCT). Improving China's enforcement of IPR was again the major topic of the JCCT talks that took place this past July. The Commission remains skeptical that China will make any substantial progress in curbing its level of IPR violations without aggressive U.S. enforcement efforts under U.S. law and in international venues.

### ***China's Repressive Labor Practices***

A significant component of China's competitive advantage in many industries is the ongoing denial of basic labor rights to workers in those industries. This is not only a bilateral human rights matter, but one that has significant repercussions for U.S. economic competitiveness.

The State Department's 2004 Country Reports on Human Rights Practices documents China's widespread deprivation of fundamental workers rights, including the right to organize, form independent trade unions, and bargain collectively, the continuing practice of forced or compulsory labor and child labor, and poor occupational health and safety standards.<sup>68</sup> In its 2004 Annual Report, the Congressional-Executive Commission on China similarly concluded that:

*Working conditions in China and the government's lack of respect for internationally recognized worker rights remained largely unchanged over the past year. Government implementation of labor laws, regulations, and policies continues to fall well below international norms in a number of areas. The Chinese government denies Chinese citizens the right to organize freely and to bargain collectively; it continues to imprison labor leaders and suppress worker efforts to represent their own interests; it continues to discriminate against migrant workers; and it has developed a system that encourages forced labor. Child labor remains a significant problem in China. In addition, unhealthy and unsafe conditions are pervasive in Chinese workplaces.<sup>69</sup>*

These repressive labor practices are a significant element holding down wages and labor costs in China and thereby giving China an enormous competitive advantage in labor-intensive production. This has a pronounced impact in the United States on a broad spectrum of industries, including higher-skill industries like aerospace:

*Failure to permit labor to enjoy freedom of association through the formation of legitimate trade unions and to engage in meaningful collective bargaining is a market distorting mechanism that artificially holds down wages. There is certainly no dispute that wages in China are low, even compared with those from developing countries. A recently reported study calculated that ‘[T]he cost of Chinese factory labor is a paltry 64 cents an hour.’ While aerospace workers in China are presumably on the higher end of the wage scale, they indisputably receive only a fraction of pay that U.S. aerospace industry workers receive and ‘although reliable data on comparable labor costs in China are not available, we can be confident that aerospace wages in China are below Mexican levels, and far below those in the U.S.’<sup>70</sup>*

U.S. trade laws recognize that a country’s repressive labor practices can constitute an unfair trade practice. Section 301 of the Trade Act of 1974 authorizes the U. S. Trade Representative (USTR) to take action to address “unreasonable” trade practices by U.S. trading partners that burden U.S. commerce. Among the enumerated “unreasonable” trade practices listed in the statute is a country’s persistent denial of internationally recognized workers’ rights.<sup>71</sup> On this basis, the AFL–CIO submitted a 301 petition in 2004 arguing that China’s labor practices constitute an unreasonable trade practice and a burden on U.S. commerce. Giving no reason, USTR turned down the petition and took no action.

### **Effect on U.S. Employment**

The foregoing discussion details the competitive challenges faced by U.S. firms in a broad array of industries in competing against Chinese firms and China-based production. These competitive challenges threaten the survival of many industries in the United States, with implications for both U.S. economic health and national security.<sup>72</sup>

To better understand the economic impact of U.S.-China trade and investment, the Commission supported two studies over the past year to quantify U.S. production shifts to China and the accompanying effect on U.S. employment. To put the following figures in context, consider that the U.S. economy employed 150.1 million people in September 2005, representing an increase of 5.8 million jobs since China joined the WTO in December 2001. The U.S. manufacturing sector employed 14.2 million people in September 2005, following a decrease of 1.5 million jobs from December 2001.<sup>73</sup> The job gain data must be measured by the quality of those jobs in terms of wage and benefit levels. “Nationwide, industries that are gaining jobs relative to industries that are losing jobs pay 21 percent less annually.”<sup>74</sup> “Recent wage growth is compared to three

benchmarks: trends since mid-1995, inflation, and productivity. In every case, wages are performing worse now than a few years ago.”<sup>75</sup>

The first study, jointly authored by Dr. Kate Bronfenbrenner of Cornell University and Dr. Stephanie Luce of the University of Massachusetts, Amherst, utilized a methodology that involved a combination of online media tracking and corporate research and the creation of a database including information on all production shifts announced or confirmed in the media during the covered period.<sup>76</sup> The study covered the period January-March 2004, and was a followup to a prior study done for the Commission in 2002 covering the period October 1, 2000 to April 30, 2001.

Among the study’s key findings were the following:<sup>77</sup>

- There have been major increases in production shifts out of the United States, particularly to Mexico, China, India, and other Asian countries. The pace of production shifts to China grew considerably between 2001 and 2004. During just the first three months of 2004, there were 58 such shifts to China documented across a range of industries, compared to 25 shifts to China during a similar period in 2001, an increase of 132 percent.
- Due to increasing efforts by firms to minimize publicity regarding overseas production shifts and other data limitations, particularly regarding smaller firms, the methodology used to track production shifts likely captures only approximately two-thirds of production shifts to Mexico and about a third of production shifts to other countries. Accordingly, the report projected that for the full year of 2004 production shifts will result in as many as 406,000 jobs moving from the United States to other countries compared to 204,000 jobs in 2001, of which nearly 100,000 jobs will move from the United States to China.
- The number of jobs lost because of production shifts far exceeds that reported by the Bureau of Labor Statistics (BLS). The BLS documented that 4,633 private sector workers in establishments with 50 or more workers lost their jobs due to global outsourcing in January-March 2004, whereas the Bronfenbrenner/Luce Report found solid confirmation that a minimum of 25,000 jobs were shifted overseas during that period.
- Production shifts from the United States to China represent a cross section of industrial sectors including apparel and footwear, sporting goods and toys, wood and paper products, aerospace, appliances, household goods, industrial equipment and machinery, electronics and electrical equipment, metal fabrication and production, chemicals and petroleum, textiles, and plastics, glass, and rubber. This contrasts with 2001 when most production shifts to China were concentrated in a few industries: electronics and electrical equipment, chemicals and petroleum, household goods, sporting goods and toys, textiles, and wood and paper products.
- Media-tracking and other such methodologies are needed to gain a picture of the extent of production shifts to China because there continues to be no government-mandated reporting system to track production shifts out of the United States.

The second study, prepared for the Commission by Dr. Robert Scott of the Economic Policy Institute (EPI), assessed the state-by-state employment impact of U.S.-China trade over the period 1989–2003 using an input-output methodology that determines the number of jobs needed to produce exports and imports.<sup>78</sup> This methodology is based on the premise that increases in exports support domestic employment while increases in imports displace domestic production that could have supported more jobs in any given sector and is therefore a measure of job opportunities created or lost through trade.

The EPI report found the following:<sup>79</sup>

- The rise in the U.S. trade deficit with China from 1989 to 2003 caused displacement of production that supported 1.5 million U.S. jobs. The loss of jobs in the United States due to the growing trade deficit with China has more than doubled since China entered the WTO in 2001.
- China's exports to the United States of electronics, computers, and communications equipment, along with other products that use more highly skilled labor and advanced technologies, are growing much faster than its exports of low-value, labor-intensive items such as apparel, shoes, and plastic products.
- The 1.5 million job opportunities lost nationwide are distributed among all 50 states and the District of Columbia.

The Commission intends to support further research efforts like these studies to obtain the data U.S. policymakers and the American public need to better understand how the U.S.-China economic relationship is affecting our economy and standard of living.

## **SECTION 2: ASSESSING AND ENFORCING CHINA'S COMPLIANCE WITH WORLD TRADE ORGANIZATION COMMITMENTS**

### **Key Findings**

- China remains in violation of its WTO commitments in a number of important areas. While China has made progress toward meeting some commitments, shortfalls persist in many of the most significant areas for U.S. industries. As a result, U.S. firms continue to face market access barriers in China and unfair trade practices in U.S. and third-country markets.
- U.S. laws and the WTO provide remedies and safeguards for firms facing unfair trade practices and import surges from China. However, these trade tools to date remain underutilized and ineffective. Antidumping duties have gone uncollected; countervailing duties are presently inapplicable to China due to a Department of Commerce practice. The U.S. government has been slow to implement the China-specific textile safeguard and then the safeguard has been immobilized by litigation at a crucial time. Relief under the China product-specific (Section 421) safeguard has never been granted by the President despite three International Trade Commission decisions authorizing relief for the parties.<sup>80</sup>
- China has effectively marginalized the WTO's annual review of its progress in meeting its WTO accession commitments—the

Transitional Review Mechanism (TRM)—preventing use of the TRMs as a means of putting multilateral pressure on China to account for compliance shortcomings. In the future, it may be more productive to rely on the Trade Policy Review Mechanism (TPRM), applicable to all WTO members, to review China's WTO compliance. The TPRM will conduct its first review of China in April 2006.

- China's exchange rate practices, extensive system of government subsidies, and weak intellectual property protections and enforcement are key trade concerns negatively affecting a broad array of U.S. firms. Currently available WTO mechanisms have yet to be tested as solutions to address these vital trade concerns, despite their explicit design as remedies for trade disputes. It is important to note that the WTO does not cover internationally defined core labor standards.

### Overview

China negotiated and accepted a transitional agreement for its entry into the WTO due to the extensive economic reforms it needed to undertake to conform to the market practices of WTO members. The agreement required numerous changes in Chinese trade laws and government policies, which were to be phased in over the following years. The vast majority of the phase-in deadlines are now past.

Many of the major compliance problems persisted in 2004, even as China continued to address them with at least a nominal effort. China instituted a large number of reforms in 2002, but progress toward full compliance slowed in 2003 and 2004. Many of these persistent problems are of utmost importance to U.S. industries, but the United States has filed only one WTO dispute against China to date.

USTR's annual report on China's WTO compliance thoroughly catalogs China's shortfalls, and remains the official U.S. government assessment of China's compliance record. USTR's 2004 Report identified six areas of particular concern to the United States in which China's compliance remains deficient. These areas are intellectual property rights, trading rights and distribution services, services, agriculture, industrial policies, and transparency.<sup>81</sup> Independent assessments of China's WTO compliance, largely produced by industry groups, essentially concur with USTR's analysis.<sup>82</sup>

China remains in violation of many critical WTO commitments, having failed to make significant progress in the areas of non-compliance noted in the Commission's 2004 Report to Congress. China's continued recalcitrance is causing material injury to U.S. companies, workers, and communities. It also is contributing to a highly skewed bilateral economic relationship marked by a soaring U.S. trade deficit and a weakening competitive position for many U.S. firms.

China's participation in the WTO has ramifications for that institution, and for international economic and legal systems in general. The magnitude, dynamism, and developing nature of China's economy put it in a category apart from other WTO entrants, giving China the capacity to fundamentally alter the structure and envi-

ronment of international trade. China's inability or refusal to abide by many important WTO commitments, coupled with the scale of its economy, pose a challenge to the foundation of the international trading system.

### **Enforcing China's Compliance**

Despite incomplete compliance with WTO obligations, China has faced only one WTO dispute to date. As discussed in Section 1, the United States filed a dispute in March 2004 concerning China's discriminatory VAT on semiconductors that favored domestic producers. Japan, Taiwan, Mexico, and the European Union all joined the complaint after it had been filed. China quickly settled the dispute to the satisfaction of the petitioners before the case reached adjudication.

A number of China's practices in other areas are similarly ripe for WTO adjudication.

### ***Intellectual Property Rights***

As detailed in Section 1, violations of intellectual property rights (IPR) in China continue virtually unchecked. However, this is no longer primarily a function of lax IPR laws: China has improved many of its laws regarding IPR since its accession to the WTO. The major remaining legal loophole is a high monetary threshold that must be cleared before criminal charges apply. This threshold contradicts provisions of the WTO's TRIPS Agreement that calls for criminal treatment of IPR violations on a commercial scale irrespective of the value of the loss.<sup>83</sup>

China's principal IPR deficiency is effective enforcement of its laws, which is among its WTO commitments.<sup>84</sup> To date, with industry sources citing piracy rates above 90 percent, it is starkly apparent that China has failed to fulfill those commitments.<sup>85</sup> China pledged to enact a specific plan for protecting IPR during the April 2004 meeting of the U.S.-China Joint Commission on Commerce and Trade (JCCT). Subsequently, USTR conducted an out-of-cycle review of IPR protection in China and determined that China had not delivered on the promises made at the 2004 JCCT.

USTR maintains a watch list of countries with the most egregious failings in IPR protection. Those countries with the most egregious IPR violations that "are not engaged in good faith negotiations or making significant progress in negotiations to address these problems" are designated "Priority Foreign Countries" and face the possibility of U.S. sanctions.<sup>86</sup> Priority Foreign Countries can move to the less severe, transitional category of Section 306 monitoring if they enter into good faith negotiations or make significant progress in addressing cited problems. As a result of USTR's out-of-cycle review, China was demoted from Section 306 monitoring to the Priority Foreign Countries list.<sup>87</sup> This change in designation reflects the conclusion that China's participation in negotiations regarding IPR issues has not been in good faith, as evidenced by unabated IPR violations.

The July 2005 JCCT meeting resulted in more promises by China to take specific actions intended to reduce the theft of intellectual property. The Commission recognizes that these steps, if

completed, would improve the status of IPR in China, but reiterates that China repeatedly has made similar pledges to no effect.

China's failure to protect IPR is clearly within the jurisdiction of the WTO, given China's explicit obligations under the TRIPS agreement. Because China is not making satisfactory progress in this area, the United States should initiate action through the dispute resolution process at the WTO to address China's failure to comply with both the criminal penalties and enforcement provisions of TRIPS. In October 2005, USTR requested information from China regarding China's IPR enforcement efforts.<sup>88</sup> USTR's request exercises U.S. rights under the WTO's TRIPS agreement, but it will not automatically result in WTO consideration of action to require China to alter its approach to IPR protection. The U.S. can and should pursue further steps toward this end.

### ***Currency Manipulation***

As discussed in Section 1, notwithstanding its recent, modest revaluation, China's currency remains significantly undervalued through direct, intentional currency market intervention by the Chinese government. In joining the WTO, China consented to be bound by GATT Article XV, which states that "[c]ontracting parties shall not, by exchange action, frustrate the intent of the provisions of this Agreement, nor, by trade action, the intent of the provisions of the Articles of Agreement of the International Monetary Fund." At a minimum, China's currency practices appear to frustrate the intent of GATT Articles VI and XVI that prohibit export subsidies. China's trade actions also violate IMF Article IV, which charges members to "avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members." The Chinese government's continued intervention in the exchange rate market to support an under-valued renminbi exposes it to a WTO dispute.<sup>89</sup>

### ***Transitional Review Mechanism***

China's accession agreement provided for an annual review of its compliance with WTO obligations during its first ten years in the organization. WTO member countries negotiated for the Transitional Review Mechanism (TRM) to be a tool maintaining pressure on China to comply with its market-opening commitments. China agreed to this provision, but over its first three years of membership has effectively abandoned its commitment while claiming that it is discriminatory because it applies only to China. China has frustrated the intent of the TRM by refusing to answer questions in writing posed by trading partners during the TRM process and by preventing production of a meaningful TRM report. (The consensus-based nature of TRM reports allows it to block reports that it finds unsatisfactory.) As a result, the TRM has not become the consequential, multilateral forum for raising and resolving issues regarding China's noncompliance it was intended and expected to be. China's successful efforts to undermine this mechanism—which was key to U.S. support for China's WTO accession—remain of great concern to the Commission.



Notably, the WTO has begun its review of China under its standard trade policy review mechanism (TPRM), whereby all members are reviewed on a cyclical basis and a report is produced assessing the subject country's trade and economic policies. The review is scheduled for completion in April 2006 and will be repeated at two-year intervals thereafter. The TPRM may produce a more thorough analysis of China's market opening progress than the TRM process has produced to date. Unlike the China-specific TRM, the TPRM results in a report by the WTO secretariat that does not require consensus approval of the members. Even if the commencement of TPRM reviews allows the TRM to wither further into a largely worthless process, China's cooperation with the TRM will remain a useful metric, allowing insight into China's pattern of interaction with the United States and the WTO on trade matters and international obligations.

### **Trade Remedies and Safeguards**

Given significant and persistent trade concerns with China, it is critical that the U.S. government and U.S. firms make use of the tools available under U.S. law and the WTO to combat unfair trade practices and import surges. There are two China-specific safeguards available to provide U.S. firms with relief from near-term surges in Chinese imports: the product-specific safeguard and the textile safeguard. These were afforded to all WTO members on a temporary basis as part of China's accession agreement, recognizing the anticipated detrimental impact that rapidly increasing imports from China would have on the domestic industries of other member states. The product-specific safeguard will be available through 2013, and the textile safeguard through 2008.

In addition to safeguards, U.S. law provides for antidumping duties and countervailing duties to be assessed on Chinese goods when they are entering the U.S. market at prices below their fair value or benefiting from government subsidies. Countervailing duties (CVDs) are not currently applicable to China due to an administrative determination by the Department of Commerce. This Commission believes that determination should be reconsidered given that CVDs are designed to compensate for government subsidies to foreign producers—a hallmark of many Chinese exports. None of these trade tools has been used as effectively as possible against Chinese trade practices, nor even as effectively as anticipated during China's accession to the WTO.<sup>90</sup>

### ***Product-Specific Safeguard***

China agreed as part of its accession to the WTO to allow trading partners to use a product-specific safeguard in any case where a rapid increase of imports of a particular product from China is causing, or threatening to cause, market disruption to the domestic producers of that product. The United States implements this safeguard through the petition process codified by Section 421 of the Trade Act of 1974, allowing aggrieved U.S. companies to petition the International Trade Commission (ITC) when they believe imports from China have caused or will cause market disruption and material injury. If the ITC makes an affirmative determination, the President decides what relief, if any, will be provided.

To date, the ITC has rejected two Section 421 petitions and found that market disruption had occurred in four other cases. In each of the first three cases of affirmative finding by the ITC, the President rejected the ITC's recommended relief, exercising his statutory authority to waive relief in circumstances where the "provision of such relief is not in the national economic interest of the United States or, in extraordinary cases, that the taking of action . . . would cause serious harm to the national security of the United States." The President has yet to act on the most recent affirmative finding, which occurred on October 11, 2005. The Commission is troubled by this record; it believes that the intent of Congress in enacting the product-specific safeguard was that there would be a presumption of relief rather than the current predisposition against relief.

Industry representatives have told the Commission that they will be reluctant to initiate future safeguard actions against Chinese imports hurting their businesses, given the high legal costs of such an action, and the expectation that the President will deny relief even if the ITC recommends it. This effectively neuters the China safeguard and precludes it from offering the relief to American businesses that Congress intended.

### ***Textile Safeguard***

China's WTO accession agreement provides its trading partners through 2008 with a China-specific textile safeguard that allows them to place a temporary limit on increases in textile imports from China when a surge of imports is found to cause or threatens to cause a market disruption in designated product categories. This safeguard is implemented by the Committee on the Implementation of Textile Agreements (CITA), an interagency committee chaired by the Commerce Department. CITA accepts petitions and can also self-initiate use of the safeguard.

CITA first approved petitions for use of the safeguard in December 2003 and has continued to apply the safeguard with moderate frequency. The major exception to this pattern came in late 2004, when industry groups filed petitions covering 12 categories of textile imports from China.

The Multi-Fiber Arrangement (MFA) that governed global textile trade through a series of quotas expired by agreement at the end of 2004. As expected, U.S. imports of textiles from China swelled immediately after quotas were lifted, outpacing increases of textile imports from the rest of the world. In January 2005, imports of Chinese apparel products increased 546 percent.<sup>91</sup> In the closing months of 2004, when safeguard petitions based on the threat of market disruption were most relevant, U.S. retailers and importers filed suit with the Court of International Trade (CIT), claiming that CITA does not have the authority to consider threat-based petitions. The CIT granted an injunction against consideration of threat-based petitions, which was reversed in April 2005. The injunction prevented safeguards from being imposed during the period that post-MFA import surges from China first hit the U.S. market.

Despite the fact that the most important opportunity for their use has passed, threat-based petitions remain pertinent. When the

textile safeguard is applied, it limits further growth in imports of a particular product category from China to 7.5 percent for up to one year. Threat-based petitions allow domestic producers to seek reapplication of the safeguard to the category in question before a new influx of Chinese imports again disrupts the U.S. market.<sup>92</sup>

The textile safeguard was designed to provide a transition period for the U.S. textile and apparel industries to adjust to competition from Chinese imports. The safeguard is only available through 2008, but it has not been used with the urgency befitting the detrimental impact of Chinese textile imports on the U.S. industry. CITA did not initially promulgate procedures for filing safeguard petitions until 17 months after China joined the WTO. Then the injunction on use of threat-based petitions prevented the safeguard's use in mitigating the flood of Chinese imports that followed the end of the MFA. With only three years remaining before the safeguard expires, the United States must make aggressive use of this tool to provide the domestic textile and apparel industries with the opportunity to adjust to new competitive pressures.

#### ***Uncollected Anti-Dumping Duties***

The Department of Homeland Security's Bureau of Customs and Border Protection (hereafter, Customs) failed to collect \$260 million in antidumping and countervailing duties in 2004. Of that amount, \$224 million related to Chinese imports, with \$213 million pertaining to Chinese agricultural imports.<sup>93</sup> China was subject to 22 U.S. antidumping duties—more than any other country.<sup>94</sup>

Importers of some Chinese goods circumvent dumping duties by exploiting a loophole known as the "new shipper bonding privilege."<sup>95</sup> The importer of a product subject to an antidumping duty is ordinarily required to make a sufficient cash deposit to cover the estimated duty. Pursuant to a 1995 law, importers who receive such products from a new shipper are permitted to post a bond with Customs in lieu of the cash deposit. The bond or cash deposit is intended to function as a guarantee that Customs will be able to collect the requisite dumping duties. The exact duty owed is not determined until one to two years after the importation has occurred, and the importer is then either refunded or billed for any difference between the estimated duty and the exact duty. In the case of the uncollected duties, when the exact dumping duty has been determined, the party responsible for payment of the bond often is bankrupt or has disappeared, and no recourse is available.<sup>96</sup> The widespread problems in collecting imposed antidumping duties on Chinese imports undermine the effectiveness of this trade remedy in combating China's unfair trade practices.

#### ***WTO Rejection of CDSOA***

The Continued Dumping and Subsidies Offset Act of 2000 (CDSOA, also known as the Byrd Amendment for its author) transfers revenue collected through antidumping and countervailing duties to U.S. producers harmed by dumped imports. The WTO has ruled that the CDSOA violates U.S. obligations governing permissible responses to dumping and subsidies, and has authorized retaliatory measures by U.S. trading partners if the United States maintains the CDSOA.

The Commission believes that the WTO overstepped its authority in this decision, as the organization's rulings "cannot add to or diminish the rights and obligations" of WTO member countries.<sup>97</sup> Furthermore, the disbursement of funds to injured U.S. companies has become an important component of U.S. trade laws, providing needed relief to U.S. firms harmed by unfair trade practices of Chinese competitors and others. Having exhausted the WTO appeals process regarding CDSOA, the United States should act to clarify through future trade negotiations the right of WTO members to disburse revenue from antidumping duties to affected industries.

### ***Countervailing Duties***

U.S. law provides for countervailing duties to be assessed to counter the effects of foreign government subsidies that distort trade. However, U.S. producers cannot seek relief from Chinese subsidies through countervailing duty laws because the Department of Commerce, in a series of decisions finalized in 1986, opted not to allow the application of countervailing duties to nonmarket economies such as China. Commerce's practice was upheld by the U.S. Court of Appeals, but is not required by law.<sup>98</sup>

Commerce should reassess its decision not to apply countervailing duties to nonmarket economies. Its original decision rested on its interpretation that because a subsidy is a factor that distorts markets, it is impossible to identify a subsidy in a nonmarket economy. Since Commerce's decision, the 1994 WTO Agreement on Subsidies and Countervailing Measures provided a definition for subsidies that does not preclude their existence in nonmarket economies. Moreover, China's accession agreement explicitly recognized that subsidies exist in China.<sup>99</sup>

Without a statutory change authorizing the use of countervailing duties against nonmarket economies or a revised determination by Commerce, U.S. firms facing competition from subsidized Chinese companies will not be able to seek relief using the U.S. trade remedy designed for this purpose. Nonetheless, the United States can and should act against China's subsidies in the WTO.

### ***Market Economy Status***

China is currently and properly labeled a nonmarket economy by the United States, pursuant to stated criteria under U.S. law. The factors to be considered under U.S. law in granting market economy status include the extent to which the country's currency is convertible, the extent to which wage rates are freely determined by negotiations between labor and management, and the extent to which the government owns or controls the means and decisions of production.<sup>100</sup> It will likely be years before China can be labeled a market economy through a proper and forthright application of these criteria. Any premature change in China's market economy status would have a detrimental impact on the ability of the U.S. firms to seek antidumping relief against Chinese imports. Antidumping duties on nonmarket economies are calculated using prices in surrogate markets. It is generally believed that antidumping duties would be applied less frequently and at lower amounts if China were labeled a market economy.<sup>101</sup> Such a

change in designation should not occur until China fully and affirmatively meets the criteria in U.S. law.

Notably, Brazil has already expressed disappointment with the lack of Chinese investment following Brazil's designation of China as a market economy in November 2004. Subsequent imports from China have led Brazilian industries to seek the implementation of trade safeguards.<sup>102</sup>

### **SECTION 3: CHINA'S STRATEGY AND OBJECTIVES IN GLOBAL CAPITAL MARKETS**

#### **Key Findings**

- Inadequate corporate governance, disclosure, and accountability, poor regulatory supervision, rampant insider trading, frequent government intervention, and corruption continue to hinder the development of China's domestic capital markets. A related lack of confidence in China's domestic stock markets in Shanghai and Shenzhen has led to falling share values, which in June 2005 hit eight-year lows.
- Chinese firms continue to look to international capital markets to raise needed capital and enhance their global profile, though the location of such fundraising is shifting. China's international capital markets strategy appears to have shifted significantly toward listing on the Hong Kong Stock Exchange (HKEx). In 2004, Chinese companies listing in Hong Kong raised \$12 billion, up from \$7.5 billion the year before.
- In 2005, Chinese companies have largely forgone listings on the New York Stock Exchange (NYSE). This is primarily due to the enhanced corporate reporting provisions of the Sarbanes-Oxley Act of 2002 (SOX). To circumvent the reporting requirements of SOX, Chinese state-owned enterprises (SOEs) wishing to make public offerings increasingly have used the 144A listing process to raise capital from institutional investors in the United States.<sup>103</sup> Privately owned Chinese companies have concentrated their listings on the NASDAQ.
- China is taking a dual approach to raising capital to shore up its principal state-owned banks, which have non-performing loan levels estimated at \$350 billion to \$550 billion. While China is preparing its largest state-owned banks for overseas stock market listings, it is also selling stakes in the banks to Western banks eager to gain a foothold in the Chinese banking sector. China Construction Bank (CCB) raised (U.S.)\$8 billion in its October 2005 initial public offering (IPO) in Hong Kong and The Bank of China (BoC) intends to attract \$5 billion or more capital in its own IPO planned for early 2006.
- China's fundraising in global capital markets has national security implications for the United States. The U.S. Treasury Department has identified a Chinese bank alleged to be involved in money laundering related to activities that could be financing North Korea's nuclear weapons programs and, according to press reports, is also investigating the Bank of China and another Chinese bank because of similar alleged activities.<sup>104</sup> This raises concerns about the nexus between Chinese banks listing on international capital markets and security-related abuses.

- Inadequate transparency and disclosure by Chinese firms prevent the U.S. government and investors from fully understanding the possible nexus between Chinese firms listing on U.S. and international capital markets and support for Chinese and other weapons proliferation activity. However, there is no doubt that some listed Chinese firms are involved in proliferation-related activities.
- Because the links between military and civilian control and production by Chinese SOEs remain opaque, investors can rarely be sure whether their investments are tied to PLA or other Chinese defense-related activities. However, there are indications that some publicly traded firms have connections to the PLA and other military-related activities.

### Overview

In 2005, Chinese firms became the second largest group of recipients—second only to U.S. firms—of funds raised through global IPOs. Chinese firms have already attracted over \$15 billion in 2005 and are seeking to raise over \$20 billion, compared with approximately \$14 billion in 2004 and \$8 billion in 2003. Chinese IPOs are expected to generate what some analysts have estimated will be \$550 million in profits and fees for securities firms assisting in various ways with the listings. While this figure is still only about one-third the amount of fees derived from U.S. listings, it surpasses income attributable to European listings for the first time.<sup>105</sup> Indeed, Chinese firms' IPOs have created a sellers' market resulting in massive oversubscription by investors wanting a share of China's economic success.

IPOs by Chinese firms remain largely the domain of SOEs. CCB and Shenhua Energy Co., China's preeminent coal producer, account for roughly \$11 billion of the total projected proceeds of \$20 billion from Chinese IPOs during 2005.

Since every firm incorporated in China must first receive government approval before listing on an exchange, the central government still has the final word on Chinese listings. This is especially true for SOEs, since they often require a "cleaning" process to ready themselves for the public scrutiny an international listing requires. This process combines a host of financial and production-related restructuring and marketing maneuvers to demonstrate management autonomy, transparency, and corporate governance improvements. In an attempt to avoid the political maneuvering that often accompanies efforts to obtain Beijing's approval for IPOs, many private Chinese firms have chosen, instead, to incorporate themselves in small island jurisdictions such as Bermuda and the Cayman Islands.<sup>106</sup>

China's listing of its four leading state-owned banks on international exchanges began this year with CCB and will continue in early 2006 with BoC. The Industrial and Commercial Bank of China and the Agricultural Bank of China are expected to follow in 2007 and 2008, respectively. Chinese authorities believe pressure to list internationally will spur Chinese banks to adopt international standards of capitalization and corporate governance.<sup>107</sup> The introduction of Chinese banks into U.S. and other inter-

national capital markets will present investors with a range of new challenges. The continuing close affiliations that exist between China's banks and firms supporting the military, and the state-directed nature of the Chinese banks' lending, leave these banks vulnerable to manipulation, unsound lending practices, and activities contrary to U.S. security interests. Recent reports of illicit activities at BoC and other Chinese banks call into question BoC's plans to list on the NYSE and may impair listings by other Chinese banks.

A reported investigation of possible linkages of the BoC and other Chinese banks to money laundering activities that could be financing Pyongyang's nuclear weapons programs has also heightened concerns regarding Chinese bank listings in international capital markets<sup>108</sup>—and regarding how Chinese firms and financial institutions use the funds they raise from U.S. and other investors.

### **China Looks to Global Capital Markets**

Foreign investment has underwritten the lion's share of Chinese economic development, mostly in the form of foreign direct investment. However, a growing proportion of foreign funds has been accumulated via the debt and equity offerings of Chinese firms in international capital markets and, to a far lesser extent, in China's domestic markets. When China opened its first stock exchanges in the early 1990s, equity and bond sales were intended to further domestic economic reforms by increasing market influences in the economy and reducing the role of heavily indebted and politically driven, state-run banks in the Chinese economy.

### ***China's Weak Domestic Capital Markets***

China's experiment with capital markets began in 1986 when Shanghai and several other cities set up rudimentary trading systems. However, progress was slow and it was not until the Shanghai Stock Exchange was established in December 1990, followed a few weeks later by opening of the Shenzhen Stock Exchange, that a formal capital market system existed in China. Believing these exchanges would become a central element of China's economic reorganization, Chinese citizens jumped at the chance to invest; "stock fever" gripped China, causing share prices to surge and further encouraging Chinese investors. In August 1992, over a million would-be investors waited in lines to buy applications for stocks being issued on the Shenzhen exchange. When the applications ran out, 50,000 people rampaged through the streets, clashing with police and leaving two dead.<sup>109</sup> Despite these setbacks, bankers and investors from around the world praised Beijing. Their praise, unfortunately, was premature. China's domestic markets sputtered while connected lending from large, state-owned banks remained dominant, forcing private companies to look to international capital markets to meet their financing needs.

China's domestic capital markets in Shanghai and Shenzhen remain weak today. Between June 2001 and June 2005 the Shanghai Stock Exchange lost over half its value and hit an eight-year low.<sup>110</sup> Experts believe this is largely due to the lack of market forces and transparency in the process of pricing listings on that market. The two exchanges face problems including a frequent failure to set the IPO price by the time the prospectus is issued, poor

regulatory supervision, rampant insider trading, frequent government intervention, a lack of corporate disclosure, and corruption. There have been criminal investigations related to eight listed companies, including an investigation of the chairman of the Shanghai-listed jeweler Diamond Co. who allegedly transferred \$10 million in company funds into private overseas accounts and disappeared.<sup>111</sup> These developments have led to a widespread lack of confidence in the proper functioning of these exchanges. As a result, both private and state-owned Chinese firms have been increasingly active in international capital markets.

According to Howard Chao, who heads the Asia Practice at O'Melveny & Myers LLP, the principal reasons Chinese companies are avoiding domestic exchange listings are that:<sup>112</sup>

- China's domestic listing process can be very time consuming, sometimes taking as long as four years;
- Unlike the U.S. disclosure-based system, listings in China involve government approvals; these require, in part, meeting certain profitability and other financial thresholds that many companies are unable to meet;
- Shares held by the original investors in a domestically listed company are usually not tradable on the exchange and can only be sold in private transactions, so that a listing does not provide a viable "exit" for investors;
- Regulations in China make it difficult for the management of SOEs to participate in equity, whereas this practice is commonplace for companies listed in international markets;<sup>113</sup>
- Private sector firms in China have experienced significant difficulties obtaining government approvals to list domestically;
- Listing on a non-PRC exchange permits profits denominated in Chinese currency to be converted into other currencies offshore; and
- China's domestic exchanges have performed poorly over the past several years.

There are some signs the Chinese government is beginning to clean up and reform its domestic markets. In June 2005, Zhou Xiaochuan, governor of the People's Bank of China, said that an open-door policy regarding foreign investors would help China integrate with global capital markets and that the policy of allowing qualified foreign institutional investors (QFIIs) to invest in domestic markets was improving the ability of Chinese exchanges to price offerings more accurately.<sup>114</sup> Currently, China's A-share exchange is limited only to QFIIs that have received official approval to trade.

The Chinese Securities Regulatory Commission (CSRC) has established several policies to stimulate growth in China's domestic exchanges, but these policies have been largely unsuccessful. For example, stock-transaction charges have been cut significantly, and an attempt to clean up shaky brokerage houses is part of this effort. In 2004, over one-third of China's brokerage houses posted losses. Regulators and state-owned asset management companies have closed or taken control of 19 brokerage houses since efforts began in mid-2003.<sup>115</sup> They also have set up a \$6 billion Fund to Protect Securities Investors to shield investors from brokerage



house failures.<sup>116</sup> To date, the most aggressive move by the CSRC has been to forbid any IPOs on China's exchanges until the end of 2005.

## **China's Current and Future Capital Markets Strategy**

### ***U.S. Markets***

#### *The New York Stock Exchange*

Over the past year, Chinese companies have eschewed listings on the New York Stock Exchange (NYSE) in favor of other international markets, particularly Hong Kong. Indeed, this year there have been no SOE or non-technology offerings by Chinese firms on U.S. exchanges. The concerns most often cited by Chinese firms contemplating U.S. listing are related to several requirements within the Sarbanes-Oxley Act of 2002 ("SOX"). In particular, SOX Section 302, which requires CEOs and CFOs to certify their company's annual and quarterly reports, and Section 404, which provides requirements for internal controls, are cited as the primary reasons that Chinese firms have begun avoiding U.S. listings. Increased reporting requirements under SOX have inflated costs and fees and have "shifted the cost-benefit balance in favor of not listing in the United States."<sup>117</sup> But beyond having concerns about SOX requirements, Chinese firms are concerned that additional requirements may be imposed on listed firms in the future.<sup>118</sup>

To avoid current and future SOX reporting requirements, Chinese SOEs have been utilizing the 144A listing process instead of traditional IPOs to raise capital. Rule 144A allows private placement to institutional investors—e.g. a hedge or private equity fund—after a public listing on the HKEx or another exchange. The ability to raise funds from U.S. institutional investors that this mechanism provides has reduced the need for Chinese issuers to incur the costs associated with meeting the disclosure and governance requirements mandated by SOX. As a result, Chinese issuances on the NYSE have fallen sharply while 144A listings have grown rapidly as shown in Figure 1.1:

**Figure 1.1 IPOs By Chinese and Hong Kong Firms Domiciled in the United States**

	<b>1996–2000</b>	<b>2000–2005</b>
SEC-registered IPOs	28	20
Rule 144a Offerings	10	32

Source: Thomson Financial Corporation.

Chinese firms are also wary of listing on the NYSE because of the relatively high risk of class action lawsuits compared to the risk of such lawsuits faced by companies listing on the exchanges of other countries. For example, in Hong Kong there are no specific procedures for shareholders to bring class action lawsuits, and in the case of a negative judgment the losing party must pay all legal fees. In comparison, in the past several years, Chinese companies Netease, Asiainfo, UTStarcom, Chinadotcom, China Life, Kongzho-

ing, 51job, and Sina that are listed on the NYSE have been sued in U.S. courts.<sup>119</sup>

#### *NASDAQ Exchange*

While there has been a drop in Chinese listings on the NYSE, the one category of Chinese companies that has continued to list on U.S. exchanges is Chinese technology firms. These companies tend to list on the NASDAQ Exchange (NASDAQ). During the “tech bubble” of the late 1990s several Chinese tech firms listed in the United States, but after the bubble burst there were virtually no Chinese technology IPOs in 2001, 2002, or 2003. In 2004, the Chinese technology sector reemerged and 11 companies launched IPOs. In 2005, Chinese technology issues started slowly but are now appearing more frequently; nine Chinese firms now are seeking to list on the NASDAQ. The Chinese firms listing on the NASDAQ are smaller, more technology-focused, and more entrepreneurial than those that have traditionally listed on the NYSE. Their IPOs generally share several characteristics:<sup>120</sup>

- They tend to be Internet, wireless, or value-added telecommunications firms
- Although headquartered in China, they often are incorporated in offshore locations and do not require Chinese government approval before they list on an exchange
- They are not SOEs, and their principal shareholders are the individual founders along with venture capitalists and private equity funds
- Their IPOs are relatively small, raising an average of approximately \$100 million
- Their issues do not aid the Chinese government but instead enrich those who built the listing companies and their early investors

The NASDAQ-listed firms appear to have determined that the benefits of a U.S. listing outweigh the costs. Managers of these firms tend to be familiar with the U.S. capital market environment and their venture capital investors expect U.S. IPOs. This is because the NASDAQ tends to value technology companies at higher price multiples than other markets, including the HKEx; provides the liquidity necessary for exiting investors; and offers the most “credibility and cachet.”<sup>121</sup> According to Howard Chao:

*[C]ompanies of this type tend to be more familiar with U.S. disclosure rules, standards of corporate governance, and other market expectations. On average they tend to have higher management standards than many other Chinese companies. They tend to be more market-driven.*

**Figure 1.2 China's 2005 IPOs on NASDAQ**<sup>122</sup>

Company Name	Size of Deal	Release Date
Actions Semiconductor	\$225.0	Late 2005
Baidu	\$109.1	August 5, 2005
China Medical Technologies	\$ 96.0	August 9, 2005
FocusMedia	\$171.7	July 13, 2005
Hurray! Holding Co.	\$ 70.5	February 4, 2005
Suntech Power	\$200.0	Late 2005
Target Media	\$150.0	Late 2005
Techfaith Wireless Communication Technology Ltd.	\$141.4	May 6, 2005
Vimicro International	\$100.0	Late 2005

Legend: All amounts are in millions of U.S. dollars.

\*Values in *Italics* are estimates.

### ***Hong Kong Exchange***

Chinese firms increasingly have sought to list in Hong Kong rather than on mainland China or other international markets. Moreover, China's strategy toward company listings in international capital markets has shifted over the past year so that it now focuses almost exclusively on the HKEx. Companies listing on the HKEx increasingly believe that there may be limited value in seeking another international listing in light of the willingness of foreign investors to invest in Chinese companies listed only in Hong Kong.<sup>123</sup> As a result, the average price of IPOs in Hong Kong has risen dramatically to \$180 million, compared to the average U.S. IPO at \$220 million.<sup>124</sup> Market capitalization of Chinese companies on the HKEx is roughly \$200 billion.<sup>125</sup>

Hong Kong is an increasingly attractive place for Chinese firms to list for several reasons:

- HKEx has a long history as an independent financial market
- Because of the culture it shares with the mainland, Hong Kong understands the mainland business climate and perspective
- HKEx provides investors the access to China they want while allowing Chinese firms access to international capital somewhat removed from Beijing's reach
- HKEx is a big and deep market that attracts funds from all over Asia and the rest of the world and can support the share price of large Chinese companies
- Hong Kong has a large number of investors knowledgeable about and interested in investing in China
- Investment banks, stock analysts, and other professional financial sector services traditionally have based their Asia operations in Hong Kong, and
- Underwriting and other transaction fees tend to be lower in Hong Kong than in the United States.

*Hong Kong Listings Raise Concerns for Investors*

Concerns about the corporate governance, disclosure, and transparency of Chinese firms have remained largely static since the Commission's 2004 Annual Report. The opaque nature of Chinese state-run firms has not changed. They still list only minority stakes and provide no minority shareholder rights to investors. However, since the demand has been high for Chinese offerings—most have been oversubscribed—Chinese companies now have leverage to resist disclosing all but the minimum required information. Consequently, investors do not know what lies behind the scenes of a Chinese listing in Hong Kong. According to Paul French of AccessAsia in Shanghai, "It [is] a seller's rather than a buyer's market and . . . [that] makes the investment process far more speculative than it might appear. Given pitiful dividends and hazy results, most investors are betting on China's future" rather than the futures of the specific Chinese companies in which they are investing.<sup>126</sup>

There is also cause for concern about the pipeline of Chinese firms seeking to list in Hong Kong. As described in the Commission's 2004 Annual Report, Chinese firms in the past have made dual listings in both Hong Kong and New York, but in 2005 this has not occurred. Chinese firms have sought to raise money in Hong Kong without a New York tranche. While it is too early to be certain, one possibility is that Chinese firms are being "warehoused" for Rule 144A listings in U.S. markets down the road. If many Chinese firms choose this option, there could be an avalanche of Chinese state-run firms raising capital from U.S. institutional investors over a relatively short period of time.

Another potential problem is the independence and oversight of the Hong Kong market. The Chinese government's control over its SOEs listed on the HKEx and its influence over Hong Kong could at some point present a conflict of interest. While the long-term implications of these relationships remain uncertain, the HKEx's financial authorities are taking preliminary measures to ward off potential trouble. This concern is particularly appropriate because there currently is no statutory mechanism for inquiry about the financial reports of companies listed on the HKEx.<sup>127</sup>

In October 2005, two cases came to light on the HKEx that underscore the need for just such a mechanism. In one case, state-owned oil giant China National Offshore Oil Corp. (CNOOC) was rebuked by the HKEx for selective disclosure of information without shareholder approval.<sup>128</sup> In the other case, state-owned Beijing Media Corp., that had collected \$116 million in its December 2004 HKEx listing, saw two of its vice presidents detained and its shares lose over a quarter of their value.<sup>129</sup> In response, Richard Williams, head of listing at the HKEx, identified the problem: "There is nothing more corrosive of market confidence than the feeling that some investors are excluded from an inner circle of privileged counterparties."<sup>130</sup> Selina Sia, a Hong Kong-based analyst with UBS AG, commented that Beijing Media Corp.'s behavior "reflects poor company management. The company didn't say anything until newspapers reported it. I think it's quite irresponsible."<sup>131</sup>

Hong Kong's regulatory authorities are publicly seeking to "maintain investor confidence and uphold Hong Kong's standard of

corporate governance” by securing enactment of a bill that has been proposed in the Legislative Council that would establish a Financial Reporting Council. This Council’s primary responsibility would be to “conduct investigations and enquiries” to ensure the market functions independently and fairly.<sup>132</sup> Similar regulatory regimes for auditing and accounting have been established by other international exchanges. As Natalie Chung, Audit Manager of Deloitte Touche Tohmatsu, explained, “In order to maintain Hong Kong as a leading international financial centre and the premier capital formation center for China, the regulatory regime for the accounting profession should be enhanced and in line with other international markets.”<sup>133</sup>

### ***Other International Exchanges***

Chinese firms have not been listing on European or other Asian exchanges with any regularity. In 2005, only a handful of relatively small Chinese companies have indicated they seek to list on the Singapore, London, or German exchanges. In the long term it seems unlikely these exchanges, with the possible exception of the London Stock Exchange (LSE), will attract a significant volume of Chinese IPOs.

This year the LSE made attracting mainland Chinese companies to its equity markets its number-one priority. The LSE was particularly interested in attracting the listings of large Chinese banks that expect to launch IPOs in coming months. In May, Martin Graham, LSE’s director of marketing services, visited Beijing to promote London as a market for overseas Chinese listings.<sup>134</sup> LSE is offering itself as an alternative to the NYSE that avoids the increased disclosure and governance requirements and the risk of class action lawsuits that are deterring Chinese SOEs from U.S. listings.<sup>135</sup>

Japan’s Tokyo Stock Exchange also has begun to attract Chinese firms with marketing visits to Beijing to promote its “public offer without listing” or POWL. According to Robert DeLaMater, “[t]his offering structure permits a company to conduct a public offering without being required, following the offering, to assume the burdens of a public listing and the ongoing disclosure and other obligations that a public listing would entail.”<sup>136</sup> Several of the recent large Chinese privatization offerings—some totaling several billion dollars—have been conducted through this mechanism.

### **The Impact of Chinese Global Capital Markets Activity on U.S. Security**

The Commission’s 2004 Annual Report to Congress identified four security-related areas of concern regarding the listing of Chinese companies on U.S. and other international exchanges. These are (1) links between listed Chinese firms and weapons proliferators, (2) links between listed Chinese firms and the PLA and China’s defense-industrial sector, (3) the way in which Chinese state-owned banks have provided subsidized financial support to Chinese defense-industrial firms, and (4) inadequate disclosure of the activities of listed Chinese enterprises in terrorist-supporting states such as Iran and Sudan. All of these continue to concern the Commission.

### ***Listed Firms Involved in Proliferation***

Inadequate transparency and disclosure by Chinese firms prevent the U.S. government and investors from fully understanding the possible nexus between Chinese firms listing on U.S. and international capital markets and support for Chinese and other weapons proliferation activity. However, there is no doubt that some listed Chinese firms are involved in proliferation-related activities.

The U.S. government has imposed sanctions on a number of Chinese companies, including quasi-governmental companies, for proliferation activities.<sup>137</sup> See Chapter 4, Section 2 of this Report, titled “China’s Proliferation Practices and Record,” for detailed information. Some of the sanctioned companies have ties to listed firms, and some of them are subsidiaries of prominent companies that do business in the United States. Examples include Nanjing Chemical Industries Group and Jiangsu Yongli Chemical Engineering and Technology Import/Export Corp. Both these organizations have been cited by the U.S. government for proliferating dual-use chemical precursors, equipment, and/or technology to Iran and have been under U.S. sanctions since 1997. Both are also subsidiaries of the Chinese oil and chemical giant Sinopec that has conducted joint ventures with U.S. companies and is listed on the NYSE, despite the fact that two subsidiaries were under U.S. sanctions at the time of the listing.<sup>138</sup>

Other Chinese firms sanctioned by the United States for proliferation include quasi-governmental firms such as North China Industries Corp. (NORINCO)<sup>139</sup> and China National Aero-Technology Import and Export Corporation (CATIC). CATIC was sanctioned for proliferation activities relating to its deals with Iran. This year CATIC has been particularly active in Zimbabwe, reporting sales of aircraft with both civilian and military capabilities.<sup>140</sup> CATIC is listed on the HKEx and the Berlin Stock Exchange. NORINCO is traded on China’s Shenzhen Stock Exchange where it is available for purchase by Chinese and QFII.

Disturbingly, U.S. investors and government regulators have little information regarding any proliferation-related activities of U.S.-listed Chinese firms. To address this concern, the Congress established a requirement for an annual report by the Central Intelligence Agency concerning “whether any Chinese or other foreign companies determined to be engaged in the proliferation of weapons of mass destruction (WMD) or their delivery systems have raised, or attempted to raise, funds in the U.S. capital markets.”<sup>141</sup> However, this requirement, established under the 2003 Intelligence Authorization Act (P.L. 107–306 sec. 827) was repealed in the 2004 Intelligence Authorization Act (P.L. 108–177 sec. 361e). The persistence of Chinese proliferation coupled with the growing number of Chinese firms entering international capital markets urgently requires the reinstatement of this reporting requirement.

#### ***President Bush’s Executive Order on WMD Proliferation Financing***

On June 29, 2005 President Bush issued Executive Order 13382. Its purpose is to freeze the assets and restrict the activities of WMD proliferators seeking to raise funds in the United States or financially interacting with American companies. It also contains authority to penalize financial institutions found to be supporting

proliferators. According to Secretary of the Treasury John Snow, “This Order sends a clear message: if you deal in weapons of mass destruction, you’re not going to use the U.S. financial system to bankroll or facilitate your activities.” Executive Order 13382 should help invigorate U.S. government efforts to identify and restrict U.S. investment in firms with proliferation-related ties.

### ***Continued PLA Involvement in Chinese Enterprises***

In 1998, then-president of China Jiang Zemin ordered the PLA to divest itself of the commercial enterprises that it had established or acquired through the 1980s and 1990s. The divestiture effort did not, however, sever links between the PLA and the defense-industrial sector. On the contrary, civil-military cooperation in the defense-industrial sector appears to have strengthened during the past few years. Additionally, thousands of smaller, subsistence-oriented enterprises remain directly under the PLA.<sup>142</sup> Eliminating direct or indirect involvement of the PLA from the operation of an enterprise remains difficult due to the nature of SOE reforms and SOE corporate governance structures. The operation of the SOE asset management system continues the decisionmaking process whereby key corporate leaders are chosen by party and state institutions.<sup>143</sup> According to Christopher McNally, in the case of the Shanghai holding corporations: “The party committee’s central role in the corporate decision making process aggravates a common governance problem: the division of labor between institutions representing ownership (board of directors) and management is illusory.”<sup>144</sup> In the case of companies under such a structure, investors can rarely be sure whether their investments are tied to PLA or other Chinese defense-related activities. As an example, at least one subsidiary of China State Shipbuilding Corporation (CSSC), a large industry group responsible for significant amounts of Chinese naval and merchant ship construction, is listed and publicly traded on the Hong Kong stock exchange. It is impossible for investors to determine the full extent of the listed subsidiary’s management and production integration with naval military activities of other CSSC subsidiaries or the parent corporation.

### **China’s State-owned Banks**

For some time, China has aspired to list its four leading state-owned banks on international exchanges; CCB led the way, listing on the HKEx on October 21, 2005 (and raised \$8 billion). Chinese authorities believe pressure to list internationally will spur its banks to achieve international standards of capitalization and corporate governance that will help them compete with foreign banks when protectionist government regulations are lifted in 2006.<sup>145</sup> This is a large step for these quasi-government institutions whose leaders are unaccustomed to opening their books to public scrutiny.

An evaluation of the Chinese banking sector provides cause for both optimism and pessimism. Among reasons for optimism: The Commission heard testimony that while all top officials at China’s financial sector regulatory agencies, the Central Bank, and the major state-owned banks are senior CCP members and political considerations are involved in their appointments, the government is trying to reduce the Party’s political influence in those organiza-

tions. Efforts are being made to bring large state-owned banks in line with international accounting norms. And last year there was a reduction in the percentage of loans by China's banks that are nonperforming (NPLs). Those NPLs are estimated to have a current aggregate value between \$350 billion and \$550 billion.<sup>146</sup> It is important to note, however, that a massive lending binge temporarily reduced the percentage of Chinese bank loans that are nonperforming, but that binge ironically could lead to a new wave of NPLs in coming years, particularly if the Chinese economy continues to slow.

Unfortunately, a number of reasons for pessimism about Chinese banks remain. While the large state-owned commercial banks are working to improve their lending practices, over 60 percent of incremental lending in China between the last quarter of 2002 and the second quarter of 2004 came from small banks, mostly owned by local governments.<sup>147</sup> Reform efforts at these smaller banks are less well developed or absent altogether. Lending without proper due diligence remains common. Tens of millions of dollars were stolen from Chinese banks last year alone, often by or with the complicity of bank officials. For example, in March 2005 regulators uncovered an \$18 million fraud at the Agricultural Bank of China. CCB Chairman Zhang Enzhao resigned amid reports that he had taken \$1 million in kickbacks. Meanwhile, investigators found over \$122 million missing at a local BoC branch.<sup>148</sup> Effectively addressing the extensive corruption in the Chinese banking sector requires Western-style regulation and application of severe penalties for financial fraud.<sup>149</sup> Despite the discouraging occurrences, however, just the discovery of these frauds is an indication that some change is beginning to occur in the Chinese banking sector.

The overall—and certainly mixed—picture concerning the reliability and integrity of Chinese banks should raise significant concerns for potential investors. Investor confidence depends on setting free China's banks from CCP control, allowing the banks to operate according to and consistent with commercial standards, and establishing and rigorously enforcing sound and sufficient transparency, governance, and accountability regulations. Until these steps are taken, investors will not have adequate information to be confident that investments in the banks will be safe and prudent and will not end up helping bankroll Chinese military programs, WMD proliferation, politically directed but uneconomical commercial activities, or enrichment of bank executives and CCP officials.

As cases in point: despite the excitement generated by CCB's recent IPO, Moody's Investor Service gave the bank's financial strength a very poor rating.<sup>150</sup> The bank's prospectus confirms CCB's weak financial position: "Our allowance for impairment losses may not be adequate to cover future actual losses to our loan portfolio."<sup>151</sup> The BoC lags behind CCB in a host of key indicators including profitability. Nonetheless, it aspires to achieve a higher valuation than its rival.<sup>152</sup>



**Figure 1.3 Expected International IPOs of Chinese State Owned Banks**

Bank Name	Market	Capital Raised in IPO (millions of U.S. dollars)	Actual or Anticipated IPO Date	State Owned?
Agricultural Bank of China	N/A	N/A	2008	Yes
Bank of China	HKEx, NYSE	\$ 5,000*	Early 2006	Yes
Bank of Communications	HKEx	\$ 1,880	June 23, 2005	No
China Construction Bank	HKEx	\$ 8,000	October 21, 2005	Yes
Industrial and Commercial Bank of China	N/A	\$10,000*	2007	Yes
Industrial Bank of Fujian	HKEx	N/A	2006	No
Minsheng Banking Corp.	HKEx	\$ 750*	November 2005	No

\*All values are approximate.

Legend: All amounts are in millions of U.S. dollars.

### ***Equity Stake Sales to Foreign Banks***

China is taking a two-pronged approach to raising capital vis-à-vis its state-owned banks. While it is preparing its largest state-owned banks for overseas stock market listings, it also is selling stakes in these and other banks to Western firms eager to gain a foothold in the Chinese banking sector. Between January and October, foreign banks have agreed to invest more than \$15 billion in Chinese lenders.<sup>153</sup> Bank of America, Royal Bank of Scotland, Deutsche Bank, and HSBC are among those seeking stakes in China's state-run banks. These transactions likely are more important to the Chinese for the international financial sector relationships they establish and cultivate and the incentives they provide to Chinese banks to improve their corporate governance methods and procedures than they are for the cash they attract.<sup>154</sup> The foreign banks see such investments as a means of entering an expanding and potentially lucrative Chinese market. These investments are subject to essentially the same set of problems for investors to which Chinese bank IPOs are subject, and institutions considering such investments should be as cautious as individuals and institutions considering purchasing the listed stocks of these banks.

## **SECTION 4: CHINA'S ROLE IN A GLOBALIZED ECONOMY AND THE UNITED STATES RESPONSE**

### **Key Findings**

- While many U.S. firms have addressed their global competitiveness challenges through outsourcing and offshoring,<sup>155</sup> these in-

dividual corporate decisions do not address, and in some cases may conflict with, efforts to maintain productive capacities in industries important to U.S. economic leadership and vitality. This distinction between private and national interests is particularly pertinent with regard to the U.S. economic relationship with China, where the market may produce outcomes that are contrary to the U.S. national interest.

- The opening of the Chinese, Indian, and former Soviet bloc economies has led to more than a doubling of the global market's work force and likely will put downward pressure on U.S. wages for workers at all levels, including higher levels of the wage scale. Increasingly mobile capital and technology flows accelerate this trend.
- China has adopted an economic growth strategy that emphasizes strategic accumulation of productive capacity and access to resources. An important part of this strategy is attracting foreign investment and know-how to assist China's export-led growth.
- China obtains a competitive advantage from political and economic systems where workers are often denied fundamental workers' rights. China's paucity of environmental protections similarly functions to benefit some Chinese industries.
- The U.S. international tax regime favors investment abroad in comparison to domestic investment, providing a disincentive to companies for maintaining production facilities in the United States.

### **Overview**

U.S.-China economic relations have become central to the development of global economic trends. As trade and investment between the two nations have expanded in importance and scope, the impact of this relationship on the U.S. economy—and the global economy—has grown to enormous proportions. As the Commission noted in its 2004 Report to Congress, “the U.S.-China economic relationship is of such large dimensions that the future trends of globalization will be influenced to a substantial degree by how the United States manages its economic relations with China” and that “[i]t is reasonable to believe that U.S.-China economic relations will help shape the rules of the road for broader global trade relations.”

### **Economic Theory in a Globalized Economy**

Broadly speaking, U.S. trade policy favors relatively free international trade because policy makers accept economic theories that predict benefits from trade. These theories demonstrate that the United States should prefer trade to absolute economic isolation.<sup>156</sup> However, it is still possible for U.S. interests to suffer if changes occur in the terms of trade.<sup>157</sup> The United States needs to carefully consider and answer the question of how changing trading relationships affect the U.S. economy and national interest and how the United States should position itself in those relationships.

Changing trade relationships also involve an adjustment period that must be addressed. When inputs are adjusted in an economic model, the model demonstrates how a new equilibrium will develop. When replicated in actual economies, the transition to a new

equilibrium can stretch out over years or decades, raising social and economic problems that the government must confront.

### ***A Global Influx of Labor Has Reshaped the Global Economy***

China, India, and the states of the former Soviet Union have commenced active participation in the global economy in the past ten to twenty years. In this short time span, the global market work force has therefore doubled.<sup>158</sup> The result is major downward pressure on wages around the world, including within the U.S. economy. The effect of the rapid entry of so many workers will likely persist for decades—one Commission witness offered an estimate of thirty to forty years.<sup>159</sup>

The pressure for wages to equalize is a result of what has been termed the “law of one price.” When capital is relatively unencumbered, it will gravitate to regions with the highest rate of return, which in practice are likely to be areas with comparatively high labor-to-capital ratios.<sup>160</sup> China, India, and the former Soviet states brought more labor than capital into the global economy. As a result, U.S. workers will find less capital to support their work, their firms will be less productive, and the workers will be more poorly compensated as a result.<sup>161</sup>

### ***Globalization Forces New Industries into Competition***

The reduction of costs and time associated with communication, information transmission, and physical transportation is a prominent characteristic of globalization.<sup>162</sup> The globalization of information and logistical systems has made it possible to trade previously untradable commodities and services, forcing U.S. companies into new competition with foreign rivals.

Globalization also coincides with a shift toward ever-higher percentages of the economy comprising goods and particularly services with no connection to the natural resources or environmental conditions of the production locale. It follows, then, that comparative advantage between and among nations is not based as frequently on immutable circumstances. Instead, comparative advantage can be changed rapidly by private sector actions and government policy.<sup>163</sup>

This observation is directly linked to the issue of economic competitiveness policy. In the 19th Century, when Ricardo developed his theory, natural and enduring factors meant that it was unlikely that production of either Portuguese wool or English wine suddenly would become more efficient. This is no longer the case for modern industries, and countries can more easily enter new business areas by acquiring or promoting the necessary skills, knowledge, and infrastructure. U.S. industries thus can be expected to face quickly varying patterns of competition.

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

#### ***China’s Economic Growth Strategy Threatens U.S. Interests and Global Economic Stability***

China has adopted an economic growth strategy that emphasizes strategic accumulation of productive capacity and access to resources. An important part of this strategy is export-led growth, which constitutes a modern form of mercantilism.<sup>164</sup>

Export-led growth is an economic strategy in which a country seeks to promote its industrial growth through a variety of policy devices that promote exports while strategically restricting imports to items needed for domestic growth or export production, such as technology and raw materials. Policy mechanisms include wage repression, industrial subsidies, targeted tax holidays, domestically-oriented government procurement policies, closed distribution systems, performance requirements on foreign investors, and an undervalued exchange rate. All these policies are evident in China.

China's export-led practices are fundamentally contrary to the spirit of an open and balanced international trading system. Such practices create imbalanced trade, as they necessitate trade deficits in other countries, including the United States.<sup>165</sup> The United States and China have reached a state of co-dependence under which the United States receives cheap consumer goods and China obtains jobs.<sup>166</sup> This equilibrium cannot last forever, as it piles up debt on the U.S. side and excess production capacity in China.<sup>167</sup> The global economy and global trading system cannot permanently sustain unbalanced practices by a country with China's economic heft, and the longer the imbalances persist, the more severe the correction will be.<sup>168</sup>

The United States cannot wait for a correction to be made voluntarily and cleanly by the Chinese side. Notwithstanding China's accession to the WTO, there is no reason to assume that China intends to abandon its growth strategy once certain growth targets are reached.<sup>169</sup> The imbalance created by China's growth strategy also helps to accelerate de-industrialization in the United States, with the concurrent loss of higher wage jobs.

### ***China Contributes to the Increasing Leverage of U.S. Retailers Over U.S. Producers***

The retail sector in the United States has undergone profound changes in the last half century as the shopping locus shifts from Main Street to malls to "big box" discount retailers. The emergence of big box discount retailers led to an enormous increase in market concentration in the retailing sector. With this increase in concentration there has been a shift of bargaining power away from manufacturers to retailers. Not only have these retailers acquired increased buying power relative to manufacturers, they also have driven a reorganization of the structure of manufacturing production—both accelerating and capitalizing on globalized supply chains. In particular, these retailers have become global buyers, scouring the globe for the lowest-cost producers. The big box discount retailers have thereby served as a vehicle for putting countries—and workers in those countries—in competition with each other. In effect, big box retailers can be viewed as a critical mechanism that accelerates shifts of global production to take advantage of low-cost labor.

China has not been the prime mover in the retail sector's transformation saga, but the emergence of inexpensive Chinese goods on the market coincided with the rise of big box retailers. Even as the United States grapples with whether and how to respond to the declining power of production companies and, secondarily, labor, the retail revolution contains the seeds of another shift for the U.S.

economy. Distribution networks, previously tied more intimately to large manufacturers, are now dominated by the big box retailers. This provides a ready pipeline for Chinese companies, which may eventually seek to sell products under Chinese brands in the U.S. market.<sup>170</sup> Such a development would cut out the remaining U.S. role in the supply chain, shifting design, management, and marketing functions to China.

### ***U.S. Economic Competitiveness Requires Active Maintenance***

The combined effect of these facets of China's role in the globalized economy is to threaten U.S. economic competitiveness.<sup>171</sup> The accumulation of productive capacity in China is due in part to the ability of the Chinese government to deploy effective incentives for U.S. and other companies to locate and expand production facilities in its country. Private companies cannot be faulted for pursuing their own interests within the confines of accepted legal and moral structures, but the U.S. government must consider the net effect of private decisions on the national interest.<sup>172</sup> Not all of China's competitive advantages are enviable, however. China continues to suppress labor rights as well as broader human rights;<sup>173</sup> China's environmental standards are also insufficient and inadequately enforced, providing a short-term competitive advantage to polluting firms.<sup>174</sup>

The current structure of the U.S. international tax system is inefficiently complex, including sourcing rules to determine whether income was earned in the United States or overseas. These rules were developed when tangible products accounted for most trade, but they are not readily workable in a system of global business operations and intangible property.<sup>175</sup>

The U.S. tax system also is favorable to offshore, as opposed to domestic, investment. For example, when a U.S. firm conducts its foreign business through a foreign-chartered subsidiary corporation, it generally can defer U.S. taxes as long as it does not repatriate the income.<sup>176</sup> This encourages overseas production, as does a WTO ruling preventing the United States from waiving corporate income taxes on export profits, in a manner similar to export credits on value-added taxes in competing countries.<sup>177</sup> U.S. corporate tax rates also have grown less competitive as other major competitors have lowered corporate tax rates.<sup>178</sup>

## **RECOMMENDATIONS**

### *Addressing China's Currency Manipulation*

- China's recent exchange rate policy reforms have to date resulted in only a 2.1 percent appreciation of the renminbi (RMB) against the U.S. dollar, leaving the RMB highly undervalued. In the absence of immediate steps to allow the RMB to appreciate by at least 25 percent against the U.S. dollar or a transparent, trade-weighted basket of international currencies, the Commission recommends that Congress pursue a four-track policy to move China to take appropriate action to revalue the RMB:

—Congress should press the Administration to file a WTO dispute regarding China's exchange rate practices. These prac-

tices continue to violate a number of its WTO and IMF membership obligations, including the WTO prohibition on export subsidies and the IMF proscription of currency manipulation. Congress should press the Administration to respond to China's violation of its international obligations by working with U.S. trading partners to bring to bear on China the mechanisms of all relevant international institutions.

- Congress should consider imposing an immediate, across-the-board tariff on Chinese imports at the level determined necessary to gain prompt action by China to strengthen significantly the value of the RMB. The United States can justify such an action under WTO Article XXI, which allows members to take necessary actions to protect their national security. China's undervalued currency has contributed to a loss of U.S. manufacturing, which is a national security concern for the United States.
- Congress should reduce the ability of the Treasury Department to use technical definitions to avoid classifying China as a currency manipulator by amending the 1988 Omnibus Trade Act to (i) include a clear definition of currency manipulation, and (ii) eliminate the requirement that a country must be running a material global trade surplus in order for the Secretary of the Treasury to determine that the country is manipulating its currency to gain a trade advantage.
- Congress should urge the Treasury Department to maintain a high level of pressure on China to take more significant actions expeditiously to revalue its currency and, if such actions are not forthcoming by the time Treasury issues its next exchange rate report, to designate China as a currency manipulator and initiate bilateral and IMF negotiations.

#### *Challenging China's IPR Violations*

- The Commission recommends that Congress support USTR in taking immediate action under U.S. law and in international venues pertaining to China's violation of IPR obligations, particularly China's failure to meet the requisite standards of effective enforcement, including criminal enforcement, explicitly imposed by the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement.

#### *Enhancing U.S. Trade Remedies*

- The Commission recommends that Congress enact legislation to make countervailing duties applicable to non-market economies.
- The Commission recommends that Congress facilitate the use of the Section 421 China-specific safeguard negotiated as part of China's WTO accession. Congress should consider authorizing compensation to petitioners in the Section 421 safeguard process for legal fees incurred in cases where the ITC finds that market disruption has occurred but the President has denied relief. Congress should also consider eliminating presidential discretion in the application of relief through Section 421 petitions or limiting

discretion to the consideration of non-economic national security factors.

- The Commission recommends that Congress repeal the new shipper bonding privilege that has allowed many importers of Chinese goods to avoid payment of antidumping duties. Importers of goods subject to antidumping or countervailing duties should be required to deposit in cash the amount of any estimated applicable duty.
- The Commission recommends that Congress maintain the Continued Dumping and Subsidies Offset Act of 2000 (CDSOA), notwithstanding the WTO determination that it is inconsistent with the WTO Agreement. Congress should press the Administration to seek explicit recognition of the existing right of WTO Members to distribute monies collected from antidumping and countervailing duties during the Doha Round negotiations and the review of the WTO's dispute resolution mechanism.

*Countering China's Government Subsidies and Discriminatory Trade Practices*

- The Commission recommends that Congress direct the Government Accountability Office (GAO) to investigate China's system of government subsidies for manufacturing, including tax incentives, preferential access to credit and capital from financial institutions owned or influenced by the state, subsidized utilities, and investment conditions requiring technology transfers. The investigation should focus in particular on the extent to which state-owned or state-invested banks in China provide loans to state-owned, state-invested, and other domestic industries on a noncommercial, preferential basis. The results of this investigation should be provided in a report to Congress that assesses whether any of these practices may be actionable subsidies under the WTO and lays out specific steps the U.S. government can take to address these practices.
- The Commission recommends that Congress urge USTR to investigate the strength of potential cases against Chinese subsidies categorized as actionable, and to file WTO disputes concerning any subsidies that meet WTO definitions for prohibited subsidies.<sup>179</sup> For example, scrutiny is warranted regarding China's provision of extensive subsidies for the expansion of its domestic paper products industry, which, combined with the elimination of tariffs on raw logs and high-grade paper machines and the maintenance or increase of tariffs on imports of finished wood products, supports the expansion of China's wood and paper products manufacturing industry at the expense of its trading partners' industries.

*Retaining China's Non-Market Economy Status*

- The Commission recommends that Congress require that the Department of Commerce obtain Congressional approval before implementing any determination that China has achieved market economy status as a country or for one or more sectors. Congress should ensure that China continues to be treated as a non-mar-

ket economy in the application of antidumping and countervailing duties through 2016, as is explicitly permitted by China's WTO accession agreement, unless China clearly meets the statutory criteria for market economy status.

*Evaluating WTO Decisions and Conducting Future Trade Negotiations*

- Many areas of China's WTO accession agreement impose dramatically unequal tariffs on comparable categories of Chinese and U.S. goods. China has developed at a pace far faster than was envisioned when its WTO accession was approved and these unequal tariff rates now heavily disadvantage U.S. exporters, accelerate import competition in the U.S. market, and are no longer supportable. The Commission recommends that Congress direct USTR to examine the potential for rectifying this situation as part of the Doha Round negotiations.

*Bolstering U.S. Competitiveness*

- The Commission recommends that Congress direct the Commerce Department to investigate ways to diminish the transfer of technology to China that is vital to U.S. national security and economic competitiveness by way of production transfers required to facilitate sales (offsets), particularly in the aerospace field. The investigation should identify the extent to which such transfers are required by Chinese government rules or regulations for commercial sales and therefore are potentially WTO inconsistent. Further, the Commission recommends that Congress encourage the Administration to enter into negotiations with the European Union aimed at reaching an agreement to take a united approach in countering efforts by China to explicitly or implicitly require production offsets as a condition of its aircraft purchases.
- The Commission recommends that Congress convene a summit of industry and labor representatives from the U.S. textile and apparel industries and senior executive branch officials to assess the potential impact and develop appropriate policy responses to the crisis affecting these industries. Among the issues to be examined should be how termination of the China textile safeguard under U.S. trade law at the end of 2008 will accelerate current trends, long-term implications of post-2008 Chinese sourcing trends, and the implications for the United States of shifts in textile and apparel production.
- The Commission recommends that Congress develop a long-term national competitiveness strategy with the goal of maintaining and enhancing the U.S. standard of living, economic and technological vitality, and strength in industries critical to national security and economic security. The strategy should include the education and training of a workforce capable of responding to the rapid changes of a globalized economy. It should create policy, tax, and economic environments that encourage domestic production leading to the retention and expansion of higher value-added jobs in the United States. Finally, it should recog-



nize specific industries that are vital to national or economic security, and ensure that a sufficient U.S. industry remains intact in those sectors.

- The Commission recommends that Congress revise U.S. international tax policy to remove incentives for U.S. firms to shift production out of the country.

#### *Mandating Corporate Reporting*

- The Commission recommends that Congress establish and fund a federally mandated corporate reporting system to gather sufficient data to provide a comprehensive understanding of the trade and investment relationship with China. Under such a system:
  - U.S. firms should be required to report to the Commerce Department their investments in China, the shift of production capacity and jobs resulting from these investments, both from within the United States to overseas and from one overseas location to another, and their contracting relationships with Chinese firms.
  - The Commerce Department should maintain an authoritative account of U.S. firms' R&D investments in China and a comprehensive assessment of their activities including any technology transfers, offsets, or R&D cooperation agreed to as part of the investment.

#### *Supporting Dislocated Workers*

- The Commission recommends that Congress fund information sessions and a public awareness campaign to inform laid-off workers about existing and newly established programs such as Trade Adjustment Assistance (TAA). Further, many workers adversely affected by trade are still excluded from receiving TAA assistance. Eligibility for TAA should be expanded to cover the broad array of workers adversely affected by trade with China, including those in the service sector and others who have not traditionally been covered. Funding should be increased to ensure that all eligible workers are able to participate fully.

#### *Coordinating with the European Union and Japan on China Trade and Security Matters*

- The Commission recommends that Congress work with the Administration to undertake more active efforts to coordinate with the EU, Japan, and other interested nations as appropriate to address mutual trade- and security-related concerns with China. Among these areas should be the following:
  - European governments and Japan share U.S. concerns about continuing large-scale IPR violations in China. Brussels, Tokyo, and Washington should coordinate their strategies on improving Chinese IPR compliance, particularly through joint action in the WTO.
  - U.S., EU, and Japanese officials should work together within the International Monetary Fund (IMF), the WTO, and other appropriate fora to move China toward a more meaningful up-

ward revaluation of the Chinese RMB that is more reflective of current economic realities.

- U.S., EU, and Japanese officials should work to enhance the effectiveness of the TRM within the WTO and consider undertaking an annual joint assessment of China's compliance record, in conjunction with China's other major trade partners if possible, that could serve as an alternative mechanism for measuring and improving China's compliance shortfalls.
- U.S. and EU officials should engage with each other to evaluate China's progress toward meeting U.S. and EU criteria for market economy status with the goal of arriving at a consistent analysis that ensures that China will have taken concrete and irreversible steps to earn market economy status before the benefits of such status are conferred.
- U.S., EU, and Japanese officials should develop coordinated responses to shared security concerns. Among the issues that should be considered is the EU's arms embargo on China, a major concern of both Japan and the United States.<sup>180</sup>

#### *Chinese Activity in Global Capital Markets*

- The Commission recommends that Congress encourage the Administration to use Executive Order 13382 to freeze the assets of Chinese firms involved in WMD or missile-related proliferation, or Chinese companies or financial institutions that may be assisting or lending to such proliferators. Congress also should encourage the Administration to expand the provisions of Executive Order 13382 so the U.S. property of a parent company can be frozen if the parent knows or has reason to know about the proliferation activities undertaken by its subsidiaries, or so the U.S. property of financial institutions can be frozen if they know or have reason to know of the involvement of their lending customers in proliferation activities.
- The Commission recommends that Congress urge the Securities and Exchange Commission to work directly with its regulatory counterparts in other nations as well as through the International Organization of Securities Commissions to press for the harmonization and independent and robust enforcement of securities laws, especially as they relate to corporate governance and reporting, transparency, and disclosure requirements.
- The Commission reiterates the recommendation in its 2004 Annual Report that Congress reinstate the provision of the 2003 Intelligence Authorization Act (P.L. 107-306, Sec 827) directing the Director of Central Intelligence to prepare an annual report identifying Chinese or other foreign companies engaged in proliferation of weapons of mass destruction or their delivery systems that have raised, or attempted to raise, funds in U.S. capital markets.
- The Commission recommends that Congress instruct the Securities and Exchange Commission to notify the National Security Council (NSC) when any Chinese firm seeks to list on a U.S. capital market, and urge the NSC upon receipt of such a notification to consider carefully all relevant intelligence and determine if the

firm is involved in WMD or ballistic missile proliferation, support for terrorism, or other security-related abuses and, if so, to utilize the appropriate provisions of Executive Order 13382.

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## **CHAPTER 2**

# **CHINA'S TECHNOLOGY DEVELOPMENT AND IMPLICATIONS FOR THE U.S. DEFENSE INDUSTRIAL BASE**

### **INTRODUCTION**

This Chapter examines the trajectory of China's technology development and the implications this has for U.S. economic competitiveness and national security. It focuses in particular on the role that U.S. trade and investment plays in China's technology industries and the impacts China's advancements in these areas have on U.S. technological leadership and the U.S. defense industrial base. China's technology development has affected U.S. technology sectors at an unexpected pace and poses potential vulnerabilities to the supply of important components of the U.S. defense industrial base.

China's comprehensive and coordinated strategy for technology development guides the rapid pace by which it is establishing itself as a center of technology production and, increasingly, technology innovation. Through a mix of preferential trade and investment policies, government subsidies, and other policies favoring domestic industries and production, China has made the development of its technology sectors a national priority. Attracting U.S. and other investment into China has been an important component of this strategy, particularly where transfers of technology and know-how have accompanied this investment.

U.S. technology industry leaders have increasingly warned of the challenges that China and other developing economies pose to U.S. technology leadership and called for a national strategy to maintain U.S. technology competitiveness. They have made clear that technology leadership is vital to the long-term health of the U.S. economy and to U.S. military superiority.

Maintaining leadership in technological innovation is critical to U.S. national defense. The Department of Defense (DoD) has come to rely on the private sector for certain technology developments, while the private sector is moving offshore much of its industrial and technology production and some of its technology design and research and development. This is taking place concurrently with China's growing position at the center of the technology supply chain, raising the prospect of future U.S. dependency on China for certain items critical to the U.S. defense industry as well as vital to continued economic leadership.

The Department of Defense transformed its acquisition model to reflect the globalized nature of the defense industrial base. While the new model analyzes the availability of key technologies to maintain a strong defense, it may not adequately consider the long-term effects on the defense industrial base of the offshoring of

industries that, while not classified as critical technologies, nonetheless may impact defense and homeland security operations. Current developments in the software and integrated circuits industries are worrisome cases in point.

## **SECTION 1: CHINA'S HIGH-TECHNOLOGY DEVELOPMENT**

### **Key Findings**

- Science and technology (S&T) development is the centerpiece of China's comprehensive strategy to build national power. As a result, the Chinese government has a comprehensive, coordinated strategy for S&T development, which it began to implement in the mid 1980s with the 863 Program. This strategy translates into government policies to encourage growth and investment in key industries, among which are the software and integrated circuit industries. Such policies include foreign investment incentives, tax incentives, government subsidies, technology standards, industrial regulations, and incentives for talented Chinese students and researchers studying and working overseas to return to China. Many of these policies make it difficult, if not impossible, to achieve a level playing field in this area of U.S.-China trade and jeopardize long-term U.S. leadership in this vital sphere.
- China has become central to the global supply chain for technology goods of increasing sophistication, and its technology research and development activities are steadily and substantially expanding. This central role grants China increased leverage in global systems of technology production.
- The technology that China is developing and producing is increasing in sophistication at an unexpectedly fast pace. China has been able to leap frog in its technology development using technology and know-how obtained from foreign enterprises in ways other developing nations have not been able to replicate. This rapid advancement is evident in the level of technologies that make up China's fast-growing trade surplus with the United States in Advanced Technology Products (ATP), which increased by 72 percent from 2003 to reach \$36 billion in 2004.
- External investment is an important source of capital, management, and technology for China's technology sector. While total U.S. investment in China has been significant, Taiwan remains China's largest external investor, accounting for about half of total FDI in China, and is a major investor along with Japan and South Korea. Taiwanese investment in China remains concentrated in the technology sectors.<sup>1</sup>
- China has made virtually no discernable improvement in the enforcement of its intellectual property rights (IPR) laws, despite the fact that the Chinese government has enacted laws to strengthen protection of IPR. Pirated IP provides cheap inputs to fuel further technological growth, but some analysts state that as China develops its own technologies, domestic parties may insist on better IP protection. However, as China's domestically designed technologies grow, there are also concerns that the government may selectively protect domestic IP while providing inadequate resources to protect foreign IP.

- Advances in China's technology infrastructure and industries, along with similar advances in other developing countries, pose a significant competitive challenge that is eroding U.S. technology leadership.
- China's approach to high technology development also includes aggressive use of industrial espionage.

### Overview

In 1998, U.S.-China trade in items with the highest R&D and engineering content was roughly in balance. However, by 2004, the United States had amassed a trade deficit with China in advanced technology products (ATP)<sup>2</sup> items of \$36 billion. (In the information technology and communications sector, the deficit was \$39 billion, offset by small and declining surpluses in semiconductors and commercial aircraft.)<sup>3</sup> The level of technology in China's exports also is increasing. From 1995 to 2004, China's high and medium-high technology exports increased from 33 percent to 52 percent of overall technology trade, while low and medium-low technology exports were down from 67 percent to 48 percent.<sup>4</sup>

Foreign investment in China continues to grow markedly, much of it drawn to technology sectors:

*[F]oreign direct investment (FDI) in China was relatively low during the first stage of labor-intensive industrial growth, less than \$5 billion per year through 1991. [Total] FDI then increased sharply, related to wide-ranging incentives for advanced technology investors, to \$38 billion in 1995 and \$62 billion in 2004. Seventy percent of FDI is in manufacturing, with heavy concentration in export-oriented companies and advanced technology sectors.*<sup>5</sup>

Taiwan remains the largest external investor in China, accounting for about half of total FDI in China. The United States moved to fourth place in 2003 behind South Korea and Japan. Last year, South Korea invested \$6.2 billion in China, Japan invested \$5.5 billion, and the United States invested \$3.9 billion.<sup>6</sup>

In April 2005, representatives of technology and venture capital firms, leading trade associations for the electronics, semiconductor, and information technology industries, and experts on China's technology development strategies and U.S. technology trends testified before the Commission. The Commission also heard from senior officials from the State Department and the National Science Foundation concerning their agencies' official assessments of China's science and technology trajectory. The Commission examined how China's development as both a producer and developer of technology goods is affecting U.S. technology industries, China's continuing lack of adequate IPR protections, the implications for China's technology development, and the close link between U.S. military superiority and U.S. technology leadership.

### China's High-Technology Strategy

The Chinese government continues to pursue a comprehensive and coordinated strategy for science and technology development.

Official Chinese government statements at the highest levels make clear the government's view that the primary drivers of economic growth and national strength are science and technology. Additionally, high-tech activities in China have the potential to develop advanced technologies that can contribute to China's military advancement as well as potentially enhancing the capabilities of countries of concern to the United States.

According to a study by Evan Feigenbaum, in a broader, strategic sense, Chinese leaders view science and technology as "a kind of warfare." China's progress "on the technology front" is seen as intimately connected to the global strategic balance.<sup>7</sup> This conforms to the Chinese government's pattern of strategic thinking, within which Chinese leaders link technological accomplishment directly to China's world position and relative prestige.

China's National High Technology Research and Development Program, or 863 Program, was initiated in 1986 as the guiding ideology to focus national policy on key scientific areas to develop technologically and ultimately build national power and military strength. In the same vein, the Chinese government, in 1997, codified the following "16 character" declaration by Deng Xiaoping:

*Combine the Military and Civil  
Combine Peace and War  
Give Priority to Military Products  
Let the Civil Support the Military*

These policies articulate China's view that technological development directly supports the strength of the military. China ultimately views its development strategy in civilian technology and the commercial incentives that support that strategy as vehicles of national strength and military prowess.

The early 1990s witnessed a paradigm shift in Chinese S&T policymaking from mere implementation of R&D policies to establishing a more modern approach to S&T development centered on a national system of innovation (NSI). An NSI entails an overarching strategy to exploit the contributions to S&T development made by various stakeholders: government bureaus, local administrators, universities, research institutes, and, most importantly, the marketplace.<sup>8</sup> Despite a more market-oriented approach, S&T policy continues to be guided by a government policy aimed at ultimately limiting external dependence in the high technology field.

China's technology advancement has been derived in large measure from technology transfers achieved via foreign trade and obtained from the more than 700 foreign-owned R&D centers in China and increasingly from the growing innovative capacity of indigenous Chinese institutions. China is now making great strides toward advanced technology power status by developing indigenous firms that have global brand recognition, reputations for producing quality products, and leading-edge R&D programs. Many Chinese technology firms have become globally competitive.



In addition to acquiring foreign technology, particularly dual-use technology, through trade, joint ventures, and foreign investment within its borders, China is now engaging in a more aggressive strategy of using corporate acquisitions as a means of acquiring technology.<sup>9</sup> This aggressive acquisition strategy is fueled in part by China's extensive foreign reserves holdings. It is also the product of a massive industrial espionage program. Below is a sample of some recent Chinese corporate acquisitions of U.S. technology firms.

Sampling of China's Corporate Acquisitions of U.S. Technology Firms from 2003 to 2005. (From the *China Business Review*)

- September 2003—CDC Software, a subsidiary of Chinadotcom Corp. of China, bought enterprise software maker Ross Systems Inc. of the United States for cash and stock worth \$68.9 million.
- October 2003—Cincinnati Lamb, a unit of Unova Industrial Automation Systems of the United States entered an alliance with Shenyang Machine Tool Co. of China to share technical information and process knowledge while using Cincinnati Lamb's system integration.
- December 2004—Lenovo Group Ltd. of China purchased IBM Corp.'s personal computer business for \$1.75 billion.
- March 2005—CNOOC, a Chinese energy company, attempted to acquire U.S. energy firm, Unocal and its subsidiaries, including Molycorp, a rare earth minerals company. The bid was rescinded in August 2005.

In one of the most dramatic examples of China's technology acquisition strategy, in May 2005, Chinese computer firm Lenovo concluded a deal to purchase IBM's personal computing unit for \$1.75 billion. This was the largest acquisition to date of a foreign technology company by a Chinese company. During the review of this transaction by the Committee on Foreign Investments in the United States (CFIUS), the Department of Justice and the Department of Homeland Security reportedly raised concerns as to whether China might use an IBM research facility in Research Technology Park, North Carolina for industrial espionage. There were also concerns about Lenovo's access to the details of IBM's government contracts.<sup>10</sup> In February 2005, IBM proposed concessions "preventing Lenovo from knowing the names of IBM's U.S. government customers, physically sealing off buildings in a shared office park, and moving thousands of employees to other locations."<sup>11</sup> CFIUS requested modification of the acquisition proposal and then approved it. A more detailed discussion of CFIUS appears in the next section of this chapter.

In 2000, the Chinese government announced an official policy to develop the software and integrated circuits (IC) industry, setting the goal of reaching advanced international levels of R&D and production by 2010. The announcement set forth 53 investment, financing, tax, industrial, export, and education policies to develop the software and IC industries. Included in this policy statement

were the parameters of the selective value-added tax (VAT) policy that was later eliminated based on a U.S. WTO dispute case.<sup>12</sup> However, there still exists a broad, coordinated inventory of policies designed to attract and enhance investments in this vital sector.

China's high demand for integrated circuits has led many foreign companies to establish production facilities and design operations in its high technology parks. While China is the world's third largest market for semiconductors (reaching \$25 billion in 2003), China currently cannot domestically produce the newer designs.<sup>13</sup> China's leading domestic semiconductor firm, Semiconductor Manufacturing International (SMIC), is a generation behind the dominant global chipmakers. As a contract manufacturer, it continues to rely on outside sources for chip designs. Intel, on the other hand, both designs and manufactures its chips.<sup>14</sup>

U.S. companies that work and invest in China are aware of China's technology development goals with regard to chip design and have taken precautions with respect to their China operations. For example, Intel has been careful not to build a fabrication plant in China for fear that it would lead to a transfer of proprietary information on its chip designs and also the design and management of its manufacturing process.<sup>15</sup> Another major concern for companies such as Intel is how soon the Chinese will develop a competitive IC industry. Reports have indicated that researchers at Tsinghua University, China's top engineering school, have already designed a microprocessor that is as fast as Intel's Pentium II.<sup>16</sup>

China's policies to build its software industry through foreign investment have had considerable success. By mid-2004, foreign investors invested \$4 billion and established 700 R&D centers in China.<sup>17</sup> For example, Microsoft and Digital China Holdings have signed an MOU to work together on software technician training, research and development, and the design of industry solutions products. Pursuant to this deal, Microsoft and Digital China will jointly research and develop software applications for a number of sectors in China.<sup>18</sup>

### ***China's Strategic Use of Technology Standards***

Developing technology standards is an important part of China's technology growth strategy. While information security and Chinese language and cultural preference are often the stated reason for pursuing unique technology standards, U.S. industry representatives identify China's use of unique technical standards as a serious and growing market access barrier that impedes sales of products to China made elsewhere.<sup>19</sup> Unlike most international technology standards, China's standards often do not reflect market competition, industry preference, or consumer choice, but rather are based on priorities of the Chinese government that frequently include the development and protection of domestic technology firms. Moreover, China has been able to use the leverage of access to its huge consumer market to promote its domestic standards.

According to a 2004 report by Deloitte Touche Tohmatsu, foreign vendors have four options when competing with Chinese technology standards: partner with standards setters, compete selectively, innovate specifically for the Chinese market, or invest in emerging

industries. The report cites the following standards as those that are currently a factor or will be a factor for foreign companies working in China:<sup>20</sup>

- The Chinese government announced that it is committed to the Linux operating system (OS) and standardization.
- In early 2004, China established a working group to develop a national radio frequency identification (RFID) standard. If the standard proves incompatible with international standards, it could pit the interests of China's emerging IT industries against the interests of major purchasers of Chinese products, such as Wal-Mart.
- Chinese companies created the EVD standard, which is to be a successor of the DVD format. EVD is currently overshadowed by the successor format HD-DVD that received an endorsement by the international association of electronics makers and movie studios.
- China is currently developing AVS, a technology it hopes will become a standard that will compete with MPEG-4 and H.264 to replace MPEG-2 for use with digital photography.
- China has its own globally approved 3G standard, TD-SCDMA for use in mobile telecommunications. It was developed by the Chinese Academy of Technology and Siemens and is supported by the Chinese companies Huawei and Lenovo. China is developing 4G mobile technology.
- In 2003, Beijing announced it would develop its own WiFi standard: WAPI. At the request of the United States, Beijing postponed full implementation of the WAPI standard in 2004, but it remains a concern for the U.S. IT industry.

Rhett Dawson, President of the Information Technology Industry Council, testified before the Commission on the WAPI standard:

*In May of 2003, China issued compulsory WAPI security standards that would have gone into effect on June 1, 2004 and were incompatible with the international standards upon which most WLAN products are based. In order to comply with the proposed regulations, U.S. technology companies would have had to collaborate with their Chinese competitors to co-produce products for the Chinese market—and in the process potentially risk sharing their valuable intellectual property with their Chinese competitors—or abandon the Chinese market and its opportunities. ... Facing pressure from the highest levels of the Bush Administration and the Congress, China agreed to indefinitely suspend implementation of this mandatory standard, revise the standard based on comments from foreign and domestic firms, and participate in international standards bodies.<sup>21</sup>*

Additionally, Kathleen Walsh of the Stimson Center testified before the Commission that “emphasis on technology standards developed to Chinese specifications is expected to help reduce China’s vulnerability to foreign supply, enhance China’s competitiveness, and limit opportunities for possible hacking, backdoor programming, or sabotage by foreign agents.”<sup>22</sup> As commercial technologies are increasingly used in defense applications, the process of devel-

oping indigenous technology standards could also aid China in overcoming the hurdle of advanced systems integration, traditionally an obstacle for China's defense development efforts.

### ***Failure to Protect Intellectual Property Rights (IPR)***

As discussed in Chapter 1, China's failure to protect IPR remains a serious concern. China has made virtually no measurable progress in protecting IPR. Enforcement remains ineffective, despite steps China has taken to build a legal framework for protection of intellectual property. For example, Chinese piracy rates for software are 90 percent.<sup>23</sup> Furthermore, Chinese pirated goods are now being exported and are reaching markets such as the United States and the United Kingdom.<sup>24</sup>

Piracy of high technology goods in China amounts to a significant portion of Chinese output and actually has contributed greatly to Chinese technological advancement.

*[V]iolating IPR rights enables Chinese companies to advance their competitiveness with minimal investment, in effect piggybacking on R&D investment made by foreign firms and governments (who in most countries carry much of the R&D expense directly, e.g., via government labs, and indirectly, e.g., via research funding). Put it another way, IPR violations constitute a direct subsidy enjoyed by Chinese manufacturers at the expense of U.S. taxpayers and stockowners. . . . Why doesn't the Chinese government do more to curb the practice? . . . [B]ecause the violations enable Chinese companies to climb the technological ladder despite modest R&D expenditure (China spends roughly 1% of GDP on R&D versus close to 3% in the United States).<sup>25</sup>*

Pirated IP provides cheap inputs to fuel initial technological growth, but some analysts believe that as China develops its own technologies, domestic pressure will require better IP protection in order for the sector to grow efficiently. However, there is concern that the government may selectively protect domestic IP while it continues to provide inadequate resources to protect foreign IP.

### ***Preferential Policies***

China has implemented a number of government policies to bolster the development of its domestic technology sectors. With regard to software, China initially announced a government software procurement policy that would protect its domestic industry from foreign competition. Under China's Government Procurement Law, only domestic software or "qualifying foreign software" may be used by government entities. The criteria for receiving the designation of "qualifying foreign software" have yet to be defined. The absence of such criteria has inhibited U.S. manufacturers from securing government business and appears intended to exclude foreign firms from a potential market of \$8 billion. At the July 2005 JCCT meeting, China announced that it would delay issuing draft regulations on implementing the software procurement law and would accelerate its efforts to join the WTO Government Procurement Agreement, which would subject Chinese purchases of software to

WTO rules.<sup>26</sup> It remains to be seen whether China will comply with this Agreement.

As chronicled in the Commission's 2004 Report, the United States filed its first WTO dispute against China in March 2004 challenging its value-added tax (VAT) on semiconductors. The dispute concerned China's practice of maintaining a 17 percent VAT on semiconductors but providing a significant rebate for sales of domestically designed and manufactured semiconductors, making the effective domestic tax rate 3 percent. The United States argued that this practice violated the WTO's national treatment principle and entered into formal consultations with China as the first step in its WTO dispute. In July 2004, USTR announced that the United States and China had reached a resolution of the dispute. China agreed to eliminate the rebate for firms currently receiving it by March 31, 2005 and to not certify any new firms to receive the rebate. While China has met its commitments in this regard, U.S. industry is monitoring other preferential policies that may take its place. But it is important to recognize that compliance occurred only after a formal request for consultation was filed at the WTO.

### ***Industrial Espionage***

Industrial espionage is an active tool of China's strategy for technological development. According to recent reports, China is using its large network of overseas researchers and students to acquire confidential scientific and technological information from foreign companies. According to David Szady, the former chief of FBI counterintelligence operations, Chinese espionage efforts have helped the country attain technological developments that would normally take ten years but are only taking China two or three.<sup>27</sup> Mr. Szady stated that China's industrial espionage is focused on systems, materials, and designs and "going after both the private sector, the industrial complexes, as well as the colleges and universities in collecting scientific developments that they need."<sup>28</sup> Michelle Van Cleave, the national counterintelligence executive, testified before the House Judiciary Committee that

*In the case of China, for example, its national-level intelligence services employ a full range of collection methodologies, from the targeting of well-placed foreign government officials, senior scientists, and businessmen to the exploitation of academic activities, student populations, and private businesses. The Chinese intelligence efforts take advantage of our open economic system to advance China's technical modernization, reduce the U.S. military advantage, and undermine our economic competitiveness. . . . Foreign students, scientists, and other experts who come to the United States to work or attend conferences also can serve as a funnel for sensitive U.S. technologies. China, in particular, seems to be benefiting from the access its experts have here. The Chinese press explicitly recognizes the role of the overseas Chinese community in increasing China's technological prowess. Moreover, Beijing has established a number of outreach organizations in China and it maintains close relations with a number of U.S.-based advocacy*

*groups that facilitate its interaction with experts here and probably aid in efforts to acquire U.S. technology.*<sup>29</sup>

The extent of these activities in Europe was revealed earlier this year when a Chinese agent defected in Belgium.<sup>30</sup> In May of 2005, a Swedish newspaper reported that it is common knowledge in the research community that China sends large numbers of guest researchers abroad to collect information by legal means for China's scientific development. "However, the Swedish police suspect that certain guest researchers from China ... are also instructed to conduct espionage and steal research."<sup>31</sup>

Such espionage activities by China are occurring around the globe. In June, the Korean press reported that industrial espionage is partly responsible for China's fast-paced technology development that is closing the technological gap with Korea.<sup>32</sup> And in 2004, Russia's Federal Security Service uncovered an industrial espionage network attempting to pass to China information on Russia's satellite program.<sup>33</sup>

### **Challenges to U.S. Technology Leadership**

The National Academy of Sciences Committee on Prospering in the Global Economy of the 21st Century recently released a report, *Rising Above the Gathering Storm* that identifies and addresses current issues in U.S. technological competitiveness. The report finds that:

*Having reviewed the trends in the United States and abroad, the committee is deeply concerned that the scientific and technical building blocks of our economic leadership are eroding at a time when many other nations are gathering strength.*<sup>34</sup>

Additionally, the Commission heard dramatic testimony from leaders of the U.S. technology industry that the trajectory of technology development in China and other developing countries is eroding the current position of the United States as the world's dominant technology innovator, requiring a refocusing of attention and resources in the United States.

William T. Archey, President and CEO of the American Electronics Association, stated:

*Let me be clear, it isn't that the United States is in decline. It's that others are advancing quickly from behind, putting all their economic resources into moving their countries forward. The problem is that even if the United States were doing everything right, the world still poses an unprecedented competitive challenge. Unfortunately, we aren't doing everything right, and this compounds the challenges that we face.*<sup>35</sup>

George Scalise, President of the Semiconductor Industry Association, said:

*Maintaining that [innovation] ecosystem and the manufacturing element of it is critical to our maintaining the leadership in technology that we enjoy today. ... America's federal and state governments need a coordinated strategy*

*to reduce the cost differential created by foreign government tax and incentive policies. . . . I believe the state of China's technological and manufacturing capabilities are rapidly increasing. They are able and talented competitors, who will increasingly pose a challenge to the U.S. . . . The investments and policy changes needed are neither easy nor inexpensive, but it is vital that we make them.*<sup>36</sup>

Former Secretary of Defense William Perry told the Commission that basic research, i.e. research aimed at developing new technologies rather than developing new applications for existing technologies, is critical to generating future technological advances, but that nearly all R&D currently undertaken by U.S. industry is focused on less risky product development involving existing technologies. He recommended enhanced federal funding to maintain a strong national environment for basic research.

Across the board, U.S. industry officials and analysts told the Commission that when the United States has faced a competitive challenge in the past, the federal government marshaled the vision, leadership, and money to address that challenge—such as when, in the post-Sputnik era, it took strong steps to encourage technology innovation and to rebuild the nation's educational system. They argued that such a national effort is needed to address today's competitive challenges.

### **U.S. Government Monitoring and Assessments of China's High-Technology Development**

Fashioning appropriate policies to respond to China's technology advancements requires the U.S. government to devote adequate resources to understanding these fast-moving developments. The Commission examined efforts by the State Department, the National Science Foundation, and the Intelligence Community to monitor U.S.-China science and technology (S&T) cooperation and the impact of China's technology development on its military advancements.

The U.S.-China S&T Agreement, executed in 1979, governs bilateral cooperative programs that have included basic research in the fields of physics, chemistry, health, agriculture, and other areas. In 2002, the Commission recommended, and Congress enacted into law, a requirement that the State Department produce a biennial report on the status of U.S.-China S&T Cooperative Programs under the 1979 Agreement and whether the programs contribute to China's military development.

In April 2005, the State Department released its 2005 Report to Congress on these programs.<sup>37</sup> The report narrowly concluded that there is "no direct evidence that the [1979] S&T Agreement has contributed to the development of China's military capabilities in a significant way. Any derived benefits to the Chinese military establishment resulting from government-to-government scientific cooperation would be overshadowed by the overall value of the program to U.S. scientific interests and the window it provides into Chinese science."<sup>38</sup> However, the report also concluded that the technology transfers related to government-to-government programs are minor compared to the extensive transfers taking place in the commercial sector:<sup>39</sup>

*While China committed to eliminating technology transfer requirements as a condition of foreign investment, many local governments and individual firms continue to apply great pressure on foreign partners to share technology. (However, state-owned enterprises are still allowed to require technology transfers per WTO accession rules. For example, the PRC government imposed a requirement for 100% technology transfer as a condition for the sale of nuclear power reactors.) U.S. firms, in general, remain willing to pay this price for admission and as such have become a major source of advanced technology for the PRC.<sup>40</sup>*

Assessing a country's level of technology development is inherently subjective and that development is difficult to measure. Not surprisingly, analysts dispute the rate of China's technological growth and its projected trajectory. The National Science Foundation (NSF) assesses and rates technology development in China using such indicators as the number of patents granted, the amount of funds U.S. parent companies invest in R&D by affiliates in China, domestic gross expenditures for R&D, the number of science and engineering degrees issued, and the percentage of high-tech exports. Using these factors to determine China's high-technology trajectory, NSF concludes that with the exception of the science and engineering degrees indicator, China's technological development, relative to Malaysia, Taiwan, and South Korea, is low. That said, the rate of growth for these indicators has been rapid in recent years. NSF is currently updating its data on China.

In contrast, in his Commission-sponsored research, Dr. Michael Pillsbury indicated that U.S. government assessments of China traditionally have been based on a belief that China's scientific development lags far behind that of the United States. While China has recently made high-level breakthroughs in nanotechnology,<sup>41</sup> computer chip and semiconductor design,<sup>42</sup> satellites,<sup>43</sup> and supercomputing,<sup>44</sup> the U.S. government does not currently produce an assessment of the implications of these advancements for China's technological development as a whole or their application specifically to China's military advancement.<sup>45</sup> Dr. Pillsbury also finds that NSF's indicators do not capture the breadth and depth of China's technological development. As a point of reference, he cites the Korean government's assessment of China's technological development that places China only 2.1 years behind Korea and 7.9 years behind the United States.<sup>46</sup>

Current National Intelligence Estimates on China, and DoD reports such as its annual report to Congress on China's military power, do not include an assessment of China's technological development. This failure is particularly noteworthy when it is contrasted to the tremendous effort the United States and its allies exerted during the Cold War to ascertain the nature and extent of Soviet technological development. Moreover, the U.S. intelligence and defense community is not devoting sufficient resources to monitoring and analyzing China's technological growth, and the derivative benefits for its military.



## SECTION 2: IMPLICATIONS FOR THE U.S. DEFENSE INDUSTRIAL BASE

### Key Findings

- The U.S. defense establishment is increasingly reliant on the private sector for its technologies. As industries such as software and integrated circuits developed faster in the private sector than in the defense sector, the Department of Defense (DoD) turned toward the private sector to acquire state-of-the-art technologies.
- China and other foreign governments provide incentives to attract investment from the United States and other countries in advanced technology industries, which results in transfers of technology and production capacity offshore. Partly as a result of such incentives, the U.S. technology sector has moved offshore much of its production and is beginning to move offshore some of the design for civilian technologies with applications in the defense sector.
- China's incentives for technology industries are part of a coordinated, strategic effort to obtain dual-use technologies. This strategy is focused on the software and integrated circuits industry—the two industries the U.S. defense establishment identifies as vital to today's information-based, network-centric warfare.
- While the U.S. defense industrial base is not dependent on Chinese imports at the present time, the Chinese government's coordinated strategy of utilizing incentives and subsidies to spur development of domestic capacity in dual-use technology industries is weakening the health of key U.S. commercial sectors on which the U.S. defense establishment relies.
- DoD's "trusted" and "assured" supply of high-performance microchips is in jeopardy due to the restructuring of the U.S. commercial integrated circuit industry that has moved operations offshore to Taiwan, Singapore, and China.

### Overview

The nature of modern warfare has changed since the Cold War. While the previous defense acquisition model was premised on obtaining from domestic sources the necessary materiel to enable the United States to fight two and one-half wars simultaneously, today's model relies on utilizing whatever current capacity, both in the United States and among our allies, is present when hostilities commence. In response to these changes, DoD changed its acquisition model to reflect the current nature of a globalized defense industrial base.

DoD currently defines the defense industrial base by the following five functional concepts: battlespace awareness, command and control, force application, protection, and focused logistics. To assess the health of the defense industrial base, DoD identifies the critical technologies required to meet the goals of these functional concepts. Then it identifies and assesses the health and accessibility of industries critical to those technologies.

Today's defense industrial base is more network-centric than platform-centric as it was in the past. In essence, the present day

U.S. military draws its strength from the knowledge of processes and its effectiveness in integrating information in each operation. This locates the critical aspects of the defense industrial base in the ability to produce and integrate information technology and its supporting systems.<sup>47</sup> The Commission has examined how the globalization of technology production is affecting the U.S. defense industrial base, with a particular focus on the implications for that base of China's position as a central player in the global supply chain of technology goods.

### **The U.S. Defense Industry's Reliance on the Private Sector**

The U.S. defense establishment today relies almost entirely on the private sector for its technology, particularly information technology, a profound change from the Cold War era when weapons systems, components, and other materiel frequently were designed and manufactured specifically for the military using unique military specifications. There are two current trends that could harm DoD's ability to acquire appropriate technology resources.

First, notwithstanding its significant level of purchases, the DoD has become a minor player in many sectors of the U.S. economy. Globalization is shaping certain technology industries more than DoD and this has led to fewer civilian firms producing military-specific technologies. In the materials and metals industries and the machine tool industry, DoD is "typically a minute fraction of overall production. [DoD] directly buys only 0.4 percent of steel production."<sup>48</sup> And it is responsible for the consumption of only 1 percent of global IT products, giving it little leverage or influence over how IT products are developed.<sup>49</sup>

*The underlying problem is that the economic incentives for globalizing the supply chain are omnipresent and are affecting almost every industry, and it is necessarily the case that what is an optimum solution for least cost production of software or least cost production of electronic equipment is not one that produces an effective security system and indeed a determined player can exploit the globalization of the supply chain.<sup>50</sup>*

Second, as industries such as software and integrated circuits developed faster in the private sector than in the defense sector, the Defense Department turned toward the private sector for these state-of-the-art technologies. However, the commercial demand driving changes in commercial technologies may not always coincide with DoD's technology needs in these industries. The companies in the private sector are increasingly focusing resources on further developing an existing product rather than developing new technologies.<sup>51</sup> Meeting some defense technology product needs in a way that maintains defense technology supremacy requires cutting-edge basic research. Increasing reliance on the private sector, whose profit goals are better met by product development than groundbreaking research, may prove detrimental in the future. William Schneider, Chairman of the Defense Science Board (DSB),<sup>52</sup> told the Commission that "one of the things that I think is especially interesting about the current time in defense technology is it's the first time ... since the '50s where defense require-

ments are, in a number of areas, considerably more demanding than civil applications.”<sup>53</sup> The DSB currently is conducting a study with the British Ministry of Defense to identify technologies important for national defense that are not being developed by the private sector.

### **Research and Development (R&D) and the Defense Industrial Base**

A lack of investment and human capital is leading to a decline in U.S. defense industry R&D. One reason is that the industry consolidation resulting from acquisitions by U.S. defense firms or foreign firms may contribute to a reduction of innovation in defense industry R&D. In a 2003 Defense Acquisition University study, Maj. David R. King and Lt. Col. John D. Driessnack found that “the average research and development (R&D) intensity for acquiring firms was significantly below the average for firms in their industry, suggesting that firms use acquisitions as a substitute for R&D or that acquired technology is used as a substitute for internal innovation.”<sup>54</sup> As commercial technologies continue to set the direction for military technologies, a lack of innovation in the private sector could have serious detrimental effects on the capability to produce innovative military technology.

Since 2001, the Commerce Department has been asked by DoD to produce 18 studies on the state of the U.S. industrial base in a variety of defense-related sectors. These studies found that many U.S. firms that had been supplying the U.S. defense sector have been unable to maintain adequate R&D levels, invest in production and process improvements, and retain qualified engineers or scientists. As a result, some companies that were committed to supplying DoD have migrated to commercial sectors or downsized their operations.<sup>55</sup>

DoD is reliant on new technologies to improve the effectiveness of and enhance U.S. military capabilities. Most of these technologies, particularly in the IT sector, resulted from private sector activities, without DoD guidance. The relationship between the private sector and the Defense Department regarding technology development has not been well coordinated. Early last year, the Commerce Department conducted an *Assessment of Industry Attitudes on Collaborating with the U.S. Department of Defense in Research and Development and Technology Sharing*. The results showed that few companies surveyed have entered into agreements with any federal government agency since 1998. Of those surveyed that held defense contracts, two-thirds would be willing to provide R&D project information for a DoD database. But only 41 percent of non-defense contractors were willing to do so. They cited “loss of proprietary data, limited economic benefit, and reduced competitive advantage” as their major concerns.<sup>56</sup>

DSB Chairman Schneider expressed concern to the Commission about the decline in basic research, and offered a possible prescription to address that problem:

*[D]efense laboratories have tended to be focused on the application of advanced technology for military purposes and have not focused very much on basic technology, but it*

*may be necessary for DoD to acknowledge the fact that there is a lot of technology that's now being produced in the civil sector that has applications to defense and focus on industry making that transition, perhaps by reducing some of the institutional barriers to more effective collaboration between the non-defense sector and the defense sector and getting the government laboratories to work in a more focused way on supporting some of the work in basic research and in collaboration with universities which are ultimately the source of a lot of this work.*<sup>57</sup>

DoD has recognized that cutting-edge R&D is most often being conducted by emerging defense industry players, but such new technologies are not fostered to the point of a DoD product. To remedy this situation, DoD included in its FY 2006 budget proposal an Industrial Base Investment Fund that will function as a "Chairman's Innovation Fund" managed by the Principal Deputy Under Secretary of Defense for Acquisition, Technology, and Logistics. The aim of the fund is to invest in technologies "and put them in programs across numerous warfighting applications."<sup>58</sup>

Furthermore, declines in the development of needed human capital are a concern for DoD. Former Under Secretary Michael Wynne deemed the declining number of American students in engineering and sciences to be an area of concern for the defense industrial base.<sup>59</sup> Some legislators have called for passage of a successor to the National Defense Education Act that was enacted in 1958 to encourage education in math and science.<sup>60</sup>

## **China's Impact on U.S. Defense-Related Industries**

### ***Foreign Acquisitions***

Section 163 of the Defense Production Act of 1992 requires a quadrennial report on whether any foreign governments or foreign companies are pursuing a strategy to acquire U.S. firms dealing with critical defense technologies. The President designated an interagency working group led by the Treasury Department to complete the first report in 1994. That report found no "credible evidence" that any countries or companies have such a strategy.<sup>61</sup> (The report did not specifically look at China or Chinese companies due to a lack of Chinese activity in global acquisitions at the time.) China has since made global acquisitions a part of its coordinated strategy for science and technology development. (See Chapter 2, Section 1.) While it is clear new players have pursued international acquisitions since 1994 and they may have a coordinated strategy to acquire critical technologies, *no further reports have been produced, and no agencies have been designated to take part in preparing such reports.*

For example, Chinese titanium factories are eyeing foreign acquisitions of upstream assets, as China does not have an abundance of titanium mines. Titanium is a vital component of a variety of defense systems. As China's demand for specialty metals like titanium rises and it appears prepared to secure supply through global acquisitions, competition for this metal will increase and this will have availability and price consequences for U.S. defense acquisition. Dr. Jack Shilling testified before the Commission that the

Chinese have aggressively and repeatedly sought to buy western technology in the specialty metals industry in exchange for market access. According to Dr. Shilling, the Chinese strategy to acquire technology is “a highly coordinated, systematic, strategic initiative which, left unchallenged, will result in transfer of specialty metals technology in China.”<sup>62</sup>

Another example is the rare earth mineral market. Rare earth magnets are used in missile guidance systems. In 1992, Chinese Premier Deng Xiaoping announced an expansion of China’s role in the rare earth market, proclaiming “There is oil in the Middle East; there is rare earth in China.” Thus, the Chinese government embarked on a detailed strategy to control the rare earth market. As part of this strategy, two Chinese firms acquired a U.S. rare earth magnet producer. In 1995, San Huan New Materials and China Non-ferrous Materials Corporation partnered with U.S. investors to purchase Indiana-based Magnequench, whose parent company was General Motors. Magnequench manufactures rare earth magnets and magnet powders, used in computer hard drives, a variety of other consumer electronics, and guidance systems. Due to concerns about the defense applications of the magnets, CFIUS reviewed the case, yet approved the transaction partially based on a commitment that the Indiana facility would remain in the United States. Eventually the whole facility was moved to China. This deal and subsequent deals around the globe have allowed China to come closer to cornering the market in rare earth minerals. Of equal concern is the transfer of technology, including patents, allowing China to control development of next-generation products using rare earth minerals. Additionally, the recent bid for Unocal by the Chinese company CNOOC may have been another piece of this strategy, as Unocal owns Molycorp, a U.S. rare earth mineral mine.

***The Committee on Foreign Investment in the United States (CFIUS)***

Pursuant to the 1988 Exon-Florio Amendment (Public Law 100-418) to the Defense Production Act of 1950, the President has authority to review mergers of U.S. companies with foreign companies and acquisitions and takeovers of U.S. companies by foreign entities to determine if the transactions pose any threats to national security. In Executive Order 12661, the President designated CFIUS to perform such reviews. CFIUS is chaired by the Secretary of the Treasury and includes eleven other members: the Secretaries of State, Defense, Commerce and Homeland Security, the Attorney General, the Director of the Office of Management and Budget, the U.S. Trade Representative, the Chairman of the Council of Economic Advisors, the Director of the Office of Science and Technology Policy, the Assistant to the President for National Security Affairs, and the Assistant to the President for Economic Policy.

A review of a proposed transaction may be initiated by CFIUS “either upon a voluntary filing by either party to the transaction or upon an agency notice filed by one of the members of CFIUS. . . . A compelling reason for a party to file voluntarily prior to consummation of the transaction is to avert a post-closing CFIUS investigation of the transaction. If the parties do not file voluntarily, the transaction is subject to potential review at any time,”<sup>63</sup> and

a post-closing review that produced a Presidential decision to prohibit the transaction could force the parties to negate it.<sup>64</sup> Once a transaction is filed, CFIUS has 30 days to determine whether to commence a 45-day formal investigation. After any such investigation, the President has 15 days to announce whether he will block the transaction and, if necessary, require divestment on national security grounds. The law requires a report to Congress following any Presidential determination.

CFIUS to date has rarely initiated the 45-day investigation process. In fact, of the over 1,500 filings it has received, CFIUS has only required a 45-day investigation in 25 cases. Only three of the 25 cases have required a Presidential decision, and only one of those, which occurred in 1990, has resulted in a divestment: the investment of a Chinese company, China National Aero-Technology Import and Export Corporation's (CATIC), in MAMCO Manufacturing Inc., a U.S. manufacturer of metal parts for aircraft.

**Figure 2.1 Notifications to CFIUS and Actions Taken**

Year	Notifications	Acquisition	Investigation
2000	72	71	1
2001	55	51	1
2002	43	42	0
2003	41	39	2
2004	53	50	2

Source: GAO Report: GAO-05-686 based on Department of Treasury data.

CFIUS usually informally mitigates any concerns about a transaction by working with the parties either prior to any filing or after the filing but prior to the launch of a formal investigation. Once the parties to a transaction file, CFIUS agencies may inform the parties of circumstances of the transaction that would require a 45-day investigation or a decision to block the transaction. Parties then may request to withdraw from the review process. CFIUS generally will grant such a request when the parties intend to modify the transaction to address CFIUS concerns; the parties then re-file it in modified form. Since a public report is required only following a Presidential decision, the CFIUS practice of encouraging parties to a transaction to withdraw and re-file after resolving all CFIUS security concerns effectively undermines the public reporting requirement pertaining to Presidential decisions. This makes CFIUS deliberations and decisions largely opaque to Congress and the public.

The U.S. Government Accountability Office (GAO) has conducted several studies of the CFIUS review process. In 2000, GAO found that "the identification process the Committee on Foreign Investment currently uses does not enable it to effectively identify all foreign acquisitions with possible effects on national security."<sup>65</sup> GAO subsequently recommended that the Secretaries of Commerce, Defense, Treasury, and State "require agency officials to submit all known foreign acquisitions of companies with potential national se-

curity implications.”<sup>66</sup> Furthermore, in 2002, GAO found that the CFIUS practice of alerting filers to possible issues and recommending withdrawal and re-filing “negate[s] the effectiveness of the Exon-Florio statute.”<sup>67</sup> GAO’s latest report on the CFIUS process in 2005 found that this practice continues unabated and that “when companies that have already completed the acquisition are allowed to withdraw, there is a substantially longer time before they refile, and in some cases they never do, leaving unresolved any outstanding concerns.”<sup>68</sup>

In early 2005, CFIUS began a 45-day investigation of the Chinese company Lenovo’s bid for IBM’s personal computer (PC) manufacturing and sales operations. According to press reports, to facilitate CFIUS approval, IBM made several concessions noted in the prior section.<sup>69</sup> By allowing IBM to make the concessions and by considering and acting on the modified, re-filing rather than evaluating and acting on the original filing that likely would have required a Presidential decision, CFIUS was not required to report to Congress on its findings. Thus, CFIUS was not accountable to anyone outside the executive branch concerning its decision in this case.

Another major concern about CFIUS is the narrow definition of national security it uses in reviewing a transaction. As discussed above, the U.S. defense industrial base is heavily reliant on the private sector. As a consequence, U.S. national security is heavily linked to U.S. economic health. The Commission heard testimony from the Chairman of the Defense Science Board, William Schneider that, “it’s the national economy that’s ultimately the source of our military power. There are very few precedents for a country being able to do much in the way of maintaining a comprehensive military capability without a strong national economy.” However, CFIUS does not appear to consider economic security when it reviews a transaction for national security concerns. Notably, the Congressional conference report that was issued when the Exon-Florio Amendment was enacted calls for a broad interpretation of national security:

*The standard of review in this section is ‘national security.’ The Conferees recognize that the term ‘national security’ is not a defined term in the Defense Production Act. The term ‘national security’ is intended to be interpreted broadly without limitation to particular industries.<sup>70</sup>*

The lack of transparency in the CFIUS review process played a role in another significant CFIUS case, and it is possible that CFIUS’ failure to apply a sufficiently broad definition of the term “national security” also was a factor. Because CFIUS’s review of the Magnequench transaction did not require a Presidential decision, there is no public report of either what definition of national security CFIUS reviewers applied or whether they considered China’s aforementioned strategy to dominate the market in rare earth minerals. This case highlights the need for a more transparent process.

## Preserving the Supply of Key Items for U.S. Defense Needs

### *Microchips*

The head of the DSB's task force on high performance microchip supply, Dr. William Howard, testified before the Commission that the United States' secure supply of "trusted" and "assured" high-performance microchips is in jeopardy, and that this problem requires an urgent response.<sup>71</sup>

DoD traditionally has relied on private sector production of chips for its supply. This has proven cost efficient given the extremely high cost of maintaining government production facilities that cannot take advantage of the same economies of scale available to private sector manufacturers. As the commercial semiconductor industry has restructured over the past several years, manufacturing capacity moved abroad, mostly to Taiwan, Singapore, and China. Dr. Howard testified to the Commission that chip design is beginning to follow manufacturing offshore.<sup>72</sup> These trends likely will continue as China pursues its aggressive strategy to rapidly develop its semiconductor sector. This threatens DoD's ability to ensure a sufficient and safe chip supply, particularly its application-specific integrated circuits.

In February 2005, the DSB Task Force on High Performance Microchips released its report on the health of defense readiness with regard to integrated circuits. The report found that:

*[T]he relocation of critical microelectronics manufacturing capabilities from the United States to countries with lower cost capital and operating environments ... [is] directly contrary to the best interests of the Department of Defense for non-COTS [commercial off the shelf] ICs. The shift from United States to foreign IC manufacture endangers the security of classified information embedded in chip designs; additionally, it opens the possibility that 'Trojan horses' and other unauthorized design inclusions may appear in unclassified integrated circuits used in military applications. ... Beyond the threat of IC device compromise described above, dependence on off-shore or foreign-owned semiconductor component production subjects the United States to several risks, such as lack of quick response or surge capacity in time of war, that could threaten its access to state-of-the-art microelectronics. As capacity moves to potential adversary countries, the United States is vulnerable to a governmental 'reverse-ITAR'<sup>73</sup> by which critical technologies are denied to the U.S. international trade.*

*A longer term risk lies in the historical fact that leading-edge R&D tends to follow production. The most attractive positions for talented process scientists and engineers moves with advanced production. Additionally, a separation of design from production could render the close collaboration between process engineers and designers required for leading edge chip development ineffective for U.S. defense industry.*

*The Defense Department does not directly acquire components at the integrated circuit level. Individual circuits are most often specified by designers of subsystems; even system*



*primes have little knowledge of the sources of the components used in their system-level products. Any DoD acquisition plan to address IC trustworthiness and availability must focus on defense suppliers as much as DoD itself.*<sup>74</sup>

The DSB report echoes many of the concerns raised by U.S. semiconductor firms (discussed in Chapter 1) about the inadequate response by the U.S. government to date to counteract incentives provided by China and other developing countries to semiconductor and other technology firms to relocate their operations to those countries.

*Since the end of the Cold War U.S. export controls have become less effective in restricting the flow of advanced semiconductor manufacturing equipment (SME) and design technology and equipment to China. . . . On several occasions, the U.S. government has sought to persuade other Wassenaar members to restrict exports of SME to China, but has been rebuffed. . . . Today the driving force behind the 'alienation' of foundry business from the United States to other countries is the lower cost of capital available in developing countries, made possible by foreign nations' tax incentives, market access requirements, subsidized infrastructure, and low-cost financing. . . . The primary beneficiary countries of the foundry trend have been in the Far East (Taiwan, Singapore, PRC, Korea, and Japan), some of whose future interests may not align with the United States. . . . Taiwan dominates global foundry production with about two-thirds of current capacity; China, a relatively new entrant with 8 percent of global capacity, is rapidly increasing its market share.*<sup>75</sup>

Furthermore, the DSB report warned that a cross-Strait conflict scenario could start a worldwide run on commercial wafer capacity that would take years to rectify. "During such a time, DoD and its contractors would have little leverage to obtain needed fabrication services."<sup>76</sup>

Currently there are only three integrated circuit fabricators in the United States: IBM, Intel, and Texas Instruments. Because only IBM has agreed to conduct business with the federal government, in 2004 IBM was designated a "Trusted Foundry" and was given a take-or-pay contract by DoD worth \$600 million over ten years. While such a program helps address near-term supply concerns, there is a danger in using a sole-source supplier because of the possibility that the supplier's ability to produce chips could be substantially degraded in the future.<sup>77</sup> Thus there is a need for the government to devise a broader strategy to ensure a long-term supply of chips for defense purposes that is both trusted and assured.

### ***The Aerospace Industry***

The ability of the U.S. aerospace industry to attract investment and sustain a base for high-technology development is also reportedly at risk and may deteriorate further as more aerospace technologies migrate offshore. The Commission on the Future of the Aerospace Industry found that the U.S. civil industrial base continues to increase its focus on knowledge generation rather than

creation of hardware. According to Dr. Schneider, “That does pose a challenge for how the U.S. will . . . maintain its leadership and be able to sustain a capability to support the national strategy of maintaining a decisive technology edge in military performance.”<sup>78</sup> The problem is exacerbated by the fact that U.S. aerospace companies may not be investing enough in R&D. For example, Heidi Wood of Morgan Stanley testified before the Commission stating, “Boeing has been . . . possibly insufficiently innovative. . . . Boeing’s commercial R&D-to-sales ratio we project to be 4.8 percent in 2005. In comparison, Airbus we are projecting at eight and a half to nine and a half percent in 2005.”<sup>79</sup>

Furthermore, Pierre Chao of the Center for Strategic and International Studies testified that after the corporate consolidation of much of the aerospace industry, aerospace subcontractors have been driven to look offshore for new work because there are fewer contractors that are potential purchasers and fewer U.S. aerospace projects need work done in the United States.<sup>80</sup> As discussed in Chapter 1, China is becoming increasingly, and increasingly inextricably, intertwined in U.S. aviation production. Securing access to the China market has required U.S. firms to offset important components of production and may therefore accelerate current trends toward offshore migration of the industry. Ironically, China presents a vast market opportunity for Boeing and some other aerospace firms and so constitutes a critical component of their future health and, to some extent, the health of this vital element of the U.S. defense industrial base.

### ***The Software/Information Technology Industry***

Process knowledge is becoming more important to defense needs than hardware knowledge. Thus, while the hardware for certain systems may be mundane by current-day technology standards, the software that directs these systems and enables them to perform particular functions is “exotic and the industry that creates that software is a national asset.”<sup>81</sup> The Commission heard testimony that the globalization of the software development industry may diminish the level of software innovation in the United States. Furthermore, it poses a potential risk to U.S. security, because foreign-produced software may contain various vulnerabilities that are very difficult or effectively impossible to identify, and adversaries can exploit those vulnerabilities at a later date.<sup>82</sup>

### ***The Machine Tools Industry***

Machine tools are critical to national defense. The United States imposes export controls on machine tools and supporting systems because of their importance in manufacturing products on which the military relies. These export controls are generally guided by the concept that manufacturing technology is often more important than the products of that technology. Yet, there is a contradictory relationship between export controls for U.S. national security purposes and the ability to maintain a healthy U.S. machine tool industry.

The inconsistencies between U.S. export controls and the controls that are imposed by other nations that are major manufacturers of machine tools have led to a decrease in U.S. global market share

for machine tools. However, the U.S. share of the China market for machine tools has remained steady at around 7 to 8 percent from 1998 to 2004. The United States is the fourth largest machine tool exporter to China, far exceeded by Japan, Taiwan, and Germany, in that order.

Dr. Paul Freedenberg, Vice President of the Association for Manufacturing Technology, testified that a decrease in the capacity of the U.S. machine tool industry has hurt the United States' ability to mobilize in the event of a national emergency. The machine tool industry saw its domestic market share decrease by 60 percent from 1998 to 2002, with a slight increase in 2003.<sup>83</sup>

### ***The Specialty Metals Industry***

Specialty steel, aluminum, beryllium, nickel, superalloys, titanium, and other specialty metals are critical to U.S. weapons systems and are elements of virtually every U.S. military platform. "[W]eapons systems can neither be built [n]or operated without these materials, whether it's missiles, jet aircraft, subs, helicopters, Humvees, or munitions."<sup>84</sup>

DoD's recognition of and response to the criticality of specialty metals has been mixed. Recently it allocated \$6 million to establish a domestic production facility for high purity beryllium metal.<sup>85</sup> But recent defense capabilities studies by DoD have not included assessments of the health of the specialty metals industry and the adequacy of the supply of these metals for U.S. defense needs.

In an encouraging step, DoD is currently undertaking a study of how China's increasing demand for such items is affecting U.S. access to specialty steel for defense needs. DoD stated in a letter to the Commission:

*Recent price and schedule trends for metals important to defense, such as steel, aluminum, and titanium, appear to be influenced by China's increasing internal demand; which is likely to persist for years to come. The prices of aerospace grade steel, aluminum, and titanium have risen considerably over the last two years. In addition to these price increases, acquisition lead times for these materials also have increased. Some experts believe that China is responsible for these trends while others are of the opinion that the increases are caused by economic trends associated with widening industrial globalization. Whatever the case, the Department is taking steps to understand the potential impact of these trends and inform planning for future acquisition budgets accordingly.*<sup>86</sup>

### ***The Shipbuilding Industry***

In May 2005, the Deputy Under Secretary of Defense for Industrial Policy completed a *Global Shipbuilding Industrial Base Benchmarking Study* that examined the six largest private shipyards in the United States in comparison to the world's ten leading shipyards. The study found that the U.S. shipbuilding industry has improved significantly over the last five years, but that large technology gaps still exist in some U.S. shipyards, and shipbuilding designs need to be optimized for state-of-the-art military vessels. According to the study, one major hindrance to industry improve-

ments is the lack of competition caused by a series of acquisitions that have led to a duopoly in the United States between General Dynamics and Northrop Grumman.

For the first time in 50 years, the United States is not currently developing a new submarine design. Amy Praeger of the American Shipbuilding Association (ASA) testified that this is having a devastating effect on the ability to ensure the continued availability of qualified ship design engineers. Since 1991, 24,000 engineers and production jobs have been lost in the United States.<sup>87</sup> Additionally, many skilled workers are leaving the shipbuilding industry because the sector does not have consistent and stable contracts. Should new skilled employees need to be found, it could take 15 years to replicate the lost skill level.

## RECOMMENDATIONS

### *Developing a National Strategy for Technology Competitiveness*

- As recommended in the Commission's 2004 Report to Congress, the U.S. government must develop a coordinated, comprehensive national technology competitiveness strategy designed to meet China's challenge to U.S. scientific and technological leadership. America's economic competitiveness, standard of living, and national security depend on such leadership. The Commission therefore recommends that Congress charge the Administration to develop and publish such a strategy in the same way it is presently required to develop and publish a national security strategy that deals with our military and political challenges around the world. Such a strategy should:
  - Identify future technology base goals;
  - Recommend policies for directing funds toward maintaining the U.S. technology base;
  - Initiate a national educational program similar to the programs developed in the post-Sputnik era to enhance the level of math and science education at the K-through-12, undergraduate, and graduate levels in the United States;
  - Recommend appropriate tax and investment policies to encourage high-technology-related research, development, and manufacturing activities in the United States.
- In establishing a national technology competitiveness strategy, it is critical to incorporate input from the U.S. technology industry to better align private-sector goals with national interests. To this end, the Commission recommends that the Congress create a task force regarding development and implementation of the national strategy. It should include representatives from the Office of Science and Technology Policy, the National Science Foundation, and appropriate cabinet departments such as the Department of Commerce to consult on a regular basis with select private sector leaders in key science and technology industries, representatives of the industries' skilled workers, and investment leaders, particularly venture capitalists. The intent in initiating such a task force is to create a permanent structured dialogue between the federal government and the private sector on tech-

nology base issues that have a direct effect on U.S. economic and national security. The task force should be required to report its findings and recommendations to Congress on an annual basis.

- The Commission recommends that Congress direct the Department of Commerce and the Office of the U.S. Trade Representative (USTR) to conduct a comprehensive study and report to Congress on China's development of unique domestic technology standards and whether non-performance-based standards are creating an unjustified market barrier to U.S. goods. If the study finds that China's standard setting process is acting as a market access restriction, Congress should direct USTR to identify standards under development and to intervene with Chinese officials early in the standard development process, and to consider filing a WTO case to address restrictive standards that are already in effect.
- Because of the importance of promoting interaction and exchange as a way of enhancing U.S. values and interests in the world and also of promoting U.S. economic interests, and because of the difficulties experienced in traveling to the United States by many business travelers who wish to expand trade relationships, the Commission recommends that Congress direct the President to review our nation's policies regarding student visas and business travel, ensuring that appropriate emphasis is placed on protecting the U.S. technological and economic base and U.S. security interests.

*Maintaining the U.S. Defense Industrial Base*

- In order to maintain a strong U.S. technological base in the key defense industries, the Commission recommends that Congress urge the President to conduct a study and recommend appropriate incentives—such as tax policy, energy policy, etc.—for domestic investment in research and development and in production in crucial defense-related industries.
- With China pursuing a coordinated strategy to attract investment in the semiconductor industry and in light of the extreme importance and urgency of ensuring a secure domestic supply of high-performance microchips for U.S. defense needs, the Commission recommends that Congress direct DoD to prepare an assessment of its future microchip needs and establish a carefully designed acquisition program based on that assessment that will secure a sufficient number of other “trusted and assured sources” of integrated circuits in addition to IBM (that participates in DoD's “Trusted Foundry Program”).
- The Commission recommends that DoD prepare an assessment of (1) China's anticipated naval buildup over the next decade and its stated plans to source 100 percent of the necessary systems and components required for this buildup, and (2), in order to usefully compare China's planned naval capability to U.S. naval capability, the ships, and the ship components and systems, that will be needed to meet U.S. military requirements over the next 20 years and the projected sourcing plan for all required ships, components, and systems extending to all levels of manufactur-

ers and suppliers—specifically noting anticipated sourcing dependence on China. This exercise should provide a prognosis of the long-term viability of U.S. domestic manufacturers of ships, components, and systems needed to meet the requirements, and the critical industrial skill base those manufacturers will need—and should highlight anticipated problem areas.

*Tracking China’s Technology Development and Defense-Related Acquisitions*

- The Commission recommends that Congress increase intelligence community resources for collection and analysis focused on China’s technology development. It is crucial that U.S. policy makers have access to current, accurate, and complete information on China’s technological development.
- The Commission recommends that Congress direct the Administration to begin preparing and submitting the quadrennial reviews required by law (P.L. 102–558) of any strategies by foreign countries and companies to acquire critical defense technologies. No such report has been prepared or delivered since the first report was issued in 1994.
- The Bureau of Economic Analysis currently compiles international trade data for each ATP product. The Commission recommends that Congress direct the Department of Commerce to present more detailed ATP trade data in a user-friendly format in its monthly publication, *U.S. Trade in International Goods and Services*. The data should be presented in a table that quantifies U.S. trade in each of the ATP products with the United States’ top ten ATP trading partners, of which China is one. This table should present, for each of the ten countries: (1) the value of U.S. imports of each ATP product from the country; (2) the value of U.S. exports of each ATP product to the country; (3) the country’s trade balance with the United States for each ATP product; and (4) the percentage of total U.S. imports of each ATP product accounted for by imports from that country. These data will facilitate analysis of the import dependency of the United States on specific ATP products and, more precisely, on specific ATP products from specific countries.

*Proposed Amendments to the Exon-Florio Provision*

- The current CFIUS process does not allow for Congressional oversight. The Commission recommends that the Exon-Florio provision be amended to require CFIUS to provide Congress notice of each proposed transaction CFIUS is requested to approve. In addition, CFIUS should be required to report to Congress on the disposition of each case it considered.
- Since economic security is an integral part of “national security,” the Exon-Florio provision should be amended to specifically require CFIUS to consider economic security as well as national security in making decisions.

- This Commission recommends that Congress urge the President to transfer the chairmanship of CFIUS from the Treasury Department to another of its member agencies.
- Congress should amend the Exon-Florio provision to require post-transaction reviews of CFIUS filings that have received full investigations, and that the results of these reviews be provided to Congress.

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## CHAPTER 3

### CHINA'S MILITARY POWER AND AMERICA'S INTERESTS

#### INTRODUCTION

China's methodical and accelerating military modernization presents a growing threat to U.S. security interests in the Pacific. While Taiwan remains a key potential flashpoint, China's aggressive pursuit of territorial claims in the East and South China Seas points to ambitions that go beyond a Taiwan scenario and poses a growing threat to neighbors, including U.S. alliance partners, on China's periphery. Recent and planned military acquisitions by Beijing—mobile ballistic missiles, improved air and naval forces capable of extended range operations—provide China with the capability to conduct offensive strikes and military operations throughout the region. Citing uncertainties about how China will use its power, the Administration has called on China to “openly explain its defense spending, intentions, doctrine and military exercises to ease concerns about its rapid military buildup.”<sup>1</sup> China's “continuing large and expanding arms purchases” have prompted the U.S. Secretary of Defense to publicly question the ultimate purpose of this military buildup.<sup>2</sup>

#### *Taiwan*

For a variety of reasons, unification with Taiwan remains one of the most important priorities for the Chinese Communist Party (CCP). In the near term this means preventing Taiwan from becoming legally recognized as independent by other nations. In the longer term, China is resolute in its ambition to unify with Taiwan under the rubric of “one China.” This objective is of such significance that the Chinese government threatens to achieve it—and prevent any substantial contrary movement—by force if that is necessary. China's very public and frequently stated commitment to this goal has left little room for negotiation or trade-offs in the event of an emerging crisis over Taiwan. For China, Taiwan is an issue that involves territorial sovereignty and regime legitimacy. In March of 2005, China promulgated the Anti-Secession Law (ASL), a legal document that codified the authority to use force to counter Taiwan moves further toward separation, and, as a consequence, placed additional pressure on Chinese leaders to take forceful actions in a time of crisis with Taiwan.

The failure of the two sides to agree on a formula for negotiating a solution to their differences has led Beijing to heighten its discussion of and preparations for possible military options to achieve unification. Rather than persuading Taiwan to move toward unification, the growing threat posed by China's military deployments

directed at Taiwan has added to fears on the island. In a wider context, the growing volume and credibility of Beijing's threats against Taiwan constitute a serious challenge to long-established U.S. security and political interests in the Pacific as those are set forth in the U.S. National Security Strategy of 2002:

*The war against terrorism has proven that America's alliances in Asia not only underpin regional peace and stability, but are flexible and ready to deal with new challenges. To enhance our Asian alliances and friendships, we will:*

- *look to Japan to continue forging a leading role in regional and global affairs based on our common interests, our common values, and our close defense and diplomatic cooperation;*
- *work with South Korea to maintain vigilance towards the North while preparing our alliance to make contributions to the broader stability of the region over the longer term;*
- *build on 50 years of U.S.-Australian alliance cooperation as we continue working together to resolve regional and global problems—as we have so many times from the Battle of the Coral Sea to Tora Bora;*
- *maintain forces in the region that reflect our commitments to our allies, our requirements, our technological advances, and the strategic environment; and*
- *build on stability provided by these alliances, as well as with institutions such as ASEAN and the Asia-Pacific Economic Cooperation forum, to develop a mix of regional and bilateral strategies to manage change in this dynamic region.*<sup>3</sup>

Beginning in the early 1990s, as increasingly open discussions of independence in Taiwan heightened Beijing's concerns, China stepped up efforts to develop viable military options to complement the political, diplomatic, and economic gestures and coercion it was directing toward Taiwan in an effort to bring about unification. China began a military transformation that abandoned its reliance on massive forces and outdated weapons in favor of a modern military armed to compete and win in a high-tech battlefield environment.<sup>4</sup> For example, in 1992, the PRC acquired a number of advanced Sukhoi-27 jet fighters from Russia and China's indigenous defense plants embarked on efforts to design and manufacture more capable air and naval platforms. In turn, Taiwan requested and received F-16 jet fighters from the United States and Mirage 2000 fighters and Lafayette frigates from France, equipment that helped redress the imbalance resulting from the capabilities of new Chinese weapons. In subsequent years, however, a booming economy and generous government funding have permitted China to take long strides toward modernizing its air, naval, and missile forces. Today, China has accumulated a formidable force of ballistic and cruise missiles, advanced strike aircraft, and modern naval combatants with long-range and truly lethal combat power. Since Taiwan has not adequately responded, the military balance across the Strait is shifting strongly in China's favor and poses a growing

challenge to U.S. security forces and political interests in the Pacific.<sup>5</sup>

The complex and evolving set of relations among the United States, China, and Taiwan requires careful diplomacy, a strong U.S. military presence in the region, and continued U.S. monitoring of the military balance across the Taiwan Strait. The United States seeks a stable, peaceful, and prosperous Asia-Pacific region, and U.S. officials repeatedly have expressed their opposition to actions by either China or Taiwan that would jeopardize the peace by unilaterally altering the status quo.<sup>6</sup>

### **Key Findings**

- China is in the midst of an extensive military modernization program. The equipment China is acquiring is aimed at building its force projection capabilities to confront U.S. and allied forces in the region. A major goal is to be able to deter, delay, or complicate a timely U.S. and allied intervention in an armed conflict over Taiwan so China can overwhelm Taiwan and force a quick capitulation by Taiwan's government.
- The combination of a U.S. policy of strategic ambiguity and Taiwan's hesitation in responding to China's aggressive military buildup sends signals of weakness and ambivalence to China, undermines U.S. deterrence efforts, leaves Taiwan vulnerable if attacked, and increases the risk that U.S. forces may be called upon to act.
- The U.S. government has not laid adequate groundwork to allow a rapid response to a provocation in the Taiwan Strait. Almost any possible scenario involving U.S. military support to Taiwan would require extensive political and military coordination with the Taiwan government and regional allies, but the foundations for such coordination have not been laid. For example, self-imposed restrictions against visits to Taiwan by senior U.S. military officers and other government officials undermine efforts to conduct advance planning for contingencies. Additionally, failure to gain advance approvals for access by U.S. forces to foreign airfields and ports in the Western Pacific might jeopardize execution of U.S. contingency plans.
- The lack of adequate and effective confidence building measures between the United States and China increases the risk of misjudgment and miscalculation, especially in crisis situations, and therefore increases the risk that a misunderstanding or minor disagreement will lead to a serious armed conflict.
- The increasing frequency of Chinese military incursions into Japanese territory sets a dangerous course and unnecessarily increases the potential for a military clash in Northeast Asia that could engulf the United States.

### **SECTION 1: CHINA'S EFFORT TO DOMINATE THE ASIA-PACIFIC REGION AND ITS IMPACT ON U.S. INTERESTS**

China's methodical and accelerating military buildup presents a growing security threat to Taiwan, specifically, and an emerging security challenge for the United States, its friends and allies, and other nations in the region. Over the past decade, the Chinese mili-

tary threat has grown far faster than many experts predicted. As former Deputy Assistant Secretary of Defense for Asia-Pacific Affairs Kurt Campbell testified, in the aftermath of the 1995–1996 crisis in the Taiwan Strait, the U.S. intelligence community conducted a number of studies to project China’s future military capability and “every one of the studies missed on the short side.”<sup>7</sup> China’s secrecy about its military programs and its intentions contribute to the perception that China is a growing threat to peace and security in the Pacific.

China wants a military that is capable of performing a variety of essential offshore missions, including protecting its eastern seaboard and ensuring the security of the sea lanes through which it receives resources essential to its continued economic development. But as Secretary of Defense Rumsfeld warned a Chinese military audience, “expanding [Chinese] missile forces” and “advances in Chinese strategic capability” worry China’s neighbors and raise questions, “particularly when there is an imperfect understanding of such developments on the part of others.”<sup>8</sup> China’s aggressive pursuit of territorial claims arising from disputes with Japan in the East China Sea and multiple countries in the South China Sea and its forays into the Bay of Bengal give rise to growing regional security concerns in Japan, India, and Southeast Asia.

China’s military threat against Taiwan is implicitly a threat to the United States as a result of both explicit and tacit assurances that have been expressed to Taiwan by every U.S. Administration since 1949. Taiwan has successfully converted from authoritarian rule to a functioning democracy, making it an even more significant symbol of American interest in the region and increasing the likelihood that a Chinese conflict with Taiwan will also involve U.S. forces.

Current Chinese policy seeks to avoid military confrontation, relying instead on united front<sup>9</sup> tactics and intimidation to exert pressure on Taiwan officials. In the meantime, China continues to acquire additional sophisticated weaponry and develop strategies to overwhelm Taiwan—and U.S. forces if they do become involved in a conflict between China and Taiwan. China’s growing military capability may embolden its leaders to adopt a more aggressive approach toward Taiwan or in other disputes, particularly if there is reason to believe the United States would be unlikely or unprepared to respond.

Any conflict across the Taiwan Strait would result in disastrous consequences throughout Asia, regardless of the outcome. Therefore, it is imperative that the United States discourage both China and Taiwan from taking steps that would unilaterally change the status quo and consequently trigger military action. To accomplish this, the United States must continue to present a credible deterrent to China. In order to dissuade China from acts of aggression, Taiwan must also ensure that its military is sufficiently robust and prepared to fend off an attack until U.S. forces are able to respond.

### **China’s Regional Strategy**

China’s military modernization is driven by factors beyond its immediate focus on Taiwan. China has several unresolved security issues that are maritime in nature—pursuit of territorial claims in

the East and South China Seas, ensuring the security of imported energy and raw materials, and protecting its eastern seaboard—where U.S. forces remain a dominant presence. China scholar Paul Godwin notes that a careful reading of China's defense white papers reflects a "fundamental apprehension of U.S. power and military presence both globally and in the Asia-Pacific region," and concludes that to address its insecurities China seeks to become Asia's dominant military power.<sup>10</sup> To do so will require China to project its military presence eastward where it will confront U.S. and allied forces and challenge U.S. security interests in the Pacific region.<sup>11</sup>

China and Japan may be headed for a conflict over territorial claims and natural gas deposits in the East China Sea estimated to be 200 billion cubic meters—located near the line Japan asserts but China denies is the boundary between the two countries' jurisdictions.<sup>12</sup> Nationalist sentiments run deep in both countries; this increases the risk that an accident or unexpected incident quickly would escalate into a full-blown confrontation. Such an incident could arise out of China's increasingly frequent and aggressive military intrusions into Japanese waters and airspace. Since this dispute arose in the early 1970s, China has claimed the Japanese-controlled Senkaku Islands (Diaoyutai in Chinese) and an economic exclusion zone (EEZ) that extends to the edge of the continental shelf, encroaching on Japanese territorial claims. A continuing pattern of intrusions by Chinese oil exploration and ocean research vessels, warships, and military aircraft into the contested areas and a contentious Chinese drilling operation feed this simmering dispute.

Chinese assertiveness and intrusions are a growing concern. In July 2004, Japanese forces intercepted Chinese navy and civilian survey vessels conducting operations within the Japanese EEZ, in possible violation of the United Nations Convention on the Law of the Sea (UNCLOS) to which both countries are signatory.<sup>13</sup> In November 2004, the Japanese Maritime Self Defense Force (MSDF) chased a Chinese Han-class nuclear submarine from Japanese territorial waters near the southern island of Okinawa.<sup>14</sup> In September 2005, a Chinese Navy destroyer aimed its guns at a MSDF surveillance plane near the disputed waters and five other Chinese naval vessels were observed operating in the area.<sup>15</sup> In addition, Chinese spy planes entered the disputed area on at least three occasions between September and October 2005. The increasing frequency and aggressiveness of these Chinese provocations could lead unexpectedly to a military confrontation with Japan, one of the United States' strongest alliance partners—so that it would be difficult for the United States to avoid becoming a party to the conflict.

Further south, Beijing's claims of sovereignty over vast areas of disputed maritime territory surrounding reefs and atolls known as the Spratly Islands compete with claims by the Philippines, Vietnam, Taiwan, Malaysia, Indonesia, and Brunei. The prospect that these islands may contain abundant oil and gas fields elevates the stakes of this dispute. In 1992 members of the Association for Southeast Asian Nations (ASEAN) committed to resolve disputes peacefully and to consider joint exploration of the territory.<sup>16</sup> How-

ever, exploration efforts by China, and its military presence in the area, since 1992 raise new concerns there could be a violent conflict over the rights to the Spratlys that could envelop other nations including the United States. The ASEAN 2002 Declaration on the Conduct of Parties in the South China Sea could restrain Chinese assertiveness in the region.

In addition, a growing dependence on imported energy resources needed to sustain its economic development exposes China to new vulnerabilities and heightens its need to secure new energy sources and the sea lines of communications (SLOCs) from East Asia to the Persian Gulf and Africa needed to move energy supplies to China. With Myanmar's consent, China operates a maritime reconnaissance and electronic intelligence station on Great Coco Island and is building a base on Small Coco Island in the Bay of Bengal.<sup>17</sup> According to an Asian defense analyst, China is helping Myanmar modernize several naval bases as a means of extending its power into the region. Moreover, Indian authorities claim that China has helped build radar, refit, and refuel facilities there to support further Chinese naval operations in the region in the future.<sup>18</sup>

China has worked to orchestrate the eviction of U.S. logistics forces supporting the anti-terrorism operations of the U.S.-led coalition from installations, airfields, and the skies over the Central Asian republics. The call to end U.S. military operations from bases in Central Asia appears to have been decided during meetings between Russian President Putin and Chinese President Hu Jintao when Hu visited Russia shortly before a July 2005 summit of the Shanghai Cooperation Organization (SCO).<sup>19</sup> The declaration arising from the summit called on members of the anti-terrorist coalition—a thinly veiled reference to the United States—to set a final timeline for vacating Central Asia and demonstrates that China's commitment to combat terrorism is secondary to its desire to reduce U.S. presence and influence there.

### **China's Rising Defense Expenditures**

As noted in the Defense Department's 2005 *Annual Report to Congress on China's Military Modernization* (2005 DoD Report), China faces no direct threat, yet it is building a military that puts regional military balances at risk, gives it the potential to threaten Asian neighbors, and equips it with the means to employ force to settle a range of issues and challenges within the region, including unification of Taiwan.<sup>20</sup> China's efforts are focused on developing the capability to fight and win short-duration, high-intensity conflicts along its periphery, especially in its maritime areas. Under Politburo orders to develop military options to deal with Taiwan, China's People's Liberation Army (PLA) seeks military capabilities designed to pose a sufficient threat to influence Taiwan's choices about its political future or, failing that, to overwhelm Taiwan militarily should it decide on that course of action.<sup>21</sup> PLA modernization efforts assume the need to deter, delay, or complicate U.S. efforts to intervene on behalf of Taiwan.

Beginning in the early 1990s China stepped up its efforts to develop the PLA into a leading-edge military capable of intimidating Taiwan or, if necessary, prevailing in a military confrontation in the Taiwan Strait. China has sustained this effort through 15 years



of double-digit growth in China's officially reported defense budget—averaging budget growth of 13.5 percent per year during the past nine years (see Table 3.1). At this rate of growth, China is doubling its real defense budget every five years, after adjusting for inflation. In keeping with this trend, China announced a 12.6 percent increase for 2005 to US\$29.9 billion. During this period of unprecedented growth in China's defense budget, defense budgets for nations elsewhere in the region have generally remained constant or been in decline.<sup>22</sup>

It is widely recognized that China's officially published defense budget substantially underreports actual expenditures, omitting foreign weapons procurement, funding for nuclear weapons programs, subsidies to defense industries, defense-related research and development, and contributions received from provincial and local governments. The 2005 DoD report notes that analysts who have studied China's defense budget generally agree that the official figure under-reports Beijing's actual defense spending by a factor of two or three, "suggesting that China's defense sector could be receiving as much as US\$90 billion in 2005, making China the third largest defense spender in the world after the United States and Russia, and the largest in Asia."<sup>23</sup>

### **Expansion of China's Nuclear Forces**

Comments by Chinese general officers offer an effective reminder that China's nuclear forces serve principally as a deterrent aimed at the United States.<sup>24</sup> The significant investments in upgrades to its nuclear forces clearly demonstrate that deterring the United States remains a centerpiece of China's defense strategy as it enters the 21st century. For many years China relied on an inventory of 20 CSS-3 medium range ballistic missiles (MRBMs) capable of striking Alaska and 20 CSS-4 intercontinental ballistic missiles (ICBMs) capable of striking portions of the continental United States. China currently is updating virtually all its nuclear capabilities and apparently has concluded that it is necessary to augment its nuclear forces to counter the U.S. deployment of national missile defense.<sup>25</sup> By 2015, China's intercontinental nuclear force is projected to grow to 75 to 100 warheads.<sup>26</sup> In the process China will transition to solid-fuel, road-mobile DF-31 and DF-31A missile systems with multiple reentry vehicle (MRV) or multiple independently targetable reentry vehicle (MIRV) warheads.<sup>27,28</sup> These smaller, and possibly stealthy, MRV/MIRV warheads are designed to defeat U.S. ballistic missile defenses. Within the next year, China is expected to achieve initial operational capability for the DF-31. By the end of the decade China will field the extended range DF-31A, thus significantly increasing the range, accuracy, and survivability of its deterrent capability.<sup>29</sup>

More ominously, perhaps, China is deploying a new Type 094 nuclear-propelled Jin-class ballistic missile submarine (SSBN). The new SSBN is configured to carry 16 JL-2 missiles, a sea-launched version of the new DF-31 system.<sup>30</sup> The Type 094 was designed to replace the troubled single-ship Xia-class, China's first generation SSBN. Expected to be quieter and more reliable, the Type 094 provides China with another survivable counter to U.S. ballistic missile defenses.

### **Accelerated Growth in Precision Strike**

According to the 2005 DoD Report, China's precision strike capability now includes several advanced missile systems that threaten Taiwan while they simultaneously hold other vital installations and bases throughout the Western Pacific at risk.<sup>31</sup> Short-range ballistic missiles continue to constitute the largest and most threatening component of this family of weapons. Deployed primarily, and threateningly, in the vicinity of the Taiwan Strait, this force now stands at an estimated 650 to 730 missiles and is increasing at a rate of 75 to 120 missiles per year.<sup>32</sup> Based on reported increases in the rate of new missile deployments, it appears that China is ramping up production of these missiles. Of greater concern, improvements in propulsion and guidance systems have increased the range, accuracy, and reliability of these weapons to the extent that they now provide a true precision strike capability against fixed targets. China has begun exploring enhancements—maneuverable reentry vehicles with seeker guidance—that would permit the use of these weapons for anti-access and sea-denial missions.<sup>33</sup>

### **Naval Forces—At the Forefront of Modernization**

The PLA Navy (PLAN) is engaged in an unprecedented level of construction and acquisition of major surface combatant ships.<sup>34</sup> It currently is deploying seven new major ship classes at one time, building up to two new ships in each class per year. These include the Project 956 Sovremenny-class guided-missile destroyer (DDG); the Type 52B DDG; the Type 52C, Aegis-like DDG; the Type 54 guided-missile frigate, the brand new Yuan-class diesel attack submarine (to augment the advanced Kilo-class [Project 636] submarine China purchased from the Russians); the Project 093 nuclear attack sub; and the Type 094 nuclear missile sub.<sup>35</sup> Further threatening Taiwan's ability to ward off a potential attack, the PLAN's arsenal now includes nearly a dozen varieties of Anti-Ship Cruise Missiles (ASCMs), including SS-N-22 supersonic, nuclear-capable anti-ship cruise missiles (ASCMs) designed to combat U.S. aircraft carrier battle groups. Sea-skimming and capable of rapid directional changes, they are very difficult to defend against. China has also stepped up indigenous research and development efforts to improve the speed, range, payload, and stealth of these weapons and their delivery platforms.<sup>36</sup> New ships emerging from Chinese shipyards are armed with indigenously produced ASCMs and longer-range surface-to-air missiles designed to provide fleet air defense. China's latest warship, the Jiangnan-built destroyer dubbed the "magic shield of China," is reportedly outfitted with a wide array of French-developed electronics and stealth features and a Russian missile defense system modeled after the U.S. Aegis battle platform.<sup>37</sup>

Sufficient numbers of modern Chinese surface combatants now exist to enable China to complicate regional access for the U.S. Navy. According to Rear Admiral (ret.) Eric A. McVadon, "China has built or is building enough new and modernized destroyers and frigates to form several surface action groups (SAGs), each capable of long-range ASCM attacks and, for the first time for the PLAN, good fleet air defenses using surface-to-air missile (SAM) systems—

with the best SAM systems coming from Russia.”<sup>38</sup> These modern SAMs allow the PLAN to defend itself from air attack and make it less vulnerable, even in the absence of air cover, in contested waters such as the South China Sea. In addition, during the period 2001 through 2005, China built 23 new amphibious assault ships capable of ferrying tanks, armored vehicles, and troops across the 100-mile-wide strait to Taiwan. Nearly all the PLAN’s inventory of U.S.-built, World War II-vintage landing ships has been replaced by similar numbers of domestically-produced vessels. These new, larger, and more specialized vessels, combined with the new Dayun-class supply ships, will form the basis of a more modern and expanded amphibious fleet.<sup>39</sup>

China’s maritime strategy relies on submarines to patrol the coastal waters, blockade the Taiwan Strait, and deter foreign interventions. As Congressman Rob Simmons noted in testimony to the Commission, with about 16 boats under construction and 25 under contract, “China is buying new submarines literally by the dozen.”<sup>40</sup> The boats in China’s marginally successful nuclear-propelled fleet, consisting of Han-class attack submarines (SSNs) and a single Xia-class ballistic missile submarine (SSBN), are scheduled for replacement with three or more new Type 093 SSNs with Russian quieting and weapon systems, and at least two Type 094 SSBNs discussed in the above section on nuclear forces. Russian shipyards are currently building eight Kilo-class diesel-electric submarines to add to the four already in China’s inventory. Ordered in 2003 at a cost of US\$1.6 billion, they are scheduled for 2007 delivery. Another five Type 039 Song-class conventional attack submarines are under construction at Wuhan and Jiangnan shipyards.<sup>41</sup> In July 2004, the U.S. intelligence community was surprised by the sudden appearance of the Yuan-class diesel attack submarine under construction at the Wuhan shipyard.<sup>42</sup> Many of these new boats will be armed with sophisticated torpedoes and ASCMs capable of being launched while submerged.<sup>43</sup>

### **PLA Air Force Adds Striking Power and Reach**

Beginning in 1991, the PLA Air Force (PLAAF) began to acquire advanced Russian fighter aircraft and armaments. Between 1992 and 1995, Russia exported 48 Su-27 fighter aircraft to the PLAAF. In 1995, China reached an agreement to begin licensed co-production of up to 200 Su-27s, referred to in Chinese media as J-11 aircraft, at the Shenyang Aircraft Company. Ninety-four Chinese-assembled Su-27s entered service in the PLAAF before work ceased under this program.<sup>44</sup> Between 2000 and 2005 the PLAAF purchased 76 Su-30 fighter-bombers from Russia to enhance its strike capability, along with an additional 28 Su-27 two-seat trainer aircraft. In addition to PLAAF acquisitions, the PLAN has acquired 48 Su-30 aircraft, bringing China’s inventory to nearly 300 advanced, fourth-generation fighter and fighter-bomber aircraft. Advanced fire control systems onboard Su-30 aircraft provide the ability to perform cooperative targeting with up to four Su-27 aircraft, greatly enhancing the ability of Chinese pilots to identify, prioritize, and engage enemy aircraft in a complex operational environment.<sup>45</sup> Su-30MK2 deliveries to the PLAN feature an improved precision-attack capability and an entirely new C4ISTAR

(command, control, communications, computers, intelligence, surveillance, target acquisition and reconnaissance). The aircraft's new N001VEP fire-control radar is modified to launch the Kh-31 (NATO codename: Kh-17A *Krypton-A*) long-range supersonic anti-ship missile.<sup>46</sup>

In the event of a crisis, China could quickly overwhelm Taiwan's air defenses and close island airfields with ballistic and cruise missiles then use these aircraft, coupled with China's growing arsenal of sophisticated land and sea-based surface-to-air missiles (SAMs), to achieve air superiority over the Strait. Air superiority, once established, would allow China to put air routes and shipping lanes at risk and thus blockade Taiwan, and disrupt commerce in north-east Asia. The proximity of Chinese fighter bases would permit the PLAAF to sustain a relative superiority in numbers over the Strait and present a difficult challenge for U.S. air and naval forces that might be called on to respond.

In September 2005, China reportedly signed a contract to purchase 30 Ilyushin IL-76 heavy transport aircraft and eight IL-78M air refueling tankers from Russia; if confirmed, this would add a significant boost to the strategic lift and reach of combat forces.<sup>47</sup> Similar in design and function to the U.S. Air Force C-141 aircraft, the IL-76 will provide China with improved capability to transport outsized military cargo and conduct airdrops, including drops of airborne forces. This capability would be greatly advantageous in any regional conflict, particularly a conflict for control of Taiwan.

### **Information Operations Strategies**

Chinese military strategists write openly about exploiting the vulnerabilities created by the U.S. military's reliance on advanced technologies and an extensive command, control, communications, computer, intelligence and strategic reconnaissance (C4ISR) infrastructure to conduct operations and to give it a decisive edge over adversaries in combat. Often writing in the context of discussing asymmetric warfare—or 'overcoming the superior with the inferior'—the military authors suggest a variety of methods for destroying or degrading U.S. C4ISR capabilities, including anti-satellite weapons, computer network attacks (CNA), introduction of computer viruses, or en masse hacking. It is not clear how effective this effort might be in a potential conflict between China and the United States, but it is clear that China possesses the resources to conduct attacks against C4ISR, and that this would likely be an important component of Chinese efforts to delay or deter U.S. involvement in a Taiwan scenario.<sup>48</sup>

In addressing this point, Dr. James Mulvenon explained that Chinese doctrinal writings advocate CNA as one of the most effective means for a weak military to fight a strong one.<sup>49</sup> From the Chinese perspective CNA is a low-risk, high-payoff supplement to conventional military operations. The Chinese view it as a long-range weapon that would allow China to directly attack the U.S. homeland while retaining a high degree of plausible deniability by Chinese government officials, and therefore reduce the odds of a rapid escalation by the United States. To preserve strategic denial and deception, Chinese theorists advocate attacks against the more accessible and vulnerable U.S. government networks used to ex-

change unclassified information, rather than attempting more sophisticated assaults that would be needed to penetrate highly protected internal government networks used to exchange classified information. As Dr. Mulvenon noted, U.S. military planners continue to rely heavily on unclassified networks to manage a variety of essential logistics and rear area support activities that are crucial to overall operations, and disabling those systems could undermine a rapid U.S. response to an emerging crisis.<sup>50</sup> There is ample evidence that the Chinese have engaged in numerous attempts to break into various classified and unclassified U.S. government and private networks. The scale, persistence, and sophistication of these attempts point to Chinese government sponsorship or acquiescence.<sup>51</sup>

### **China's Space Programs**

During the past several years, China has become a major space power. It launched its first satellite in 1970 and since then has experimented with recoverable photo imaging, remote imaging, communications, meteorological, maritime surveillance, and electronic and military intelligence satellites. Since 1988, China and Brazil have pursued a ground imaging program that resulted in the successful development and launch of two China-Brazil Earth Resources Satellites. In 2003, China entered a cooperative agreement with the European Community on Galileo, the civil global navigation satellite system (GNSS) developed by the EU.

In October 2003, China joined the United States and Russia in the manned spaceflight club. China's latest manned space mission, carried out between 11 and 17 October 2005, orbited two astronauts 76 times around the earth in five days while carrying out scientific experiments in a separate orbiter module. Having proven its ability to launch and recover manned space missions, China has provided further evidence of its mastery of weapons delivery capability. Chinese space ambitions include a space walk in 2007, development of a manned space station between 2008–12, and placing a man on the moon by 2020.<sup>52</sup> China possesses a large and growing space infrastructure with multiple ground launch sites and a robust satellite launch and tracking control center supported by domestic and overseas tracking facilities including a fleet of eight tracking ships.<sup>53</sup>

Chinese military writings discuss anti-satellite (ASAT) programs and suggest China may be pursuing ground-based lasers capable of damaging or destroying satellites.<sup>54</sup> While China currently lacks sufficient space surveillance and tracking capabilities and the launch-on-demand capability to conduct ASAT operations, technical characteristics of China's KT-1 mobile launcher may be suitable for a direct ascent ASAT at some point in the future.<sup>55</sup> Chinese military strategists recognize that U.S. forces have become highly reliant on space-based systems to support the full scope of operations—command and control, communications, intelligence, surveillance, targeting, and missile defense—and any disruption or degradation of U.S. space assets would significantly impinge on the ability of the United States to conduct air and naval operations in the vicinity of Taiwan.

### **PLA Operational Training and Exercises**

A key component of China's military modernization involves education, training, and exercises. The sophisticated new weapons systems coming on line require the PLA to conduct rigorous training, in some cases over many years, before personnel develop the skills and confidence to perform the complex tasks in a modern combat environment. The PLA training regime clearly aims to confront the capabilities of the U.S. military. Dennis Blasko, a former U.S. military attaché in Beijing, pointed out that PLA operational and training doctrine undoubtedly is calibrated toward defeating uniquely U.S. weapons platforms and capabilities, including stealth aircraft, cruise missiles, helicopter gunships, precision strikes, and reconnaissance and surveillance.<sup>56</sup> As Rear Admiral (ret.) McVadon pointed out, U.S. analysts cannot accurately predict how quickly, through training and exercises, the PLA will attain full operational status with the modern equipment it is acquiring.<sup>57</sup> The Chinese military may be able to assimilate new weapons systems and technology at a more rapid pace than other nations.

Bilateral exercises with Russia and other nearby nations may also contribute to the pace of the PLA's advancement. In the past, China demonstrated a reluctance to participate in military exercises with other nations' forces, but recently it has come to understand the value of participating in combined exercises. The growing confidence of PLA commanders has been demonstrated by a willingness to join in an increasing number of such exercises. In August 2002, China and Russia participated in cross-border communication exercises near Inner Mongolia.<sup>58</sup> In 2002 and 2003, China participated in anti-terrorist exercises with member countries of the Shanghai Cooperation Organization (SCO).<sup>59</sup> In summer 2004, China conducted a small-scale cross-border security exercise with Pakistan's armed forces in northwest China.<sup>60</sup> Most recently—in August 2005—China conducted a major field training exercise with Russian air, land, and naval forces in the vicinity of Vladivostok and on the Shandong peninsula. According to Chinese press releases, some 10,000 Chinese and Russian troops took part in this military exercise, dubbed Peace Mission 2005.<sup>61</sup>

### **Foreign Military Acquisitions and Assistance**

U.S. and EU sanctions, in place since China's violent suppression of Tiananmen protestors in 1989, restrict transfers of military hardware and dual-use equipment to China. As a consequence of these sanctions, Russia emerged as China's default supplier of advanced military hardware. Additionally, China has received significant military technology from Israel and Brazil.

As noted in the 2004 DoD Report to Congress on China's Military Power, since 1991 the republics of the former Soviet Union sold China a total of \$20 billion in military hardware and services, with actual deliveries estimated at \$12 billion as of 2004. Russia, Ukraine, and Belarus are China's chief sources of weapons and materiel, reportedly providing in excess of 95 percent of all China's arms imports since 1990.<sup>62</sup>

Israel has a history of defense cooperation with China that began in the early 1980s. Israel offered substantial assistance in the development of China's indigenous F-10 air defense fighter that was

based on Israel's cancelled Lavi fighter. Five years ago, under U.S. pressure, Israel cancelled the sale to China of its Phalcon airborne warning and control system (AWACS), a deal valued in excess of one billion dollars.<sup>63</sup> China then turned to Russia where it purchased the A-50I as an alternative.

More recently the United States pressured the Israeli government to cancel a contract to upgrade a fleet of 100 Harpy drone aircraft that Israel sold to China in the 1990s with U.S. approval. U.S. officials objected to the planned retrofit of new high-tech parts for the drones on grounds it would give them an additional capability to attack ground anti-aircraft radars. Israel agreed to cancel the deal and entered into an understanding with the United States to review future weapons transactions to ensure the two governments see eye-to-eye on third-party military transfer issues and avoid a repeat of the dispute over the drones.<sup>64</sup>

### **EU Arms Embargo**

In 2004 the EU considered the possibility of lifting an arms embargo it had imposed against China after the 1989 Tiananmen massacre. The momentum in the EU to lift the embargo was halted temporarily by U.S. pressure and Europe's reaction to China's enactment of its Anti-Secession Law in early 2005 but French President Jacques Chirac and former German Chancellor Gerhard Schroeder are on record stating that the embargo should be lifted. EU High Representative for the Common Foreign and Security Policy Javier Solana also has lent support. However, the United Kingdom, the Netherlands, Sweden, and Denmark insisted that the ban should stay in place, and in April 2005, the European Parliament passed a non-binding resolution to retain the 16-year-old arms embargo, noting that member states should "find ways to facilitate dialogue, defuse tension, and encourage disarmament in cross-strait relations [with Taiwan]."<sup>65</sup> The resolution described Taiwan as "a model of democracy for the whole of China" and called on the EU to draft a binding code of conduct on arms sales. As the 2005 DoD report notes, the consequences of lifting the embargo would be serious and numerous. The embargo bars China from access to many dual-use technologies, and its repeal very likely would be followed by the sale to China of some of those technologies. This, in turn, would increase the pressure on Russia and other FSU countries to sell their most advanced military weapons to China.<sup>66</sup> There is evidence that China is employing a "forceful and consistent" effort to pressure the EU into lifting the arms embargo.<sup>67</sup> Calls to lift the embargo are likely to continue and the EU leadership again will be tempted to cite a revised Export Code of Conduct as a sufficient safeguard to override any concerns that canceling the embargo will increase China's access to advanced weapons and dual-use technologies.

### **Taiwan's Defense Needs**

During the past decade, Taiwan's defenses and defense budgets have not kept pace with the rapidly growing military threat posed by the PLA. Between 1994 and 2005, Taiwan's regular defense budget declined, as a percentage of gross domestic product (GDP), from 3.8 to 2.4 percent.<sup>68</sup> The George W. Bush Administration is

“increasingly concerned” that Taipei is failing to invest both in military hardware and other improvements, such as hardening command and control facilities and stockpiling ordnance, that are vital to survivability and deterrence.<sup>69</sup> In September 2005, the Director of the Defense Security Cooperation Agency’s Middle East, Asia, and North Africa Directorate, Edward Ross, publicly warned Taiwan government officials that “the U.S. ability to contribute to Taiwan’s defense in a crisis is going to be measured against Taiwan’s ability to resist, defend, and survive based on its own capabilities,” and strongly urged Taiwan to improve its defenses.<sup>70</sup>

Taiwan defense expert Fu S. Mei pointed out that there have been some noteworthy positive developments, including Taipei’s establishment of civilian control over the military, an improved capability to conduct joint operations, and upgrades to air defense and command and control systems.<sup>71</sup> Yet Taiwan faces other serious security challenges that have not been adequately addressed. Taiwan’s civilian infrastructure—telecommunications, electric power, and rail and road systems—is highly susceptible to sabotage by fifth column operations. Expanded economic integration and cross-border flows between the mainland and Taiwan further compound the challenges that Taipei confronts in defending against infiltrating special operations forces. As James Mulvenon noted, Taiwan’s current military capability and readiness levels are much lower than other states—notably Israel and South Korea—which are faced with comparable security concerns.<sup>72</sup>

In April 2001 the United States responded to a request originating from Taiwan’s government dating from when it was led by the Kuomintang (KMT) party, for advanced weapons in the face of China’s continued militarization of the Taiwan Strait by offering to sell Taiwan up to US\$30 billion of defense articles and services. This included eight diesel-electric submarines, 12 P-3C Orion anti-submarine warfare (ASW) aircraft, 54 Mark-48 ASE torpedoes, 44 Harpoon submarine-launched anti-ship cruise missiles, 144 M109A6 Paladin self-propelled howitzers, 54 AAV7A1 amphibious assault vehicles, electronic countermeasure (ECM) systems for F-16 aircraft, and 12 MH-53 mine-sweeping helicopters.<sup>73</sup> Additionally, the United States offered four decommissioned Kidd-class destroyers as Excess Defense Articles (EDA). Subsequently, in May 2002, the White House approved Taiwan’s request for 30 Apache attack helicopters.<sup>74</sup>

Taiwan’s pace of acquisition has been modest and disappointing. In 2002, the George W. Bush Administration authorized the sale of up to 200 advanced medium-range air-to-air missiles (AMRAAMs) for Taiwan’s fleet of 150 F-16 aircraft. Taiwan ordered and has taken delivery of 120 missiles, but has not acted on a subsequent U.S. offer of and recommendation that it purchase surface-launched AMRAAMs (SLAMRAAMs) to defend against China’s growing arsenal of cruise missiles.<sup>75</sup> In September 2003, Taiwan initiated a contract with Lockheed Martin to enhance its command, control, communications, intelligence, and surveillance (C4ISR) program.<sup>76</sup> Taiwan began taking delivery of amphibious assault vehicles in March 2005.<sup>77</sup> Delivery of the four Kidd-class destroyers is expected between 2005 and 2007.<sup>78</sup> In June 2005, Taiwan concluded a \$752 million contract with Raytheon to purchase one of the two early



warning (EW) radars that had been approved by the White House in 2000.<sup>79</sup>

For the past year, President Chen Shui-bian has sought to secure passage by the country's parliament, the Legislative Yuan of a US\$15.3 billion Special Budget<sup>80</sup> for the purchase of Patriot PAC-III air defense systems, P-3C Orion antisubmarine aircraft, and diesel attack submarines—systems that U.S. planners deem essential to Taiwan's defense. These efforts have been frustrated by partisan wrangling including opposition by the KMT which originally sought many of the components of the arms package. In September 2005, the heads of the KMT and People First Party (PFP), Taiwan's two main opposition parties, jointly opposed a scaled-back US\$11 billion special budget proposed by President Chen's administration, arguing that the weapons were unnecessary and too expensive, and against the Taiwan people's wishes.<sup>81</sup> Citing assurances from the mainland, James Soong, chairman of the pro-unification PFP, stated, "In May, when I went to China, [Chinese President] Hu Jintao clearly said if Taiwan doesn't pursue independence, there won't be any military threat in the Taiwan Strait."<sup>82</sup> These comments, and similar arguments from the KMT legislators, indicate that there is little likelihood that the special budget will pass soon.<sup>83</sup>

As former Department of Defense Country Manager for China and Taiwan Dan Blumenthal testified, the obstructionism and political cynicism of opposition party leaders in Taiwan's parliament is obvious.<sup>84</sup> The special budget items being sought by President Chen's office—submarines, P-3 aircraft, and Patriot PAC-3 air defense missiles—are the same items that the KMT requested when it held power five years before. This has troublesome implications for the national security interests of Taiwan—and those of the United States.

## **SECTION 2: THE CROSS-STRAIT POLITICAL AND ECONOMIC RELATIONSHIP**

While growing economic and social ties between China and Taiwan have the appearance of integrating the two, different political systems and issues of self-identification tug in the opposite direction. China's leaders seek unification with Taiwan and have proffered the model of 'one-country, two-systems' that has been used to describe the political arrangement in the former European colonies of Hong Kong and Macau: offering concessions to partial Taiwan autonomy if Taiwan yields to the sovereignty of Beijing. According to former AIT head Richard Bush, Taipei authorities have rebuffed Beijing's offer because "all major forces on the island have consistently held that if unification is to occur, the sovereign character of the Taipei government must be preserved within the context of that national union."<sup>85</sup>

The leaderships in both Beijing and Taipei are mistrustful of the other's intentions. Beijing fears that if it accedes to Taiwan's claims for status as an equal sovereign state—with, as former Taiwan President Lee Teng-hui described it, a 'special state-to-state relationship' with the mainland—Taipei may take that as an opportunity to delay discussions, or worse, to declare *de jure* independ-

ence. Taipei fears that if it accedes to Beijing's definition of one China,<sup>86</sup> it concedes ground that will diminish Taiwan's ability to negotiate greater political autonomy, freedoms, and international standing. As a consequence, forward political movement is at a standstill, with neither side willing to yield.

Meanwhile, Beijing is working to undermine Taiwan's standing in the international community by offering foreign aid and diplomatic recognition in an effort to lure countries away from recognizing Taiwan. Former Deputy Assistant of State for East Asia and Pacific Affairs Randall Schriver has noted that "China has arguably enjoyed some success in its campaign to isolate and coerce Taiwan—but [the strategy of buying out Taiwan's allies] may ultimately be an Achilles heel to China if it allows its emotions over Taiwan to drive decisions that are otherwise irrational in terms of China's own interests."<sup>87</sup> Unfortunately, Taiwan's domestic political debates also threaten to undermine its development of a cohesive cross-Strait strategy.

Taiwan domestic politics is embroiled in a major power struggle between rival political blocks Pan-Blue and Pan-Green in Taiwan's legislative body, the Legislative Yuan.<sup>88</sup> The leadership of President Chen Shui-bian, a member of the Democratic Progressive Party (DPP), which is the major component of the Pan-Green block, is being tested by the Pan-Blue, whose largest component is the KMT. The struggle affects a variety of important policy issues, including how Taiwan should relate to Beijing. Among the most contentious issues among the parties is the ongoing battle over the purchase of a large list of defense items, largely drawn up by the KMT in the late 1990s when it was the party in power. Regrettably, the KMT has blocked President Chen's legislative efforts to pass a special budget for defense purchases in a purely partisan move to gridlock his government, as described in section 1 of this chapter.

### **Visits to China by Taiwan Political Leaders Other Than Its Elected Officials**

In April 2005, the Chinese government invited KMT Chairman Lien Chan to visit China. His subsequent visit made Lien the first KMT chairman to visit China since 1949. Emboldened by the KMT's strong showing in the 2004 Legislative Yuan elections, the party's leaders gambled that they could rebuff DPP accusations they were selling out to Beijing. Beijing gave the visiting KMT officials a warm welcome, arranged a series of high-level meetings, and even permitted then-party chair Lien to make a speech at Beijing University. The trip culminated in the release of a ten-point statement of consensus between the CCP and the KMT that proposed a plan to strengthen economic and cultural ties across the strait. In a symbolic gesture, Beijing also rewarded Chairman Lien by scrapping an import tariff that applied to more than ten kinds of fruit from Taiwan and allowing imports of six additional fruit species.<sup>89</sup> Apparently, Beijing did not require the KMT delegation to publicly address the one-China issue.

Chairman James Soong of Taiwan's second largest opposition party, the PFP, made yet another high-visibility visit to Beijing just days after his pan-Blue colleague Lien returned to the island.

As Soong ended his visit, President Hu Jintao announced that China would make several policy concessions, including easing work restrictions for Taiwan residents on the mainland, simplifying exit and entry rules, and allowing Taiwan students attending mainland universities to pay the same fees as Chinese nationals.<sup>90</sup>

It was widely noted that China pointedly failed to invite Taiwan's current elected leadership, the DPP. Not surprisingly—in fact, many speculate that it was the intent of China's actions—there was considerable political fallout in Taiwan from the visits. The first official reaction by Pan-Green supporters in Taipei to the visit by the KMT delegation was to condemn it for negotiating as though it were the government. The repercussions were not limited to derogatory statements directed by one party toward another. According to one former high-level U.S. official, the apparent rapprochement between the KMT and CCP has undermined the likelihood that a consensus on U.S. arms purchases will emerge between the Pan-Blue and the Pan-Green.

### **China's Anti-Secession Law**

Adopted on March 14, 2005 at the Third Session of China's Tenth National People's Congress, China's Anti-Secession Law (ASL) was established specifically for the "purpose of opposing and checking Taiwan's secession from China by secessionists in the name of 'Taiwan independence,' promoting peaceful national reunification, maintaining peace and stability in the Taiwan Straits (sic), preserving China's sovereignty and territorial integrity, and safeguarding the fundamental interests of the Chinese nation."<sup>91</sup> At the time of issuance, Washington and other capitals characterized the ASL as "unhelpful" with respect to resolving the issue of Taiwan. As noted by John Tkacik, "the 'anti-secession law' has only two purposes: to serve as propaganda and as diplomatic leverage against the U.S. relationship with Taiwan. As propaganda, the legislation readies the Chinese people for war with Taiwan, and as a diplomatic lever it is to be trotted out and exhibited to Americans whenever the United States points to its obligation under the Taiwan Relations Act."<sup>92</sup>

The law reiterates China's view that "solving the Taiwan question and achieving national unification is China's internal affair" and authorizes the use of non-peaceful means in the event China perceives that Taiwan has seceded, or is attempting to secede, or that the opportunity for peaceful unification with Taiwan is "completely exhausted."<sup>93</sup> The law is vague as to what actions might trigger a non-peaceful response.<sup>94</sup>

Beijing's ASL announcement backfired in a number of ways. Both the U.S. Congress and the Administration condemned the enactment of this legislation. It was also met with disapproval in Europe, leading to the European Union's decision to abandon efforts to lift the EU's embargo on arms sales to China.

### **Cross-Strait Economics**

As the Commission noted in its 2004 Annual Report, growing cross-Strait political tensions have not stood in the way of the continued rapid development of cross-Strait economic relations. That trade has been increasing steadily and substantially for the past 15

years and, according to China's Ministry of Commerce (MOFCOM), totaled \$78.3 billion in 2004, a 34.1 percent increase over the previous year.<sup>95</sup> This trade relationship also remains heavily tilted in Taiwan's favor with the island's exports to China totaling nearly \$65 billion against imports from China of \$13.5 billion according to MOFCOM.<sup>96</sup> Growing export dependence has led to expressions of concern in Taiwan, particularly in the Pan-Green camp, but beyond rhetorical urgings for businesses to diversify their export markets, this concern has not led to changes in the investment patterns of Taiwan businesses, whose desire for profit appears to outweigh security considerations.

"Economically [China] continues to maximize the interdependence between Taiwan and the mainland, and make China the destination of choice for investment, lower-end manufacturing, and alternative employment. And it is succeeding."<sup>97</sup> Taiwan remains the largest external investor in China, accounting for about half of total foreign direct investment (FDI) in China. Taiwan's cumulative contracted investment in the PRC was over \$78 billion in 2004, an increase of nearly \$10 billion over 2003 levels.<sup>98</sup> Despite its size, Taiwan's investment in the mainland remains difficult to track precisely because Taiwan's investors, like many others, have used tax havens like the Cayman Islands as a base for their investments.

Cross-Strait IT investment has grown at an impressive pace and is expanding into new sectors such as e-services, mobile telephone services, and digital media. This rapid growth was accelerated by the global downturn in IT at the end of last century, which led Taiwan-based producers to cut costs by relocating manufacturing to the mainland. WTO entry for both China and Taiwan further reduced barriers to trade while the improving quality of mainland products and China's growing domestic demand provided added incentives for Taiwan's IT firms to relocate supply lines to China.<sup>99</sup> The Shanghai-Suzhou-Nanjing corridor in particular has become the new critical-mass staging-point for IT investment in China. The mayor of Suzhou even visited Taiwan to encourage further Taiwan IT investment.<sup>100</sup>

Having embraced the economic opportunities offered on the mainland, Taiwan tacitly supports the economic development of the country that is its primary strategic rival. The PRC has encouraged the economic exchange with Taiwan in an effort to promote unification. Beijing believes that economic cooperation will facilitate a gradual political integration, as it perceives was the experience in Western Europe when the independent nations there formed and progressively ceded considerable control to the European Union. In addition, there is an expectation in Beijing that interaction with mainland Chinese will soften the attitudes of Taiwan's people with respect to social, cultural, and political differences and foster a desire for unification.<sup>101</sup> Government leaders in Taiwan have discounted China's strategy for a 'soft integration,' but fear remains that Beijing may be tempted to use sanctions in an attempt to unfairly leverage deepening cross-Strait economic ties to resolve political issues. However, Beijing understands that economic interdependence cuts both ways, as evidenced by Beijing's reluctance to employ sanctions during political tensions during the 1995–1996 and 1999–2000 periods.<sup>102</sup> Nevertheless, the integration of these

two economies unquestionably is eroding barriers between the countries and may partly explain Taiwan's growing reluctance to further invest in its self-defense.

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

#### ***China's Military***

Many of China's military modernization efforts—supersonic ASCMs, stealthy submarines, TBMs, possibly with terminal guidance, and nuclear force modernizations—are aimed specifically at combating U.S. forces and bases. While the near-term focus unquestionably is Taiwan, it is noteworthy that many of China's new lethal weapons are applicable to a wide range of potential operations beyond the Taiwan Strait. The rapid growth in China's military power not only threatens Taiwan—and by implication the United States—but also poses threats to U.S. friends and allies throughout the western Pacific and Southeast Asia. Unanswered, China's military rise could lead to a major reordering of relationships and alliances throughout the Pacific.

#### ***Taiwan***

The government gridlock in Taiwan that has resulted from the political in-fighting over national security issues sends a signal of weakness to Beijing and endangers U.S. security interests in the Pacific. As Princeton political scientist Thomas Christensen pointed out, any weakening of the security relationship between Washington and Taipei diminishes the deterrence presented to Beijing, and this is true whether or not Beijing seeks to avoid a conflict across the Taiwan Strait.<sup>103</sup> China's growing military force, coupled with Taiwan's weak response, have greatly complicated U.S. efforts to deter a cross-Strait conflict and manage its interests and relationships in the region.

Beijing is dually deterred from seeking a military solution to the Taiwan situation by the risk of failure and the confidence that unification can be achieved by exercising restraint. Beijing's calculus is substantially influenced by the strength of U.S.-Taiwan relations and the possibility of a strong U.S. response in the event of military attack against Taiwan. Beijing perceives efforts to strengthen the U.S.-Taiwan security relationship as an indication that Taiwan is moving toward independence or making unification more difficult to realize. Yet, as Dr. Christensen pointed out, Taiwan and the United States have no recourse but to present the threat of a credible and effective response to a provocation or attack by China.<sup>104</sup> To do otherwise would invite aggression.

The United States must seek ways to enhance the credibility of Taiwan's defensive capability. Adjustments to the deployment of U.S. forces in the Pacific are already underway and some efforts, such as assignment of active-duty military officers to the American Institute in Taiwan and increased discussions between Taiwan defense forces and U.S. Pacific forces, are being undertaken to strengthen the security relationship between the United States and Taiwan.

Additional efforts are needed to eliminate obstacles that impede the United States from effectively engaging in cooperative defense

with Taiwan and persuading Taiwan to accelerate acquisition of defense items that will complement the capabilities of U.S. forces in the region. Visits to Taiwan by higher-level U.S. officials will also demonstrate the solidarity of U.S.-Taiwan security arrangements and dissuade Chinese provocation. In addition, the United States must ensure its ability to respond rapidly in a crisis. Contingency plans in the Pacific hinge on the support of U.S. friends and allies in the region and this may necessitate obtaining approvals in advance for basing and access rights needed to support a Taiwan contingency. As Kurt Campbell testified, it will be very difficult to move quickly if the first-time conversations are taking place during an emerging crisis. Additionally, the United States needs to communicate to Taiwan's Pan-Blue opposition leaders that they are alienating friends in the U.S. Congress, from whom Taiwan will need support in the case of a crisis, and with whom Pan-Blue will have to work were it to regain political power in Taiwan.<sup>105</sup>

**Figure 3.1 China's Official Defense Expenditures, 1997–2004**

Year	Defense Spending	Percentage Increase	Percentage GDP Growth	CPI Rates
1997	80.57	12.7	8.80	2.80
1998	90.99	12.7	7.80	-.80
1999	104.65	15.1	7.10	-1.30
2000	120.75	12.7	8.00	.40
2001	144.20	17.7	7.30	.70
2002	169.44	17.0	8.00	-.80
2003	185.30	9.6	9.10	.50
2004	207.00	11.6	9.50	1.10
2005	244.66	12.6	9.20	2.50
Total	1347.56			
Average	137.86	13.5	8.31	.56

Legend: All figures are in billions of PRC Yuan.

China's defense budget has experienced double-digit growth for over 15 years.<sup>106</sup> The 2005 budget increased by 12.6 percent during a year in which GDP grew 9.2 percent.<sup>107</sup>

### RECOMMENDATIONS

- The Commission believes that there is an urgent need for Congress to encourage increasing U.S. military capabilities in the Western Pacific in response to growing Chinese capabilities and deployments in the area.
- The Commission recommends that Congress reaffirm that any solution to the Taiwan problem must have the voluntary assent of the people of Taiwan.

- The Commission recommends that Congress and the Administration review the issue of defense coordination with Taiwan. The Commission believes that the arms sales package should remain on offer, and it further believes that Congress should take steps to facilitate strong working relationships through such measures as authorizing the exchange of general and flag officers, conducting interactive combat data exchange with Taiwan defense forces, providing increased opportunities for Taiwan officers to be trained in the United States, and establishing institutional relationships with the Legislative Yuan to improve the oversight of defense matters.
- The Commission recommends that Congress enact legislation instructing the President and the appropriate officials of his cabinet to seek initiation of discussions with China with the objective of developing and implementing new confidence building measures (CBMs) that facilitate resolution of tensions that may develop between the two nations and to minimize misunderstanding between the nations' civilian and military leaders at the strategic, operational, and tactical levels. These CBMs could include communications mechanisms, opportunities for opposite number leaders to meet and establish relationships with each other, regular information-sharing devices, and hot lines between DoD and the PRC's Ministry of Defense.
- The Commission recommends that Congress mandate a thorough investigation by appropriate agencies of cyber attacks originating from China against U.S. networks. To the extent that China is determined to be responsible for, complicit in, or negligent for its failure to adequately dissuade Chinese citizens from conducting such cyber attacks, and that this action constitutes an unfriendly act against the United States, Congress should require the President to notify it of the measures that he will take under existing law, or that he recommends Congress enact, to prevent or dissuade future attacks against U.S. networks.

#### ENDNOTES

1. Glenn Kessler, "U.S. Says China Must Address Its Intentions: How Its Power Will Be Used Is of Concern," *Washington Post*, September 22, 2005, p. A-16. Citing a speech by Deputy Secretary of State Robert Zoellick on September 21, 2005.
2. "Rumsfeld: China Buildup a Threat to Asia: U.S. Defense Chief Chides Military Growth, Position on Taiwan," *Associated Press*, June 4, 2005. <http://www.msnbc.msn.com/id/8091198>
3. The National Security Council, *The National Security Strategy of the United States of America* (Washington, D.C.: September 17, 2002).
4. Chinese military strategy evolved in a series of steps following the death of Mao Zedong in 1976. In 1985, Deng Xiaoping revised military thinking by introducing the concept of "local" or "limited" war, thus changing Mao's doctrine of "People's War" to "People's War under Modern Conditions" and eventually "Local Wars under Modern Conditions." Subsequently, after analyzing the U.S.-led coalition operations in Desert Storm in 1991, then-President Jiang Zemin stressed the need to move from an army capable of conducting "local wars under ordinary conditions" to one that can fight "local wars under modern, high-tech conditions," signifying Chinese recognition of the need for offensive capability to fight and win local or regional conflicts.
5. U.S. Department of Defense, *Annual Report to Congress on the Military Power of the People's Republic of China*, (Washington, DC: 2005), pp. 12-13.

6. The National Security Council, *The National Security Strategy of the United States of America* (Washington, DC: September 17, 2002); and U.S. House of Representatives Committee on International Relations, *Hearing on PRC Anti-Secession Legislation*, testimony of Deputy Assistant Secretary of State Randall G. Schriver, April 6, 2005.

7. U.S.-China Economic and Security Review Commission, *Hearing on China's Military Modernization and the Cross-Strait Balance*, testimony of Kurt Campbell, September 15, 2005.

8. Thom Shanker, "Rumsfeld Tells China Its Military Buildup Worries Neighbors," *New York Times*, October 21, 2005, p. A-14.

9. In the context of this discussion, 'united front tactics' refers to Beijing's effort to unite through common cause constituencies opposed to those elements in Taiwan's polity favoring separatism or independence for Taiwan. The principal targets of China's united front tactics are Taiwan opposition party members and business leaders. The term united front originates from the CCP's 1924 decision to make common cause with the KMT, which it regarded as the party of the bourgeoisie, in order to unify China. Mainland China was at that time under the control of a number of different warlords.

10. Paul H.B. Godwin, *China as a Major Asian Power: The Implications of Its Military Modernization*, (September 29, 2005), p. 3. This report was prepared for a conference on "Contending Perspectives: Southeast Asian and American Views of a Rising China," sponsored by the Institute of Defense and Strategic Studies (IDSS) and the National Bureau of Asian Research (NBR), which took place in Singapore on August 22-24, 2005.

11. In 1987 Central Military Commission Vice Chairman and former Commander of the PLA Navy Admiral Liu Huaqing advocated China's blue-water naval ambitions with a strategy of 'offshore active defense.' Liu's proposed offshore active defense is part of a larger strategic concept that provides an in-depth maritime defense of the Chinese mainland through effective military control over the chain of islands ('first island chain') some 200 miles off China's coast starting in the Yellow and East China Seas in the north down through the South China Sea. Control over those maritime areas would deny enemy operations and access to base facilities within proximity to the mainland. Liu reportedly expressed this concept in terms of a three-stage naval development process, applied to two strategic maritime areas of vital concern to the nation. While Chinese military strategists no longer discuss Chinese military and security ambitions in these terms, the concept of expanding its defensive perimeter eastward remains a valid security concern for China. See the discussion in Ai Hongren, *Zhonggong Haijun Toushi: Maixiang Yuanyang De Tiaozhan* [An inside look into the Chinese Communist Navy: Advancing toward the blue-water challenge] (Hong Kong: Cosmos, October 1988); and Zhang Lianzhong, *et al.*, *Haijun Shi* [A history of the PLA Navy] (Beijing: PLA, 1989), p. 247.

12. J. Sean Curtin, "Stakes Rise in Japan, China Gas Dispute," *Asia Times Online*, October 19, 2005. <http://www.atimes.com/atimes/Japan/GJ19Dh01.html>

13. John Tkacik, Jr., "China's New Challenge to the U.S.-Japan Alliance," *The Heritage Foundation WebMemo #533*, July 13, 2004.

14. "Japan Protests to China Over Submarine Intrusion," *Agence France Presse*, November 12, 2004.

15. J. Sean Curtin, "Stakes Rise in Japan, China Gas Dispute," *Asia Times Online*, October 19, 2005. <http://www.atimes.com/atimes/Japan/GJ19Dh01.html>

16. The Association of Southeast Asian Nations (ASEAN) was established on August 8, 1967, with the signing of the ASEAN Declaration, also known as the Bangkok Declaration, by foreign ministers of Indonesia, Malaysia, the Philippines, Singapore and Thailand. Brunei, Vietnam, Laos, Myanmar, and Cambodia gained membership in ASEAN between 1984 and 1999. China began to participate in ASEAN as a dialog partner in 1996. <http://www.aseansec.org>

17. Sudha Ramachandran, "Myanmar Plays off India and China," *Asia Times*, August 17, 2005. [www.atimes.com/atimes/South\\_Asia/GH17Df01.html](http://www.atimes.com/atimes/South_Asia/GH17Df01.html)

18. Sudha Ramachandran, "Myanmar Plays off India and China," *Asia Times*, August 17, 2005. [www.atimes.com/atimes/South\\_Asia/GH17Df01.html](http://www.atimes.com/atimes/South_Asia/GH17Df01.html)

19. John Chan, "Russia and China Call for Closure of U.S. Bases in Central Asia," *Asian Tribune*, July 31, 2005. [http://www.asiantribune.com/show\\_article.php?id=2594](http://www.asiantribune.com/show_article.php?id=2594)

20. U.S. Department of Defense, *Annual Report to Congress on the Military Power of the People's Republic of China* (Washington, DC: July 2005), p. 13.

21. Both DPP and KMT have stated that they do not intend to declare independence, since they regard the Republic of China/Taiwan as having been a sovereign, independent state since 1911. PRC authorities have stated several other cir-



cumstances under which they might invade, such as failure to negotiate on Beijing's terms *sine die*.

22. Chris Hellman, "U.S. Continues to Dominate World Military Expenditures," *Weekly Defense Monitor*, vol. 5, no. 11 (March 15, 2001); <http://www.globalissues.org/Geopolitics/ArmsTrade/Spending.asp#WorldMilitarySpending>; and Carl Conetta and Charles Knight, "Post-Cold War U.S. Military Expenditure in the Context of World Spending Trends," *Project on Defense Alternatives Briefing Memo 10*, (Washington, DC: 1997) <http://www.comw.org/pda/bmemo10.htm#2>. Worldwide defense spending declined significantly from 1989 through 1999. During the past five years, military spending has grown slightly, driven largely by increases in the defense budgets of the United States and other developed countries. China's 15-year spree of double-digit growth in defense spending is unmatched anywhere else in the world.

23. U.S. Department of Defense, *Annual Report to Congress on the Military Power of the People's Republic of China*, (Washington, DC: July 2005), p. 22. Estimating the Chinese defense budget is an imprecise science and the subject of much debate among experts within the analytic and research communities. The DoD estimate includes adjustments for China's undervalued currency and purchasing power parity to account for the low labor and resource costs relative to international markets.

24. Bill Gertz, "Chinese General Shakes Nukes at U.S.," *Washington Times*, July 16, 2005. Comments by then-PLA Second Department chief Lieutenant General Xiong Guangkai conveyed a nuclear threat against Los Angeles in 1995 to a question about China's response to a U.S. intervention into a military scenario involving Taiwan. This threat was repeated in July 2005 when Major General Zhu Chenghu of the PLA's National Defense University again threatened that China would be forced to resort to nuclear weapons to counter a U.S. military intervention in a military scenario involving Taiwan. Although Chinese government officials distanced themselves from these threats, neither officer was publicly admonished and, in fact, General Xiong has been rewarded with further promotions.

25. Paul H.B. Godwin, *China as a Major Asian Power: The Implications of Its Military Modernization*, (September 29, 2005), p. 16. This report was prepared for a conference on "Contending Perspectives: Southeast Asian and American Views of a Rising China," sponsored by the Institute of Defense and Strategic Studies (IDSS) and the National Bureau of Asian Research (NBR), which took place in Singapore on August 22–24, 2005.

26. National Intelligence Council, *Foreign Missile Developments and the Ballistic Missile Threat through 2015* (Washington, DC: December 2001), p. 3. As the report notes, "assessments of future missile developments are inexact and subjective because they are based on often fragmentary information." That caveat notwithstanding, the Intelligence Community projected that by 2015 Beijing's future ICBM force will number around 75 to 100 warheads primarily targeted against the United States.

27. Jack Spencer, *The Heritage Foundation Ballistic Missile Handbook* (Washington, DC: 2000) pp. 21–28. See also *Center for Nonproliferation Studies*. <http://cns.miis.edu/research/china/coxrep/wwwmdat.htm>

28. According to a January 9, 2003 article in the *Daily Yomiuri*, Japan's largest English language daily newspaper, China successfully test-launched a medium-range Dong Feng–21 (DF–21) missile with multiple warheads in December 2002. The launching of the MIRV warhead, with a target range of approximately 1,800 kilometers, was the first successful test launch by China of a missile with multiple warheads. It illustrates China's nuclear missile development efforts intended to counter the U.S. missile defense network planned for the region. The W–88 warhead data allegedly stolen from the Los Alamos Nuclear Laboratory is suspected to have assisted the Chinese to develop multiple warhead technology.

29. U.S. Department of Defense, *Annual Report to Congress on the Military Power of the People's Republic of China*, (Washington, DC: July 2005), p. 28.

30. Jack Spencer, *The Heritage Foundation Ballistic Missile Handbook* (Washington, DC: 2000), p. 23. See also *China Defense Today*. <http://www.sinodefence.com/missile/nuclear/default.asp>

31. Jack Spencer, *The Heritage Foundation Ballistic Missile Handbook* (Washington, DC: 2000), p. 29.

32. Jack Spencer, *The Heritage Foundation Ballistic Missile Handbook* (Washington, DC: 2000), p. 29.

33. Mark A. Stokes, *Weapons of Precise Destruction: PLA Space and Theater Missile Development*, (November 5, 1999). This report was prepared for the National Intelligence Council's conference on "China and Weapons of Mass Destruction: Implications for the United States."

[http://www.cia.gov/nic/confreports\\_chinawmd.html#Link3](http://www.cia.gov/nic/confreports_chinawmd.html#Link3)

34. Timothy Hu, "Country Briefing—China: Ready, Steady, Go," *Jane's Defense Weekly*, April 6, 2005; and Eric A. McVadon, "Alarm Bells Ring as China Builds Up Its Armory on a Massive Scale," *Jane's Defense Weekly*, March 16, 2005, p. 23.

35. Kenneth Sherman, "Flashpoint Taiwan Straits: A Look at One of the Most Dangerous Places in the World," *Edefense Online*, March 16, 2005. [www.edefenseonline.com/default.asp?func=article&aref=03\\_16\\_2005\\_IF\\_01](http://www.edefenseonline.com/default.asp?func=article&aref=03_16_2005_IF_01)

36. U.S. Department of Defense, *Annual Report to Congress on the Military Power of the People's Republic of China*, (Washington, DC: 2005), p. 29.

37. Charles R. Smith, "French Arms Sales to China: French Want to Sell Weapons to China," *NewsMax.com*, November 11, 2004.

38. U.S.-China Economic and Security Review Commission, *Hearing on China's Military Modernization and the Cross-Strait Balance*, testimony of Eric McVadon, September 15, 2005.

39. "Warship Modernization," *GlobalSecurity.org*, August 8, 2005. <http://www.globalsecurity.org/military/world/china/plan-mod.htm>

40. U.S.-China Economic and Security Review Commission, *Hearing on China's Military Modernization and the Cross-Strait Balance*, testimony of Congressman Rob Simmons, September 15, 2005.

41. *China Defense Today*. <http://www.sinodefence.com/navy/sub/default.asp>

42. "China Builds New Type Submarine," *United Press International*, July 16, 2004.

43. *China Defence Today*. <http://www.sinodefence.com/navy/sub/default.asp>

44. According to some sources, the PLAAF acquired the Su-27/J-11 as an interim fighter aircraft while awaiting production and delivery of the indigenously produced J-10. While the Chinese apparently have abandoned further production of Su-27/J-11 aircraft, there have been reports that Russian defense officials have rebuffed Chinese efforts to enter a contract to transition to the production of Su-30 aircraft at the Shenyang Aircraft Company.

45. *Jane's All the World's Aircraft, 2005-2006*, Jane's Information Group, Ltd., (London: 2005), pp. 442-444. Jane's states that Russian Su-30s employ the NIIP N001 Myech ('Slot Back') coherent pulse Doppler look-down/shoot-down radar, with an ability to track 10 targets and engage two simultaneously. The aircraft is also believed to be capable of conducting a group mission with four Su-27s; only the Su-30 would operate radar, enabling it to assign targets to Su-27s by radio datalink. The Su-30MKK (Flanker-G) export version sold to China has an N001VE radar with expanded air-to-ground capabilities, including mapping, and is also presumed to be able to conduct group missions.

46. *China Defence Today*. <http://www.sinodefence.com/airforce/fighter/su30.asp>

47. Richard Fisher, "Chinese Dimensions of the 2005 Moscow Aerospace Show," *International Assessment and Strategy Center: Arms Show Report*, September 12, 2005, p. 2. [http://www.strategycenter.net/research/pubID.78/pub\\_detail.asp](http://www.strategycenter.net/research/pubID.78/pub_detail.asp)

48. U.S.-China Economic and Security Review Commission, *Hearing on China's Military Modernization and the Cross-Strait Balance*, testimony of Dr. James Mulvenon, September 15, 2005; and U.S.-China Economic and Security Review Commission, *Hearing on China's Military Modernization and the Cross-Strait Balance*, testimony of Eric McVadon, September 15, 2005.

49. U.S.-China Economic and Security Review Commission, *Hearing on China's Military Modernization and the Cross-Strait Balance*, testimony of James Mulvenon, September 15, 2005.

50. U.S.-China Economic and Security Review Commission, *Hearing on China's Military Modernization and the Cross-Strait Balance*, testimony of Dr. James Mulvenon, September 15, 2005.

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55. U.S.-China Economic and Security Review Commission, *Hearing on China's Military Modernization and the Cross-Strait Balance*, testimony of Joan Johnson-Freese, September 15, 2005.

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65. "Parliament Votes in Favour of Keeping China Arms Embargo," *EurActiv.com*, April 15, 2005. <http://www.euractiv.com/Article?tcaturi=tcu:29-138017-16&type=News>

66. U.S. Department of Defense, *Annual Report to Congress on the Military Power of the People's Republic of China*, (Washington, DC: 2005), p. 24.

67. U.S.-China Economic and Security Review Commission, *Symposium on Transatlantic Perspectives on Economic and Security Relations with China*, testimony of Frank Umbach, November 30, 2004, p. 86.

68. Shirley Kan, "Taiwan: Major U.S. Arms Sales Since 1990," *CRS Report for Congress*, July 5, 2005, p. 18. During the period 1994–2005, Taiwan's annual defense budget stayed relatively level at around NT\$260–280 billion (US\$8–10 billion per year). In addition, from 1994–2003 the Taiwan legislature approved special budgets totaling US\$22.6 billion to fund the procurement of fighter aircraft and military housing construction.

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73. Shirley Kan, "Taiwan: Major U.S. Arms Sales Since 1990," *CRS Report for Congress*, July 5, 2005, pp. 8–15.

74. Charles Snyder, "U.S. Military Officials Confirm Sale of Apaches," *Taipei Times*, May 26, 2002, p. 4. <http://www.taipetimes.com/News/taiwan/archives/2002/05/26/137661>

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81. "Ma, Soong Agree to Oppose Special Weapons Budget," *China Post*, September 8, 2005. <http://www.chinapost.com.tw/detail.asp?ID=68233&GRP=A>

82. "Taiwan Opposition Shoots Down Arms Budget," *Reuters*, September 7, 2005. [www.defensenews.com/story.php?F=1085853&C=asiapac](http://www.defensenews.com/story.php?F=1085853&C=asiapac)

83. Alice Hung, "Time Running Out as Taiwan Wrings Hands Over U.S. Arms," *Reuters*, October 2, 2005.

[news.yahoo.com/s/nm/20051002/wl\\_nm/arms\\_taiwan\\_china\\_dc](http://news.yahoo.com/s/nm/20051002/wl_nm/arms_taiwan_china_dc)

84. U.S.-China Economic and Security Review Commission, *Hearing on China's Military Modernization and the Cross-Strait Balance*, testimony of Dan Blumenthal, September 15, 2005.

85. U.S.-China Economic and Security Review Commission, *Hearing on China's Military Modernization and the Cross-Strait Balance*, testimony of Richard Bush, September 15, 2005.

86. Beijing's definition of 'one-China' relegates Taiwan to the status of a province, and Taipei a local government, subject to the authority of Beijing. In 1991, at the onset of unification talks between Taipei and Beijing, Taiwan's President Lee Teng-hui rejected Beijing's one-China principle fearing that it was a political trap. According to Richard Bush, all Taiwan political parties continue to reject the one-China principle as defined by Beijing.

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90. Mike Chinoy, "Beijing Softens Policies on Taiwan," *CNN*, May 13, 2005. <http://edition.cnn.com/2005/WORLD/asiapcf/05/12/taiwan.china>

91. *Anti-Secession Law* (Beijing, China: March 14, 2005), Adopted by the third session of the 10th National People's Congress and Chinese People's Political Consultative Conference.

92. John Tkacik, "China's New "Anti-Secession Law" Escalates Tensions in the Strait," *The Heritage Foundation Webmemo #629*, December 21, 2004. <http://www.heritage.org/Research/AsiaandthePacific/wm629.cfm>

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2005), <http://tga/mofcom.gov.cn/aarticle/d/200501/20050100338608.html>. However, in 2001, Dr. Tsai Ying-wen, then head of Taiwan's Mainland Affairs Commission, informed members of the U.S.-China Economic and Security Review Commission that if remittances from people on Taiwan to mainland relatives were included, the balance would be "a wash."

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98. Ministry of Commerce of the People's Republic of China, Department of Taiwan, Hong Kong, and Macao Affairs, *2003 Nian Liangan Jingji Jiaoliu Qingkuang* [2003 Cross-Strait Economic Trade Yearbook] (Beijing, China: March 15, 2004), <http://tga/mofcom.gov.cn/aarticle/d/200403/20040300195152.html>; *Ibid*, *2004 Nian Liangan Maoyi Touzi Qingkuang* [2004 Cross-Strait Trade and Investment Yearbook] (Beijing, China: January 25, 2005).

99. Richard Bush, *Untying the Knot: Making Peace in the Taiwan Strait* (Washington, DC: Brookings Institution Press, 2005), p. 32.

100. U.S.-China Economic and Security Review Commission, *Hearing on China's Military Modernization and the Cross-Straits Balance*, testimony of Merritt T. Cooke, September 15, 2005.

101. Denny Roy, "Cross-Strait Economic Relations: Opportunities Outweigh Risks," *Asia-Pacific Center for Security Studies Occasional Papers Series*, April 2004. [www.apcss.org/Publications/Ocasional%20Papers/Cross-Strait%20Economic%20Relations.pdf](http://www.apcss.org/Publications/Ocasional%20Papers/Cross-Strait%20Economic%20Relations.pdf)

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105. In May 2005, nearly three dozen members of Congress, all major supporters of Taiwan, sent a letter to then-KMT chair Lien Chan urging his party to cease blocking passage of the weapons budget. Charles Snyder, "U.S. Representatives Urge Passage of Arms Budget," *Taipei Times*, May 28, 2005, p. 1.

106. U.S. Economic and Security Review Commission, *2004 Report to Congress of the U.S.-China Economic and Security Review Commission* (Washington, DC: June 2004), p. 195; "Chinese Military Keeps Defense Modernization Under Party's Absolute Leadership," *Xinhua General News Service*, March 9, 2005; and "ADB Boosts China GDP 2005 Growth Forecast to 8.5%," *Intellinews—Asia Today*, September 9, 2005. <http://www.euromoney.com/default.asp?page=18&Pub=25&ISS=20418&SID=580207>. Data from 1997–2004 was obtained from the Commission's 2004 Report to Congress. See Fig. 8.1, "China's Defense Spending, 1997–2004." This table has been expanded to include China's official growth and defense budget figures for 2005, as reported by official Chinese sources.

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## **CHAPTER 4**

### **CHINA'S GLOBAL AND REGIONAL ACTIVITIES AND GEOSTRATEGIC DEVELOPMENTS**

#### **INTRODUCTION**

In the past year, China's global presence and influence continued to grow. It sought out new export markets for its products, and trade increased between China and many regions of the world; in some cases trade grew rapidly, such as with Europe. China also reached out to regions such as Africa, the Americas, and the Middle East to secure the energy and raw materials needed to fuel and support its growing economy. Since the Commission's previous Annual Report (issued in June 2004), China has become the world's second largest national consumer of petroleum behind the United States.

Unfortunately, certain international activities by China throw a shadow on its global rise. For example, China has continued to be a source of WMD- and missile-related technologies to countries of concern such as Iran. Despite China's enactment of tougher export control laws and constant complaints and sanctions by the United States, Chinese companies and organizations continued to proliferate. China took welcome steps to achieve progress in the diplomatic discussions aimed at eliminating North Korea's nuclear weapons and weapons programs but has not yet exerted its full leverage over Pyongyang to solve this problem.

The following are highlights of China's global activities over the last year:

- China's foreign policy has changed dramatically over the past ten years. China's regional and multilateral goals are influenced by the need to obtain resources, particularly energy resources, and to gain access to export markets; the desire to isolate Taiwan; and the intention of diluting an international system it sees as dominated by the United States. In order to achieve its goals, China employed a more proactive and creative diplomacy and increasingly used aid, development and investment packages, and diplomatic support to win favor in regions such as Africa and Latin America.
- China continued to cultivate ties with large regional leaders such as Russia and India. Russia recently joined China in calling for U.S. forces to leave the Central Asian bases from which they fight terrorism. China's ties with Europe also grew, especially on the trade front, and Beijing continued to press Brussels to lift the EU arms embargo on China that has been in place since the 1989 Tiananmen massacre.
- In part in order to obtain access to energy resources and raw materials, China utilized and expanded relationships with nations

- such as Iran, Sudan, and Zimbabwe that have earned international opprobrium for objectionable human rights, terrorism support, and other activities. In these interactions, China focused on its narrow interests while dismissing international concerns.
- Chinese companies continued to provide WMD- and missile-related technology to countries of concern such as Iran and obtained both economic gain and diplomatic influence from such sales. Despite continued complaints from the Administration and the imposition of numerous proliferation-related sanctions against Chinese companies since June 2001, these problems persist.
  - China remained North Korea's principal patron with consequent significant leverage over that country. Significant amounts of fuel and food were provided by China to Pyongyang and the two countries enjoyed an historic level of bilateral trade. In recent months, China has taken productive diplomatic steps to move denuclearization talks forward by circulating a statement of principles to reinvigorate the moribund Six-Party Talks and working to obtain agreement to those principles. Now it is critical that Beijing exert as much influence as will be needed to ensure that North Korea eliminates its nuclear threat.
  - The future success of China's economic and political policies is tied to the success of its energy policies. Two-thirds of China's energy needs are met by coal, but China's demand for oil resources needed to fuel its economic growth is rapidly increasing, putting China on course to compete with the United States and other oil importing nations for global supplies. China's policy of attempting to obtain control of oil resources at the wellhead rather than participating in the international petroleum market threatens to exacerbate tensions with the United States and other countries that are market participants. The attempt by a Chinese oil firm partly controlled by the central government to purchase California-based Unocal exemplified its policy and caused considerable U.S. concern before the attempt was abandoned.

In light of these developments, the United States should take a more attentive and active role in monitoring and responding to China's increased global presence, including China's attempt to secure international energy sources. The United States needs to reassess its policy aimed at stopping Chinese proliferation, including reexamining the adequacy of U.S. nonproliferation sanctions authorities. The United States also must persuade Beijing that it is in China's interest to engage more vigorously in the effort to halt North Korea's reckless nuclear weapons programs.

## **SECTION 1: CHINA'S REGIONAL ACTIVITIES AND THEIR ECONOMIC AND SECURITY IMPACTS**

### **Key Findings**

- China has increased its presence in many geographic regions during the past decade.
- China's decisions to become involved in specific countries and regions, the nature of its involvements, and its regional and multi-



lateral goals appear to be frequently influenced by its need for resources, particularly energy-related resources, the search for export markets, and a desire to increase its geopolitical leverage and influence and advance national objectives. Diplomatic aims include marginalizing Taiwan and increasing China's leverage in multilateral institutions by strengthening relations with other countries.

- China's regional strategies generally appear to be complementary and consistent and to reflect a larger global foreign policy strategy.
- China's regional approaches appear to be value-neutral; they are not influenced by ideology or human rights concerns and focus only on achieving China's practical objectives. China approaches countries that have histories and reputations of behavior and activities objectionable to the world community—such as proliferation, human rights abuses, aggression against other nations or less direct efforts to undermine their interests, support of terrorism, etc.—without requiring or even exerting pressure for changes in policy or behavior.

### **Overview**

China has increased its diplomatic and economic activity around the world to secure markets for its exports, to obtain minerals, raw materials, and oil for its fast-growing economy, and to strengthen its international stature while isolating Taiwan and reducing the influence and power of the United States, especially in the Asia-Pacific region. China's foreign policy has changed dramatically in the post-Cold War environment, driven by an expanding economy and new geopolitical realities. In an attempt to enlarge its profile vis-à-vis the United States, and to secure new energy sources, China is increasing its use of investments, development packages, and diplomatic gestures to win favor and contracts in places like Africa and Latin America. At the same time, China will overlook the problems associated with despotic regimes and countries of concern and proceed to engage with such countries as long as its practical economic, energy, and strategic interests can be served by the engagement.

### **Factors Driving China's Global Strategy**

#### ***Economic Growth***

Sustaining economic growth is a major concern that is reflected in both China's domestic and international policy. This leads to a general desire for international stability, which facilitates trade and minimizes the diversion of resources to military ends.<sup>1</sup> More specifically, China's prioritization of economic growth leads to regional strategies that pursue export markets for Chinese goods and foreign direct investment (FDI) from other countries. China's booming manufacturing capacity often outstrips domestic consumption, to a considerable extent by design, leading to dependence on export markets to fuel its growth rate. China actively seeks FDI, which increased again in 2004 to \$60.6 billion, contributing to a cumulative total that has reached \$562 billion.<sup>2</sup>

China's global involvement is often driven by the need to secure resources. Energy-related resources are a particularly high priority, as discussed in Section 4 of this chapter. China's growing economy also leads China's government to incorporate the quest for minerals, lumber, and other raw materials in its diplomatic approaches.

### ***Taiwan***

China and Taiwan continually vie for international recognition. China has been far more successful in its efforts, and Taiwan currently is accorded national recognition by only 25 countries, many of which are in Africa, Latin America, and Oceania. China often uses its influence in multilateral organizations to deny or place extra burdens on Taiwan's membership. China's characterization of Taiwan's status as a strictly internal matter also leads it to favor countries with a similar aversion to foreign intrusion into what China describes as sovereignty rights. In fact, China often informs its diplomatic partners "that 'non-interference' in Chinese affairs is the price of admission for a quality relationship with China."<sup>3</sup>

### ***Multilateral Institutions***

China seeks support for its stances in the United Nations, the World Trade Organization, and other organizations in which each state has a vote or other formal powers. China spent the latter half of the Cold War positioning itself as a counterpoint to both the United States and the Soviet Union, and has transitioned its message into a play for contemporary economic and political leadership in the developing world.<sup>4</sup>

### ***Nationalism and Legitimacy***

China as a polity and a society enjoys international recognition for its own sake. For example, China and many of its citizens are extremely proud that Beijing will host the 2008 Olympics. Moreover, the Chinese press routinely overplays mundane meetings between Chinese officials and other countries, even when the country or meeting is strategically unimportant.<sup>5</sup>

China's government also uses the appearance or reality of international respect and cooperation to buttress the legitimacy of its domestic actions and circumstances. One of the original and continuing bases for supporting the Chinese Communist Party is the expectation that its governance can command international respect. This concept was and remains particularly important given China's view of its history as one of exploitation at the hands of Western powers, and later Japan. As a result, the Party prominently displays the ceremonies surrounding diplomatic interactions to convince the populace that strong leadership results in national strength and prestige while protecting the country from exploitation by foreign powers.

### ***Filling Vacuums***

China takes advantage of voids that result when other regional and global powers sanction, ostracize, or ignore nations or governments because of their objectionable activities, including states such as Iran, Myanmar (Burma), Sudan, and Zimbabwe. When the

United States, Europe, and others deny such countries the benefits of trade, investment, technology, development assistance, and political cooperation, China often becomes—and presents itself as—a passable alternative. China in many cases refuses to join international condemnation of a country that is repressing its population, abusing human rights, engaging in aggression or other unfriendly actions against other nations, or proliferating—even if that country is subject to international sanctions. China generally states that it does so on the grounds that the sovereignty of those nations should be respected. However, there often may be a more practical reason: Beijing’s desire to establish favorable relations to facilitate its efforts to obtain oil and other raw materials from such countries.<sup>6</sup>

### ***Power and Multipolarity***

China is “focused on further developing its comprehensive national power, and further promoting its position in the world to be a more influential and more powerful country.”<sup>7</sup> The generic, latent power available through developing economic, diplomatic, and security ties with other countries can be pursued without a particular aim such as de-legitimizing Taiwan, securing economic interests and energy resources, or posturing for a domestic audience. Thus, China’s regional strategies are not always driven by narrow and immediate concerns, but the absence of specific goals should not be taken as an indication that China will refrain from an active strategy in a particular region.<sup>8</sup>

A specific manifestation of China’s desire to increase its power and prestige on the international stage is its explicit desire for a multipolar international order.<sup>9</sup> In practice, China’s foreign policy is often tempered by the recognition that, whatever its preferences, the United States will be the dominant global power for some time.<sup>10</sup> Nonetheless, “Chinese speeches and writings are steeped with language against hegemony, and for the promotion of a multipolar world,”<sup>11</sup> and there is evidence that China’s leadership believes that U.S. power and influence constitute a threat to its national interest.

### **China’s Regional Strategies**

#### ***Africa***

Africa is one of the focal points of China’s strategy to develop energy resources, export markets, and diplomatic support in the international community.<sup>12</sup> Beijing also sees African nations as valuable supporters of China’s claims to lead the developing world. Particularly in the United Nations and in the struggle against what China calls American hegemony, Sino-African cooperation can pay real dividends for China. China often champions the interests of developing countries in international fora, or repackages its own interests as identical or comparable to those of the developing world, in order to develop closer ties with those countries.<sup>13</sup>

China’s leaders face little scrutiny from the public, particularly in light of the government’s preponderant influence over domestic news media, leaving the government free to deal with African and other despots without facing significant domestic criticism or opposition.<sup>14</sup> China’s leaders have increased the use of such tactics as

face-to-face diplomacy, government-subsidized loans, and active lobbying on behalf of state-run firms in order to advance a pragmatic strategy in African countries, some of which have severe human rights or other problems.

China is a source of diplomatic, economic, and/or military support to pariah governments in such countries as Sudan and Zimbabwe, which underscores the amoral nature of China's African strategy. Zhou Wenzhong, China's Deputy Foreign Minister, explained this characteristic by saying, "Business is business. We try to separate politics from business."<sup>15</sup> China has acquired access to Zimbabwe's vast natural resources and has sold that country hundreds of millions of dollars worth of fighter jets, tanks, and small arms, according to a member of Zimbabwe's opposition party.<sup>16</sup> China also has sold arms to Sudan<sup>17</sup> as it worked to undermine efforts in the U.N. aimed at ending the genocide in Sudan's Darfur region.<sup>18</sup>

Africa factors heavily into China's energy procurement strategy and is likely to become even more important. China instituted stricter limits on the sulfur content of gasoline and gasoil in July 2005, but Chinese refineries are not sufficiently equipped to meet national demand at the stricter limits. Chinese refineries therefore will have to shift their oil purchases to regions such as West Africa that produce 'sweet' oil with lower natural sulfur levels.<sup>19</sup> China obtains roughly one quarter of its oil from Africa, with Angola, Sudan, and Nigeria as major oil partners.<sup>20</sup> China also sees Africa as a vital source of other commodities such as copper, iron, and timber. For instance, Chinese investment has poured into the mines of Zambia and the Democratic Republic of Congo.<sup>21</sup>

Trade between African states and China is growing rapidly, having doubled in 2004, albeit from a modest base.<sup>22</sup> China increasingly uses the promise of development projects and generously termed loans to African countries as a means of assuring that its companies receive favorable consideration for trade partnerships with the governments and companies of those countries.<sup>23</sup>

Six African countries maintain formal diplomatic relations with Taiwan—Burkina Faso, Chad, Gambia, Malawi, Swaziland, and São Tomé and Príncipe. China continues its strategy to undermine Taiwan internationally by offering financial and political incentives such as grants, loans, and diplomatic support and cooperation to these nations.<sup>24</sup>

### ***Latin America***

China's interest in and ties to Latin America have grown as a result of China's desire to strengthen its trade, especially energy-related trade, with that region. As it does in Africa, China weaves the Taiwan issue into its regional diplomacy in order to marginalize Taiwan.<sup>25</sup> China is also poised to take advantage of anti-American sentiments present in some countries of the region.<sup>26</sup>

China's quest for raw materials and commodities has led it to this region with its rich energy resources, minerals, and other commodities. China covets Venezuela's oil, Chile's copper, and Brazil's and Argentina's soybeans and, in return, appears willing to increase its financial investments in the region. In 2003, trade be-

tween China and Latin America doubled to almost \$27 billion; during a November 2004 trip by Chinese President Hu Jintao to the region, agreements were signed for tens of billions of dollars in Chinese investments.<sup>27</sup> Chinese investment in Latin America to date has been narrowly targeted at developing and acquiring resources or products necessary to China's economic growth that are not sufficiently available in China.<sup>28</sup>

Argentina, Brazil, Chile, Peru, and Venezuela all granted China market economy status in 2004, fulfilling a major goal of President Hu's November 2004 tour of the region.<sup>29</sup> Brazil's Foreign Minister has since expressed regret for this decision, noting that China has not increased investment in Brazil in return. Brazil also failed to negotiate subsequent Chinese export restraints on textiles and footwear.<sup>30</sup> Venezuela signed deals in December 2004 and January 2005 that permit Chinese firms to gain access to and develop more than 15 of Venezuela's declining oil fields.<sup>31</sup> Although China currently imports negligible quantities of oil from Venezuela, this development eventually may affect the U.S. oil market, which now absorbs two-thirds of Venezuela's oil exports.<sup>32</sup> For China to import Venezuelan oil, it would have to absorb high transportation costs. China would also have to build refineries capable of processing Venezuela's heavy oil; such facilities are already available in the United States.

### ***Europe***

China's ties with Europe are growing stronger, especially in the economic realm. Significantly, European countries have fewer security concerns involving China, in contrast to the United States and its security interests, presence, and commitments in East Asia.<sup>33</sup> Thus security does not complicate the EU-China relationship to the extent that it does the U.S.-China relationship.<sup>34</sup> Europe also figures prominently in China's desire for a multipolar global geopolitical arrangement, as Europe would be a necessary component of any effort to band countries together as a counterbalance to U.S. power. However, China is unlikely to meet with success on this point, as European countries generally prefer rules-based multilateral institutions to the *realpolitik* that would be involved in creating a multipolar system.<sup>35</sup>

China's trade with Europe has accelerated rapidly and is increasingly important to both China and the EU. China has become the EU's second largest trading partner,<sup>36</sup> and EU-China trade has grown more rapidly than China's trade with either Japan or the United States.<sup>37</sup> In 2004, the 25 countries of the EU imported 126.9 billion euros of merchandise from China and exported 48.1 billion euros.<sup>38</sup> European companies generally have been eager to invest in China and sell to its growing domestic market, which has led to large FDI flows from Europe. Not surprisingly, the level of economic diplomacy between Brussels and Beijing has increased as a result of these trends. However, there are concerns in Europe about Chinese human rights abuses, the rising presence of cheap Chinese goods in European markets, and intellectual property rights violations in China.<sup>39</sup>

China has pressed a number of countries to grant it market economy status and has directed a strong effort at the EU. Some major

economic powers, including the United States and the EU, have declined to do this. The EU denied China's request in June 2004, noting that China lacked the ability or will to provide sufficiently strong corporate governance structures, intellectual property protection, and bankruptcy procedures.<sup>40</sup>

One recent target of China's diplomatic efforts in Europe is the EU arms embargo, imposed against China after the 1989 Tiananmen massacre. According to a senior European diplomat who spoke with the Commission during its November-December 2004 mission to Brussels, China has pressed the EU extremely hard to lift the ban. Although the EU appeared ready to do this in the first part of 2005, it postponed action on this matter in apparent response to U.S. pressure and China's adoption of its Anti-Secession Law that threatens Taiwan's and possibly U.S. security interests. Still, French President Jacques Chirac continues to support lifting the embargo, and EU High Representative for the Common Foreign and Security Policy Javier Solana expressed support for doing so as recently as September 2005.<sup>41</sup> In opposition, the EU Parliament and several national parliaments have passed resolutions urging that the embargo be left in place, noting that the human rights conditions that led to its imposition have not fundamentally improved.<sup>42</sup> Advocates for lifting the embargo argue that improved export control guidance, such as a strengthened code of conduct on arms exports, will prevent undesirable exports to China.<sup>43</sup> The Commission believes that the embargo must remain in place for human rights and strategic reasons, particularly considering the shortcomings of the code of conduct.<sup>44</sup>

### ***Northeast and Southeast Asia***

China's strategy in Northeast and Southeast Asia is heavily influenced by a desire to incorporate Taiwan into China without raising tensions with other nations such as Japan and South Korea.<sup>45</sup> "[China] seeks to diminish Taiwan's positive reputation within the East Asian region, to make [Taiwan] appear the troublemaker," explained one Commission witness.<sup>46</sup>

Japan's 2004 trade with China reached a total of \$168 billion, with China enjoying a modest surplus.<sup>47</sup> South Korea's trade with China was \$90 billion in 2004, with South Korean exports standing at double the value of imports.<sup>48</sup>

China's Asian strategy appears to be aimed at binding the region to itself economically, politically, and militarily.<sup>49</sup> In this, its major regional rival is Japan. China continues to harbor hostile sentiments toward Japan, based in some part on antagonism that originated during the Japanese occupation preceding and throughout World War II and that continued throughout the Cold War. Anti-Japanese riots erupted in several Chinese cities in April 2005, apparently after initial prompting by the Chinese government.<sup>50</sup> Ironically, China's growing military power is having the effect of encouraging closer security ties between Japan and the United States.<sup>51</sup>

Given geographic proximity and China's current limited capability to project military power, the nations of Northeast and Southeast Asia are particularly concerned about the ultimate effects of China's expanding strategic power.<sup>52</sup> This is especially the

case with Taiwan, as discussed in Chapter 3. China is certainly aware of the possibility that its growing stature will be construed as a threat to other countries in the region. To mollify fears of strategic dominance through economic or military power, China trumpets the concept and terminology of its “peaceful rise.”<sup>53</sup> This rhetorical strategy encourages other nations to view China’s rise as meteoric, inevitable, and beneficial to the international community.<sup>54</sup>

China is not the only threat to regional stability and specifically to countries such as Japan and South Korea. For the past decade, a secretive and fractious North Korea has appeared committed to building a nuclear and ballistic arsenal. As discussed in Section 3 of this chapter, China has tremendous leverage over North Korea and must be exhorted to use this influence to lessen the threats posed by that country.

### ***Hong Kong***

The Commission visited Hong Kong in August 2005 and met with a number of Hong Kong legislators and other officials, the American Consul-General and his staff, and both U.S. and foreign media representatives. It was troubling to hear not only that there is a lack of progress toward democracy, but also that the Beijing authorities have established constraints on Hong Kong’s political development. The Commission heard serious concerns over whether Beijing’s actions are undermining the high degree of autonomy for Hong Kong envisioned under the Sino-British Joint Declaration of 1984, the Hong Kong Basic Law, and the principle of ‘one country, two systems.’ Pro-democracy Hong Kong legislators suggested to the Commission that Congress should urge Beijing to expand suffrage, end the imprisonment of journalists such as Ching Cheong, and cease its erosion of Hong Kong’s autonomy. This problem is highlighted by the response of Donald Tsang, the newly appointed Hong Kong Chief Executive, to criticisms about the glacial pace of democratization in Hong Kong: “[W]e are not masters of our fate.”<sup>55</sup> The Commission believes it is important for the Congress to remain cognizant of the situation in Hong Kong and to demonstrate to Beijing that whether China honors its commitments to Hong Kong is of special concern to the Congress.

### ***South Asia***

South Asia continues to be important to China. China’s current trade volume with South Asia totals nearly \$20 billion a year, including \$13 billion with India alone.<sup>56</sup> In an apparent attempt to deepen its strategic influence in the region, China has offered economic incentives to the other countries in the region. It also backs the region’s governments against internal dissent, most tellingly favoring the government of Nepal over its Maoist insurgency.<sup>57</sup> Currying favor with these states gives China some leverage in any future tensions that could arise with India, which is one of China’s traditional strategic rivals.<sup>58</sup> The policy also gives Beijing access to outposts close to its sea lanes to the Middle East and Africa. Addressing the same considerations, China is heavily involved in building the Pakistani naval port at Gwadar, and it is anticipated

that this base will give China a very important strategic naval presence in the Indian Ocean.<sup>59</sup>

Despite its historical problems with India, China is attempting to nurture improved ties with that country. Chinese trade with India shows promise and China likely seeks access to Indian technology, especially in the computer software field.<sup>60</sup> The two countries are engaged in settling their long-standing border dispute, which contributed to a military confrontation in 1962.<sup>61</sup> However, some speculate that China may draw out the resolution process so as to maintain an uneasy balance of power between Pakistan and India, thereby occupying the strategic attention and resources of both. "It is possible that one reason why Beijing is not in a hurry about resolving the boundary dispute with India is that it would fundamentally ease India's two-front problem, intensifying Indian pressure on Pakistan."<sup>62</sup>

### ***The Former Soviet States***

With China having settled most long-standing border disputes with Russia, and with both nations opposed to U.S. global dominance, closer ties between Beijing and Moscow on some levels are likely.<sup>63</sup> But there are also areas in which regional competition could chill relations between the two. One example is Moscow's fear of undue Chinese economic and political influence in Russia's border areas with China.<sup>64</sup>

China's military is heavily reliant on ongoing or past Russian arms sales, especially sophisticated weapons systems that China has lacked the capability to produce indigenously. Russia's armament industry, in turn, is dependent on the Chinese transactions that account for 45 percent of its total sales.<sup>65</sup> Further acquisition from Russia has the advantage that China already is familiar with the Russian weapons systems it now uses although, over the longer term, China certainly does not want to be permanently dependent on arms sales from another country and will likely pursue policies to wean its military from Russian imports.<sup>66</sup> In contrast to former President Jiang Zemin, current President Hu Jintao is described as pro-Russia by some because of his reported reliance on Russian political support and Russian military hardware.<sup>67</sup> The two countries are expanding military exchanges and cooperation and conducted the first China-Russia joint military exercise in the summer of 2005.<sup>68</sup>

Both countries harbor concerns about the presence of U.S. armed forces in Central Asia, which increased substantially in 2001. On July 5, 2005, both China and Russia called on the United States and its coalition partners with troop presence in several Central Asian states to set a deadline for regional withdrawal.<sup>69</sup>

Energy is another major driver in China's approach to Central Asia. Last summer, after years of negotiations, China and Kazakhstan agreed to build a pipeline into China's northwestern Xinjiang region. According to one source, the "pipeline will be a key link in a 3,000-kilometer project that aims to join China to the Caspian Sea."<sup>70</sup>

China's influence is fanning across the former Soviet Central Asian states of Kazakhstan, Kyrgyzstan, Turkmenistan, Uzbekistan, and Tajikistan. Because of its heightened interest in Central



Asia, China has taken a leading role in the Shanghai Cooperation Organization (SCO). The SCO, initially formed in 1996, is a political alliance composed of the Central Asian states named above minus Turkmenistan, plus China and Russia. Iran, India, and Pakistan recently joined as observers. The original impetus for the alliance was to cooperate against radical extremism and separatism, but the group's focus has grown to encompass promoting cooperation in trade and other areas. Some see China and Russia attempting to use the bloc to counter U.S. influence in the region.<sup>71</sup>

## **SECTION 2: CHINA'S PROLIFERATION PRACTICES AND RECORD**

### **Key Findings**

- China's proliferation activities are broad ranging; it continues to provide equipment and technology, including dual-use goods and technologies, related to WMD and their delivery systems to countries such as Iran as well as conventional armaments to countries like Sudan.
- China continues to be governed by a Communist party hierarchy that controls major aspects of the government, society, and economy. Party cadres are selected by the leadership to serve as key executives of state-owned corporations and many smaller firms and subsidiaries, and enforce the leadership policy. Beijing is also placing more party members in the ranks of newer private companies. Through this and other methods, many proliferation actions of Chinese companies are either effectively controlled or tacitly condoned by certain levels of the central government. In a number of cases, China uses proliferation to raise revenue or gain diplomatic influence.
- Continuing proliferation undermines the public commitment Beijing has made by becoming a party to, or participating in, various multilateral nonproliferation treaties, regimes, and organizations, and by promulgating strengthened export control laws.
- As China improves its nuclear and missile capabilities, the potential damage from its proliferation action increases. Given China's poor track record on preventing proliferation, the presumption is that it will continue to allow transfers of improved WMD- and missile-related technology to countries of concern.
- Numerous U.S. sanctions have been imposed to punish Chinese companies for their proliferation activities, but they appear to be largely ineffective. A significant reason for this is that many sanctions regimes do not extend penalties to a parent company, which may have business connections in the United States, for the proliferation activities of its subsidiaries unless a parent company had demonstrable knowledge of the transaction.

### **Overview**

In a post 9/11 world, addressing terrorism is of dire importance not only to the United States, but also to all in the international community. An enormous challenge is to prevent terrorist organizations, and countries that support them, from acquiring WMD and

the ability to deliver them. This should remain a central national security objective.

Unfortunately, countries of concern, such as Iran, which has been labeled a state sponsor of terrorism by the State Department, continue to receive WMD- and missile-related technology from Chinese companies. All countries, including China, should be concerned about the grave consequences should WMD be acquired by countries of concern or terrorist groups.

### **Proliferation Problems Persist**

Since the 1980s, China has been a source of billions of dollars of WMD- and missile-related technology to countries in South Asia and the Middle East.<sup>72</sup> During the 1990s, questions arose about China's compliance with its international nuclear commitments, including numerous allegations of Chinese assistance to Pakistan's nuclear program that could have had weapons-related implications.<sup>73</sup> Chinese assistance has helped Pakistan develop nuclear weapons;<sup>74</sup> Pakistan's A.Q. Khan has engaged in widespread proliferation and, for example, provided Libya with a nuclear bomb design, reportedly of Chinese origin.<sup>75</sup>

Despite the increased threat to global security, there is evidence that Chinese companies continue to transfer WMD- and missile-related equipment and technologies, including dual-use goods and technologies, to countries of concern with several Chinese firms acting as serial proliferators. According to the Director of the Defense Intelligence Agency, Vice Admiral Lowell Jacoby, "Chinese entities continue to supply key technologies to countries with WMD and missile programs, especially Pakistan, North Korea, and Iran, although China appears to be living up to its 1997 pledge to limit nuclear cooperation with Iran."<sup>76</sup> To some extent, the continuing involvement of Chinese companies with the Iranian nuclear establishment<sup>77</sup> is unsurprising, given China's openly acknowledged intention to complete work on two contracts in effect when the 1997 pledge was made. However, this contact nonetheless is troubling, given assessments that Tehran is pursuing a nuclear weapons program.<sup>78</sup> There also are concerns about Chinese companies aiding the chemical weapons programs in Iran.<sup>79</sup>

In April, September, November, and December 2004, 14 Chinese companies and one Chinese individual were sanctioned under Executive Order 12938 or the Iran Nonproliferation Act for problematic transfers. Such activity confirms that either the Chinese government's stated willingness to police this issue is disingenuous or the government lacks the power and capability to exert effective control, calling into question the value of its signature on international nonproliferation agreements. The explanation that the government lacks enforcement capability is dubious based on the effectiveness with which the government controls other activities to which it objects. In 2002, Director of Central Intelligence George Tenet testified to the Senate Armed Services Committee that some proliferation activities by Chinese companies are condoned by China's government.<sup>80</sup> In fact such activities may be paying economic and political rewards. In March 2005 Admiral Jacoby indicated that in return for sales of WMD- and missile-related technologies, China receives revenue and diplomatic influence.<sup>81</sup>

***Chinese Firms Involved in Proliferation***

As noted above, Chinese companies and individuals that transfer WMD- and missile-related equipment and technologies pose a tremendous threat to regional and global security. In some instances, as indicated in the chart below, certain large Chinese companies, or their subsidiaries, have been identified by the U.S. government as having transferred such equipment and technologies to countries of concern.

Since the Commission's 2004 Annual Report, The United States Has Placed Sanctions On The Following Companies Or Individuals. Parent Companies Are Listed In Parenthesis, <sup>82</sup> But Are Not Penalized Under These Specific Sanctions.	
—CHINESE COMPANY—	—RECIPIENT COUNTRY—
XINSHIDAI	Unnamed Country
BEIJING INSTITUTE OF AERODYNAMICS (CHINA AEROSPACE SCIENCE AND TECHNOLOGY CORPORATION)	Iran
BEIJING INSTITUTE OF OPTO-ELECTRONIC TECHNOLOGY	Iran
CHINA GREAT WALL INDUSTRY CORPORATION (CHINA AEROSPACE SCIENCE AND TECHNOLOGY CORPORATION)	Iran
NORTH CHINA INDUSTRIES CORPORATION (NORTH CHINA INDUSTRIES CORPORATION GROUP)	Iran
LIMMT ECONOMIC AND TRADE COMPANY, LTD	Iran
ORIENTAL SCIENTIFIC INSTRUMENTS CORPORATION (CHINA ACADEMY OF SCIENCE)	Iran
SOUTH INDUSTRIES SCIENCE AND TECHNOLOGY TRADING COMPANY, LTD	Iran
LIAONING JIAYI METALS AND MINERALS CO.	Iran
The Chinese individual CHEN QINGCHANG (aka Q.C. CHEN)	Iran
WHA CHEONG TAI COMPANY, LTD	Iran
SHANGHAI TRIPLE INTERNATIONAL, LTD	Iran
BEIJING ALITE TECHNOLOGIES COMPANY, LTD	Iran
CHINA AERO-TECHNOLOGY IMPORT EXPORT CORP. (JOINTLY OWNED BY CHINA AVIATION INDUSTRIES CORPORATION I AND CHINA AVIATION INDUSTRIES CORPORATION II)	Iran
ZIBO CHEMET EQUIPMENT COMPANY, LTD	Iran

In the past five years a number of the Chinese companies that have been sanctioned by the U.S. government because of their proliferation activities have been quasi-governmental organizations, including some that have been labeled “serial proliferators.” For a full list of sanctioned companies since 1991, see Appendix A of this chapter.

The Chinese government monitors and controls functions within the state-owned industry sector and is also increasing the number of party officials assigned to private companies.<sup>83</sup> Given such connections, it is troubling that Beijing is unable or unwilling to control the proliferation activities of companies with which it has close ties. Organizations with close ties to the government that have been sanctioned for proliferation include North China Industries Corp. (NORINCO) and the China Precision Machinery Import/Export Corp. (CPMIEC).<sup>84</sup>

In some instances, sanctioned companies are subsidiaries of prominent corporate parents that do business in the United States, or with U.S. companies, or have other subsidiaries that do.<sup>85</sup> Examples include Nanjing Chemical Industries Group and Jiangsu Yongli Chemical Engineering and Technology Import/Export Corp. Both these companies have been cited by the U.S. government for exporting dual-use chemical precursors, equipment, and/or technology to Iran and have been under U.S. sanctions since 1997. Both are also subsidiaries of the Chinese oil and chemical giant Sinopec, which has conducted joint ventures with U.S. companies and raised billions of dollars in American capital markets by listing on the New York Stock Exchange, even while these two subsidiaries were under U.S. sanctions.<sup>86</sup>

Washington has often called on Beijing to scrutinize the activities of these and other companies for forbidden proliferation actions, but with limited success. According to Assistant Secretary of State Stephen Rademaker who testified before the Commission, “[Beijing’s] inability to take action against serial proliferators calls into question China’s commitment to truly curb proliferation to certain states.”<sup>87</sup>

### **Effectiveness of Chinese Export Controls**

Beginning in the early 1990s, China has taken some modest steps to address the proliferation concerns of the United States. It promised, in 1991, to abide by the Missile Technology Control Regime (MTCR) though it was passed over for MTCR membership in October 2004 presumably because of continuing exports of missile-related equipment and technology.<sup>88</sup> China also acceded to the Nuclear Nonproliferation Treaty in 1992. In December 2003, China issued its first nonproliferation white paper, calling on those involved with export license approvals to consider whether the countries receiving the controlled exports have WMD or missile programs or any links to terrorist organizations.<sup>89</sup> In keeping with this pledge, China, in recent years, has “expended considerable resources to upgrade and improve its national infrastructure for export controls.”<sup>90</sup> In September 2005, Beijing released another white paper stressing its commitments to nonproliferation.

These policies have achieved certain limited successes. In the fall of 2003, Chinese authorities intercepted a shipment of chemicals

transiting China and bound for Pyongyang's nuclear program.<sup>91</sup> In the spring of 2004, Beijing announced that it was penalizing two Chinese companies for missile-related export violations. While this was the first time China announced such sanctions, it failed to publish the identity of the guilty parties.<sup>92</sup>

One recent report by the University of Georgia's Center for International Trade and Security noted that enforcement is one of the weakest links in China's export control system and, "[h]istorically, export control enforcement in China has been opaque and half-hearted . . . its enforcement efforts still remain largely obscured."<sup>93</sup> Undoubtedly, as an expert testified to the Commission, political and economic factors "slow progress in establishing a strong, viable [export control] system."<sup>94</sup> According to an August 30, 2005 State Department report, "China's [nuclear] export control system appears designed to ensure adequate review for those exports that come to the attention of Chinese export control authorities if these authorities choose to exercise this authority."<sup>95</sup> This same report complained that "Beijing has also not taken adequate steps under these new [missile-related export control] regulations to prevent sensitive transfers or prosecute violations, and China needs to publicize its efforts to enforce its export control regulations."<sup>96</sup> According to a September 2005 report by the RAND Corporation, Beijing needs to devote more resources and political capital to improving export control practices noting that such effort "serves as a key indicator of the government's ability to fulfill its stated goal of acting like a 'responsible major power' in global affairs, especially as related to WMD nonproliferation."<sup>97</sup>

China joined the Nuclear Suppliers Group (NSG) in May 2004. Less than a month prior to joining the NSG on May 27, 2004, the Chinese government permitted the China National Nuclear Corporation to contract with Pakistan's Atomic Energy Commission to construct a second nuclear reactor at its Chasma nuclear site. China's stated policy, required under NSG guidelines, is not to export nuclear technology to a country that does not have full-scope International Atomic Energy Agency (IAEA) safeguards on all its nuclear material and facilities.<sup>98</sup> Pakistan still has not signed the IAEA's full-scope protocol on all its nuclear-related facilities. It should be noted that the new Chasma contract, signed before China's acceptance into the NSG, will be subject to a limited IAEA safeguards protocol. China's action in this case may show Beijing's proclivity to abide by the letter rather than the spirit of the law, and calls into question its commitment to nonproliferation.

Despite Beijing's rhetorical commitment to stopping impermissible transfers, Assistant Secretary of Defense for International Security Affairs Peter W. Rodman noted—

*The fact remains, however, that Chinese entities today remain key sources of transfers of arms, WMD- and missile-related equipment and technologies, including dual-use technology and related military capabilities, to countries of concern. Despite Beijing's pledges, for example, Chinese entities remain involved with the nuclear and missile efforts of Iran and Pakistan, and remain involved with chemical efforts in Iran.*<sup>99</sup>

### The U.S. Approach

Current U.S. policy toward Chinese proliferation is based on simultaneous dialogue with the Chinese government and aggressive imposition of sanctions on its companies found to be proliferating.<sup>100</sup> In January 2005, President Bush said that China has “heard us loud and clear. We will make sure to the best extent possible they do cooperate . . . We’ll make it clear not only to China, but elsewhere that we’ll hold you to account—we want to have friendly relations[,] but do not proliferate.”<sup>101</sup>

According to the former Under Secretary of State for Arms Control and International Security, John Bolton, the Bush Administration during its first term (2001–2004) sanctioned proliferating Chinese companies a total of 62 times,<sup>102</sup> although in one case those sanctions were waived on national security grounds.<sup>103</sup>

Selected U.S. Sanctions Available for Punishing Proliferating  
Companies:

Arms Export Control Act

Executive Order 12938 (as amended by Executive Orders 13094  
and 13382)

Export-Import Bank Act

Nuclear Proliferation Prevention Act

Export Administration Act

Iran-Iraq Arms Nonproliferation Act

Iran Nonproliferation Act

Chemical and Biological Weapons Control and Warfare  
Elimination Act

One proliferation expert complained to the Commission that, “[current sanctions] are not strong enough to affect the profitability of the offending companies. Put simply, our sanctions do not have any real teeth.”<sup>104</sup> Under the provisions of most U.S. laws permitting imposition of sanctions on proliferating companies, sanctions cannot be imposed on parent companies for the proliferation activities of their subsidiaries unless the parent companies “knowingly assisted” in the prohibited transactions, a burden of proof that is very difficult to meet.<sup>105</sup>

Moreover, when a company can be sanctioned for its proliferation activities, the principal penalty is to prohibit it from conducting business with the U.S. government, and in some cases it also can be restricted from exporting its products to U.S. markets.<sup>106</sup> But the impact of such sanctions is minor because few of the proliferating companies have direct business connections with the U.S. government or substantial exports to the United States, although the parent firms may have substantial economic ties to and interests in the United States.<sup>107</sup>

The Bush Administration has aggressively used the Iran Nonproliferation Act to sanction Chinese companies for transfers of

WMD- and/or missile-related materials and technology to Iran. However, this legislation is narrowly focused and while it does provide for sanctioning successors, subunits, or subsidiaries, it does not provide for sanctioning a parent company.<sup>108</sup> In June 2001, Jiangsu Yongli Chemicals and Technology Import/Export Corp. was punished under that Act. During the period for which Jiangsu was under sanctions, its parent, the Chinese oil giant Sinopec, and some of Sinopec's other subsidiaries, benefited from joint ventures with American companies and Sinopec stock traded on the New York Stock Exchange.

On June 28, 2005, the White House issued Executive Order 13382, known as the WMD Proliferation Financing Executive Order. This order authorizes freezing U.S. assets of WMD proliferators designated under the order, thus prohibiting U.S. persons or companies from transacting business with them. According to U.S. Treasury Secretary John Snow, “[with Executive Order 13382] we deny proliferators and their supporters access to the U.S. financial system and starve them of funds needed to build deadly weapons and threaten innocents around the globe.”<sup>109</sup> Denying problematic companies access to U.S. capital markets is a positive step. But under this order, parent companies can be sanctioned only on a case-by-case basis depending on the amount of their support for the actual proliferation transfers. Since it is likely to be difficult to demonstrate such support, the efficacy of applying this provision to parent companies is questionable.

Chinese companies continue to be involved in proliferation activities despite extensive bilateral dialogue in which the United States has urged China to reduce such activities, and the repeated application of sanctions to the companies found to have been involved with proliferation. The fact that many of the proliferating companies have close relationships to the Chinese government coupled with the often-observed effectiveness of the government in preventing activities it opposes, such as political dissent, confirms that the Chinese leadership's commitment to nonproliferation is insufficient. In fact, Beijing may be benefiting diplomatically from such transfers to Iran, North Korea and Pakistan.<sup>110</sup> If these activities are to be curtailed, the United States must more effectively harness multilateral diplomacy to obtain Chinese cooperation and must increase the effectiveness of its sanctions.

### **The Proliferation Security Initiative and Port Security**

In May 2003, President George W. Bush launched the Proliferation Security Initiative (PSI) aimed at halting the trafficking of WMD, delivery systems, and related materials between states or non-state actors.<sup>111</sup> France, Germany, Japan, Spain, Singapore, and the United Kingdom, among others, support the PSI which seeks to use intelligence sharing, diplomacy, joint law enforcement, and military interdictions to defeat WMD-related trafficking. Participation is voluntary and, while it has been invited to participate, China has decided not to do so, citing international law concerns in connection with interdictions. In fact, China has reportedly threatened to veto any United Nations Security Council resolution that specifically endorses the PSI.<sup>112</sup>

In addition to pursuing PSI efforts, the U.S. government also must focus more attention on U.S. port security. The dramatic increase of Chinese imports traveling through U.S. ports raises concerns about whether U.S. port security efforts are sufficient, particularly with respect to inbound container trade from China. WMD easily could enter the United States through these containers.

At the Commission's hearing in Seattle, Washington, directors of the ports of Seattle and Portland both acknowledged the scope of the problem as they discussed port security efforts underway. The Port of Portland's Nathaniel Ruda testified that U.S. ports are "at least five years from a technology solution to container seal integrity. It is a big issue."<sup>113</sup> The Port of Seattle's M.R. Dinsmore noted that only 4 to 5 percent of inbound containers are inspected and told the Commission that while the United States has "over-reacted with [regard to the security of] our nation's airports ... on the maritime side of our portfolio we've under-reacted."<sup>114</sup>

During the hearing, the Commission learned that there is limited inspection of so-called "empty" containers—those that have less than 2,000 pounds of materials in them. Also, Nathaniel Ruda conceded that fewer inspections of these empty containers are occurring now than occurred prior to 9/11, a very troubling revelation in light of the severe threat they could pose.<sup>115</sup>

Port security concerns also extend to the adequacy of screening at key foreign ports that handle outbound shipping to the United States. The Government Accountability Office (GAO) released a report on U.S. efforts to prevent nuclear smuggling via overseas seaports.<sup>116</sup> According to the report, the Department of Energy (DOE) started its Megaports Initiative in 2003 with the goal of enabling foreign personnel at key overseas ports to use U.S.-installed equipment to screen shipping containers entering and leaving these ports for nuclear and other radioactive material.<sup>117</sup> This program also coordinates with and complements the Department of Homeland Security's (DHS) Container Security Initiative (CSI), discussed below.<sup>118</sup> To assist the Megaports Initiative, Sandia National Laboratories maintains a database of foreign seaports that it considers susceptible to potential nuclear-related smuggling and which includes several Chinese ports.<sup>119</sup> The GAO found that the DOE has had limited success in initiating work in high priority foreign seaports due to difficulties in negotiating agreements with some countries including China.<sup>120</sup> The two principal reasons for these negotiating difficulties have been concerns about anticipated interruptions in the flow of commerce and reluctance to hire the additional personnel for the operation and maintenance of the U.S.-provided radiation detection equipment.<sup>121</sup> Addressing this issue should be a high priority for the DOE as well as the DHS.

While China has not agreed to the Megaports Initiative, the ports of Shenzhen and Shanghai are participating in the CSI. Under the CSI, U.S. Customs officials are stationed at the participating ports, and along with domestic agents, attempt to identify potentially dangerous cargo bound for the United States.



### **SECTION 3: CHINA'S INVOLVEMENT IN RESOLVING THE NORTH KOREAN NUCLEAR CRISIS**

#### **Key Findings**

- The extent of Chinese cooperation in the Six-Party Talks to achieve a complete, verifiable, and irreversible dismantling of North Korea's nuclear weapons and nuclear weapons programs is a critical test of the U.S.-China relationship.<sup>122</sup>
- China is North Korea's principal patron and has very substantial economic leverage with that country. It is important for China to use its considerable influence with North Korea, including economic and energy assistance, as leverage to press Pyongyang to dismantle its nuclear weapons, nuclear weapons programs and long-range delivery systems. China's recent efforts to bring North Korea back to the Six-Party Talks and its circulation of a now agreed-upon set of principles that the parties signed in September 2005 are new and commendable steps. However, the effort to get North Korea to abandon its nuclear weapons programs, nuclear weapons, and nuclear weapons material has a considerable distance yet to go, and it is imperative that China, with its leverage over North Korea, take substantial responsibility for the ultimate success of this effort.

#### **Overview**

With the terrorist attacks on 9/11 in the United States and, more recently, in Madrid and London, dramatizing the boldness with which terrorists are willing to strike, the international community must redouble its efforts to prevent the transfer of nuclear and other WMD and related delivery systems from terrorist-sponsoring states to terrorists willing to use them to inflict harm. Moreover, the international community must not permit a rogue nation to produce a nuclear arsenal that also could lead to a regional arms race or, threaten the United States or its allies. In particular it is of great importance to halt North Korea's nuclear and other WMD-related activities. China, with its close relationship with North Korea, has significant leverage that it can use to curb North Korea's disturbing behavior, and therefore its role in achieving a successful outcome to the Six-Party Talks is critical.

#### **China's Relationship with North Korea**

China exerts significant leverage over North Korea as its largest trading partner and as a principal source of financial and other assistance. A Treaty of Friendship, Cooperation, and Mutual Assistance between the two countries has been in place since 1961. It is difficult to imagine how a regime in North Korea could remain in power without Chinese support.

In 2004 the two countries reached a new high for bilateral trade—\$1.2 billion—up 35 percent from the previous year.<sup>123</sup> Historically China has provided North Korea with extensive foreign aid; Beijing consistently has allocated 25 to 33 percent of its foreign assistance budget to North Korea in recent years.<sup>124</sup> It also exports significant amounts of fuel and food to North Korea, presumably at below market prices. For example, it is reported that roughly 70 to

90 percent of North Korea's energy supplies come from China.<sup>125</sup> After the collapse of the North Korean farming system and the fall of the Soviet Union which had been North Korea's principal patron, China became what is widely believed to be North Korea's largest provider of food, though it is difficult to measure how much is actually provided.<sup>126</sup> Moreover, Chinese petroleum and coal are thought to be significant factors in bolstering the fragile North Korean economy.<sup>127</sup> Chinese fuel exports to North Korea are estimated to have been over \$100 million a year, some of which likely has been provided at 'friendship prices.'<sup>128</sup> One estimate holds that the North Korean economy would be paralyzed within a period of six months should Chinese energy assistance be halted.<sup>129</sup>

Given the level of Chinese assistance to and trade with North Korea, China has significant power in shaping Pyongyang's behavior. Probably out of fear of destabilizing its neighbor, China currently appears unwilling to impose economic and other sanctions in order to gain traction concerning North Korea's nuclear weapons activities.<sup>130</sup> According to Christopher Hill, Assistant Secretary of State for East Asian and Pacific Affairs, "the Chinese have a very strong relationship with North Korea, a very strong economic relationship, [and] political relationship. In fact, there are a lot of personal relationships that go between China and North Korea."<sup>131</sup>

Beyond general economic assistance to North Korea, there is evidence that Chinese companies continue to transfer key WMD- and/or missile-related technologies to North Korea.<sup>132</sup> Questions also remain with regard to China's possible role in permitting North Korean ships and planes involved in proliferation activities to use Chinese ports and airspace.<sup>133</sup> For example, Spanish warships, acting in conjunction with the U.S. government, intercepted a freighter bound for Yemen in late 2002 that contained 15 complete North Korean Scud missiles and spare parts; its previous port of call, according to Spain's Defense Minister, was in China.<sup>134</sup> But China's performance on stopping problematic shipments is mixed; in fall 2003, Chinese authorities, in cooperation with the U.S. government, interdicted a shipment of chemicals transiting China and bound for Pyongyang's nuclear program.<sup>135</sup>

Additionally, the U.S. Treasury Department has identified a Chinese bank alleged to be involved in money laundering-related activities that could be financing North Korea's nuclear weapons programs, and, according to press reports, is also investigating the Bank of China and another Chinese bank because of similar alleged activities.<sup>136</sup> For more on this issue see Chapter 1, Section 3 of this report.

### **China's Role in the Six-Party Talks**

In October 2002, North Korea stated that it secretly had resumed its nuclear weapons program, in violation of its commitments under the 1994 Agreed Framework as well as the Nuclear Nonproliferation Treaty, its International Atomic Energy Agency safeguards agreement, and the Joint North-South Declaration on the Denuclearization of the Korean Peninsula. The North Korean government acknowledged to a U.S. delegation that it had a program to enrich uranium for nuclear weapons, which it later denied.

In August 2003, the U.S., China, Japan, Russia and South Korea engaged with North Korea in what became known as the Six-Party Talks. At the first session, all parties agreed that the goal was a denuclearized Korean Peninsula. The U.S. goal for the talks has been to achieve a complete, verifiable, and irreversible dismantling of all North Korean nuclear programs. As the host of the Six-Party Talks, and given its close relationship with North Korea, China has a special role to play in shaping the course of these discussions and achieving their goals.

Two subsequent Six-Party meetings took place and at the third meeting (June 23, 2004), the U.S. delegation tabled a comprehensive proposal that called for a step-by-step dismantlement of North Korea's nuclear programs, which would be rewarded after certain steps with aid and other concessions to North Korea. Under this plan North Korea would be required to make a declaration stating that it would dismantle its nuclear programs which, if accepted, would be rewarded by provisional multilateral security assurances.<sup>137</sup> In the end, discussions about ending sanctions against North Korea could result.<sup>138</sup>

But North Korea failed to take part in a working meeting prior to the fourth round of discussions scheduled for September 2004. It later issued a number of belligerent statements emphasizing its unwillingness to return to the negotiating table.

On February 10, 2005, North Korea announced that it was formally suspending its participation in the Six-Party Talks and declared it possessed nuclear weapons. Subsequent to its February 10 statement, North Korea launched a short-range missile into the Sea of Japan and announced it had extracted spent nuclear fuel from its Yongbyon reactor so it could "increase its nuclear arsenal."<sup>139</sup> During this period, Chinese diplomats met with North Korean officials to encourage their return to the negotiations but also called on the United States "to show more flexibility and sincerity [toward Pyongyang]," and suggested that the United States make concessions to lure North Korea back to the negotiating table.<sup>140</sup> During the impasse, the Chinese clearly sought to protect the North Koreans against sanctions. "We are of the view that we should not resort to sanctions or pressure in international relations ... [such moves] will not solve problems," China's Foreign Ministry spokesman, Kong Quan, noted.<sup>141</sup> China has blocked all proliferation sanctions proposed at the United Nations Security Council and presumably would block any such sanctions aimed at Pyongyang in the future.<sup>142</sup> For example, China reportedly blocked a U.S. attempt to condemn North Korea's nuclear-related behavior in April 2003.<sup>143</sup>

During a July 2005 trip to the region by Secretary of State Condoleezza Rice, North Korea announced that it would return to the Six-Party Talks later that month. On July 26, 2005 the Six-Party Talks restarted in Beijing for what turned out to be a 13-day session. During the discussions, China circulated several draft documents aimed at resolving the nuclear crisis. But the talks recessed after North Korea expressed its desire to operate light water nuclear reactors.<sup>144</sup>

During the September round of the Talks, China circulated a proposed set of principles in which Pyongyang would commit to

eliminate its nuclear weapons and nuclear weapons programs, re-join the Nuclear Nonproliferation Treaty, and readmit nuclear inspectors.<sup>145</sup> On September 19, 2005 the six delegations signed the statement of principles. A copy of the joint statement following the meetings is attached as Appendix B of this chapter.

While this apparent progress toward the objective of dismantling North Korea's nuclear weapons programs and nuclear weapons is encouraging, there is a great distance to go before the agreed principles are reflected in reality. And the history of North Korea's action in abiding by and implementing agreements is abysmal. In the months ahead it will be critical for the other five parties to ensure realistic progress is made in achieving implementation of the agreed-upon principles. Because of China's unique leverage over North Korea, this effort will succeed only if China manifests true leadership and takes those steps that are necessary, while working with the other parties, to ensure North Korea's adherence to this latest agreement. The statement of U.S. Special Envoy for Six-Party Talks Joseph DeTrani at the Commission's March 2005 hearing is still applicable: "it is all the more imperative that China, as Chair of the Talks, use its influence and leverage . . . to achieve our shared goal of a nuclear-free Korean Peninsula."<sup>146</sup> According to another expert witness at the Commission's hearing, "[e]xtreme pressure must be applied to North Korea, and Pyongyang must understand that diplomatic, political and economic pressure will only increase if it continues its nuclear programs. China's active participation in such an effort is necessary to achieve any success."<sup>147</sup>

## **SECTION 4: CHINA'S ENERGY NEEDS AND STRATEGIES**

### **Key Findings**

- China's energy demand continues to grow at a rapid pace as its economy expands. Roughly 40 percent of all new world oil demand is attributable to China's rising energy needs.
- The United States and China currently follow different energy security policies regarding oil procurement. The United States secures its supplies via open international markets while China wants to own oil at the wellhead.
- China's energy acquisition efforts are expanding internationally, and specifically in Africa, the Western Hemisphere, Central Asia, and the Middle East.
- China appears to trade influence and assistance, including weapons technologies, arms, and other aid, for access to oil and gas in terrorist-sponsoring states, such as Sudan and Iran, greatly compromising U.S. efforts to combat terrorism, weapons proliferation, and human rights abuses.
- The United States should seek to influence China's energy policies and lessen the potential for future energy-related conflict by conducting joint research and development (R&D) programs with China to improve its energy efficiency and protect the environment.
- Both China and the United States are self-sufficient in coal. Clean coal and coal-to-liquids technologies are possible areas for mutually profitable joint R&D efforts and areas where the

United States could provide technological assistance that could benefit both nations, and enhance environmental protection.

### **Overview**

World energy consumption is projected to increase dramatically in the next two decades. During this period, China will be one of the leading consumers of energy and energy-related resources. In order to avoid energy-related conflicts with the United States and other nations, it is of great importance that China's energy policies be consistent and integrated with the world's energy markets and for it to implement responsible energy efficiency and environmental protection practices pertaining to energy use.

As the world's leading consumer of energy-related resources, the United States needs to formulate a responsible and realistic policy for responding to China's growing energy demand and policies of acquiring petroleum sources, and assist China to achieve maximum energy efficiency.

### **The Global Energy Picture**

World energy consumption, driven by growing global economies, is projected to increase by 57 percent in the next two decades. In emerging economies such as China's, energy use is projected to grow at a 3.2 percent average annual rate compared to a 1.1 percent average growth rate in mature economies.<sup>148</sup>

As stated by one witness at the Commission's July 2005 hearing, "Energy is a very political mineral . . . [and] all countries pursue energy security as a critical geopolitical objective."<sup>149</sup> China is no exception; it needs energy to sustain a robust economic growth rate that its leadership sees as necessary for it to maintain social and political stability.

Oil is the dominant global energy source, and the economies of China and the United States require much of the available supply. In an emerging Asia, including China and India, energy consumption is increasing dramatically; those developing economies will account for 45 percent of the projected increase in world oil consumption through 2025.<sup>150</sup>

Energy sector analysts and companies are divided in their assessments of the amounts and precise locations of world petroleum supplies—and how long the supplies will meet global demand. A recent report by the U.S. Energy Department's Energy Information Administration (EIA) titled "International Energy Outlook 2005" (IEO2005)<sup>151</sup> indicates there is sufficient oil to meet world aggregate demand during the next two decades; it is not expected to peak until after 2030. Some analysts and companies believe demand will exceed supply earlier, and others later. As the distance between the demand and supply lines narrow, there is an increasing likelihood some nations will be unable to secure supplies sufficient to meet their needs, which could lead to economic and social disruptions. There also will be a heightened risk of conflict among those nations competing for insufficient supplies. In this respect, China's projected increasing petroleum demand will be a prominent factor on the face of the global energy picture. Prudence dictates that policy makers operate on the basis of the more conservative assumptions.

Regardless of the adequacy of the global supply to meet aggregate global demand, political and other disruptions to the world's petroleum market may result in supply interruptions to one or more oil-importing nations well before aggregate demand exceeds aggregate supply. For example, with most of the world's untapped petroleum production capacity located in the Middle East, many experts believe the United States, China, and other net oil importing nations are vulnerable to supply disruptions resulting from political turmoil in that region. If such disruptions produce acute, geography-specific supply-demand imbalances, the affected nations will face substantial economic and political difficulties and pressures. If the United States or China or both were to be affected in this way, the two nations could find themselves on a petroleum collision course well before the world's aggregate petroleum supply is exhausted.

Coal ranks second behind petroleum as the world's leading energy source. The emerging economies of Asia, including China, will more than double their consumption of coal during the next twenty years.<sup>152</sup>

World electricity use is also predicted to double by 2025. It, of course, is a secondary energy source that is a product of other energy consumption. Coal and natural gas are, and will continue to be, the most important electricity-generating fuels, with nuclear power's role increasing and the roles of hydro generation and other renewables remaining lower but constant.<sup>153</sup>

According to the IEO2005, today's primary energy sources in the world ranked from most to least used are oil, coal, natural gas, renewables, and nuclear. Over that report's two-decade forecast period, fossil fuel use will grow most dramatically.

### **China's Energy Picture**

Energy provides the foundation for China's economy, and its economic policy therefore is dependent on the success of its energy policy. China has 10.7 percent of global energy reserves, but because of its tremendous population, its reserves per capita are very low and it already is heavily importing energy resources. The discrepancy between domestic supplies and projected energy needs will only get worse, especially given China's predicted growth and consumption rates.<sup>154</sup>

Seventy percent of China's primary energy needs are met by coal, 25 percent with oil, 3 percent with gas, and only 2 percent from all other energy sources, including nuclear at 1.4 percent.<sup>155</sup>

China has abundant coal reserves, and coal "will remain the fuel of choice in China's rapidly expanding industrial sector" for the foreseeable future.<sup>156</sup> However, China's coal reserves are located in its interior, and even though it is the second largest coal exporter in the world, it is importing increasing amounts of coal, primarily from Australia, because of transportation costs and domestic infrastructure limitations within China.

While coal remains important, China's oil use is expected to grow by an annual average rate of 5.8 percent in the next ten years.<sup>157</sup> According to some experts "[b]ecause they rely so heavily on fuel-guzzling factories for growth, Asian economies use considerably more oil and gas to generate economic activity than in the West.

They also have less oil and gas of their own, which means they must import more of their oil than the United States and other countries.”<sup>158</sup>

China became a net oil importer in 1993, and its oil imports have rapidly increased; as long as its economy continues to grow rapidly, China will continue to consume large amounts of foreign oil. And China is dramatically increasing its use of oil in its transportation sector. China’s OPEC imports are expected to reach 7.3 mbd by 2025, further increasing its Middle East dependency.<sup>159</sup> China’s domestic oil production is expected to remain roughly flat at approximately 3.5 mbd for the next 20 years to 2025, which will intensify its need to acquire and import oil from other nations.

Natural gas meets only 3 percent of China’s total primary energy demand, but China’s goal is to increase its use of natural gas so that it meets at least 8 to 10 percent of the nation’s energy demand by 2025.<sup>160</sup> To this end, China has reached a number of supply agreements to increase imports of liquefied natural gas (LNG). Overall, China’s natural gas consumption is expected to grow at an average annual rate of 7.8 percent, with much of the increased consumption going to electricity generation. Only China’s nuclear power generation is expected to grow more rapidly, at a 9.9 percent average annual rate through 2025.<sup>161</sup>

### **China’s Energy Policy and Objectives**

As noted in the Commission’s 2004 Annual Report to Congress, China’s stated energy policy goals are to reduce its reliance on imports by further diversifying the types of energy it uses, broaden import sources, and improve the technology used in energy production and consumption to increase efficiency. In all likelihood, however, China will realize its goal of reduced dependency on outside energy sources only in the case of coal.<sup>162</sup>

To reach its goals, China primarily employs a two-pronged energy strategy based on (1) increasing domestic energy output, and (2) pursuing strategic deals to secure access to diverse international petroleum resources, preferably by obtaining rights to the physical production. China’s pursuit of Unocal, as discussed later in this section, typifies its attempts to diversify and expand its international energy supplies and thus reduce its dependency on the Middle East. Nonetheless, its flat domestic petroleum supply and heavy reliance on Middle East oil is still unnerving to Beijing.<sup>163</sup>

China increasingly is focused on acquiring petroleum at the source, rather than purchasing it—as the United States and most other nations do—on international markets. In the past ten years China’s national oil companies (NOCs) have acquired equity interests in oil projects in many countries, including Australia, Azerbaijan, Burma, Canada, Ecuador, Indonesia, Iran, Iraq, Kazakhstan, Oman, Peru, Sudan, Venezuela, and Yemen.

Witnesses presented two views to the Commission about China’s strategy of acquiring petroleum at the source. According to Fareed Mohamedi, Chief Economist for PFC Energy, China’s current campaign to overspend in hopes of securing oil at the wellheads may yield little benefit.<sup>164</sup> But other experts disagree, noting that China’s strategy to purchase and secure oil resources depends on the

future. If there is increased political instability, greater scarcity, and thus an increased relevance of physical acquisition, then China's current attempts to secure energy resources "may well pay off."<sup>165</sup> And it is important to recognize that, as a non-market command economy, China is likely to pay a premium for supplies while subsidizing the costs to its consumers.

Other Chinese energy policies are focusing on structural economic adjustments to lower energy use intensity and improve the efficiency of energy exploitation. The central government is attaching increased importance to energy matters and has issued a series of new laws regulating the exploitation, utilization, and conservation of the country's energy resources. New policies also call for improving the efficiency of the energy sector's infrastructure.<sup>166</sup>

### ***China's Global Search for Oil***

#### *The Middle East*

According to testimony before the Commission, China is increasing its ties with Middle East energy producers. Saudi Arabia is China's largest crude oil supplier, and China is now exploring Saudi natural gas fields. The Saudi national oil company Aramco is a 25 percent investor in China's biggest refinery and petrochemical integration project.<sup>167</sup> Elsewhere in the region, China and Iran recently signed an oil deal worth \$70 billion.<sup>168</sup> Reportedly, Iran currently supplies 13.6 percent of China's oil imports.<sup>169</sup>

#### *Africa*

China obtains 7 percent of its oil imports from Sudan, which may have Africa's greatest unexploited oil resources, and reportedly has invested \$3 billion there—China's largest overseas investment project. In the past five years China has developed several of Sudan's oil fields, built a 930-mile pipeline, a refinery and a port.<sup>170</sup> China provides what Sudan's regime wants but has difficulty obtaining elsewhere: China reportedly is Sudan's largest arms supplier, and it is believed that 80 percent of Khartoum's oil revenues have been used for arms purchases.<sup>171</sup>

#### *Central Asia*

In 2006, Kazakhstan—which today produces a little more than 1 percent of the global oil supply—will begin exporting petroleum to China. China also is working with Kyrgyzstan and Uzbekistan on energy-related issues.<sup>172</sup>

#### *The Western Hemisphere*

China also is seeking energy sources in the Western Hemisphere. It appears to be focused on Venezuela for future oil supplies, although Venezuela currently does not have the ability to export a significant amount of oil to China—primarily because there are no practical means of moving it to the Pacific Ocean for shipment. Venezuela extracts about 2.6 mbd and sends 60 percent of this to the United States; Venezuela's goal is to produce five mbd by 2009. China already operates two oil fields in Venezuela and Venezuela's President Hugo Chavez has said that China will be allowed to operate 15 mature oil fields that could produce more than a billion barrels. Chavez also has invited Chinese firms to bid on gas explo-



ration contracts. In addition, Venezuela and China are exploring means of transporting oil from the wellhead to deepwater Pacific transfer points, including pipelines across Venezuela and Colombia or, alternatively, through Panama. China also plans to build refineries in Venezuela.<sup>173</sup>

Brazil's oil exports to China are increasing and reached 14 million barrels in 2004, up 180 percent from 2003.<sup>174</sup> In May 2004, Brazilian and Chinese companies signed a number of oil-related cooperation agreements. China has pledged to invest \$10 billion in Brazil over the next two years and China's Sinopec is considering participating in a proposed 1,225 mile, \$1.3 billion natural gas pipeline in Brazil.<sup>175</sup>

China recently has evidenced interest in Canada's significant oil reserves—which rank second only to Saudi Arabia's when Canada's oil sands and shale oil are taken into account—but the relationship is still in its very early stages. A dispute between the United States and Canada over allegations that the Canadian provinces were unfairly subsidizing softwood lumber exports and subsequent punitive U.S. tariffs is affecting energy-related relations between the two countries.<sup>176</sup> At the same time, Canada is increasing discussions and deals with Chinese petroleum companies, possibly in retaliation for the U.S. softwood tariffs.<sup>177</sup> To facilitate Canadian exports to China, a \$2.5 billion Canadian pipeline to the Pacific would be needed.

### **The Impact of China's Energy Use and Policies on U.S. Interests**

#### ***China's Strategy to Control Energy Sources***

There is a clear distinction between U.S. and Chinese approaches to securing oil supplies. Whereas the United States has shifted from an oil import strategy that was based on controlling the oil at the wellhead to one that is based upon global market supply and pricing, China focuses on owning oil at the point of production. These different energy policies could bring both countries' energy interests into conflict.<sup>178</sup> This potential for conflict already has been visible in the effort during 2005 by a Chinese oil firm to purchase an American oil firm and its reserves, as described later in this section.

As China has become the world's most prolific manufacturing center, it also has become the world's largest consumer of minerals and other natural resources and the number two consumer of oil, second only to the United States. Latin America provides an example of how Chinese mercantilism is assuming a neo-colonialist pattern in which a dominant country secures markets for its manufactured goods in exchange for raw materials from its weaker partners. Ambitious mercantile powers aim to keep any advanced industrial project in their own country while relegating trade partners to subordinate supplier status.<sup>179</sup> The overseas expansion by China's NOCs fits this pattern.

#### ***Other Geostrategic Implications***

According to testimony presented to the Commission, China is increasing its ties with Middle East energy producers, and the

United States should look carefully at the Sino-Saudi strategic oil partnership. As noted earlier in this section, Saudi Arabia currently is China's largest crude oil supplier, China is considering obtaining Saudi natural gas, and the Saudi national oil company Aramco is investing in China's biggest refinery and petrochemical integration project.<sup>180</sup> The United States is heavily reliant on Saudi oil and gas, and therefore Saudi sentiments toward our nation are of considerable import. While there is still a strong U.S.-Saudi relationship, Beijing would like to see Riyadh shift its friendship to China.<sup>181</sup> It is important for the United States to be mindful of this and to ensure that China not undermine the U.S.-Saudi relationship. Assessments of the significance of China's energy-related activities in the Americas vary, and the United States needs to monitor these activities closely, and carefully determine their importance and the most profitable way to respond to them. According to one witness who testified before the Commission, "China's energy acquisition in the Western Hemisphere will eventually make the United States more dependent on the Middle East and other volatile areas of the world. Every barrel of oil that China buys in America, whether it is in North America, Central America, or Latin America, essentially means one less barrel available for the U.S. market."<sup>182</sup> Yet there is relatively little apparent concern in the United States about Chinese activities in Latin America.<sup>183</sup>

Looking specifically at Venezuela—which currently supplies a large percentage of U.S. oil import requirements—reveals some troublesome signs. Chinese efforts, described in the previous segment of this section, to acquire Venezuelan oil and gas are increasingly successful. Today, as one Commission witness described the situation, Venezuela currently is unable to export a significant amount of oil to China, but that could change and the United States should keep this oil available for itself.<sup>184</sup>

Others, however, see no reason for concern regarding China's pursuit of petroleum from Venezuela, or its ability to interfere with U.S. access to petroleum from that country, because Venezuela is 'hard-wired' to the United States—among other reasons because the United States refines much of Venezuela's oil. According to Fareed Mohamedi, "the Chinese threat [to U.S. access to Venezuela's oil] has been slightly overblown."<sup>185</sup>

China's growing interest in Canada's oil reserves puts the United States in the difficult position of balancing its commitment to open market energy acquisition policies with the desire to retain access to nearby energy supplies. Canada's oil reserves rank second only to Saudi Arabia's when oil sands and shale oil are taken into account, and oil solely from Canada's sands would be enough to cover all U.S. requirements for the next 100 years, thus ending U.S. dependence on Middle East oil.<sup>186</sup> The United States needs to give considerably greater attention to how it wishes to address foreign competition for this adjacent resource, and pay particular attention to China's competition because of its policy of trying to obtain a lock on energy resources and remove them from the global energy market.

***The Attempted Purchase of Unocal by the China National Offshore Oil Corporation***

In mid-2005, the China National Offshore Oil Corporation (CNOOC), a 70 percent government-owned corporation, attempted to outbid Chevron, a large U.S. oil company, to acquire a smaller U.S. oil company, Unocal. On July 13, 2005, the Commission's Chairman testified before the House Committee on Armed Services about the U.S. national security dimensions of CNOOC's proposed takeover bid. The Chairman's testimony covered the nature of the proposed action, China's energy strategy, the long-term impact of China's energy practices on the U.S. economy and national security, and the role of the Committee on Foreign Investment in the United States (CFIUS) in the proposed acquisition.

The Chairman indicated that China's strategic approach to secure its oil supply at the source is mercantilist in nature and conflicts with U.S. energy policy that relies on open markets and promotes sharing arrangements in the event of supply disruptions. He also pointed out other features of the proposed transaction that were troublesome, including CNOOC's use of essentially unlimited Chinese government resources, including below-market financing, in what purportedly was a free-market acquisition attempt.

After it became clear that there would be substantial Congressional opposition to CNOOC's acquisition attempt, and that the CFIUS would likely give the offer a searching review, CNOOC withdrew its bid. The episode dramatized China's strategy to acquire oil and gas resources at the source and Beijing's willingness to pursue that strategy all the way to the acquisition of a U.S. energy company. As Chairman D'Amato noted in his testimony, "it is critical to persuade China to abandon this mercantilist spree to lock up attractive energy supplies wherever it can, and instead participate [with the International Energy Agency] to plan for sharing oil in the case of supply disruptions, and to participate in the open market buying of its supplies and begin relying on free markets to promote energy security for everyone."

**U.S. Influence on China's Energy Policy**

The United States and China have several energy-related similarities: both are rich in coal, biomass, and garbage, but they lack sufficient supplies of oil upon which both of them heavily depend. Progress in perfecting and deploying both clean coal<sup>187</sup> and biomass conversion technologies could make welcome contributions to reducing oil consumption in both nations. Therefore, according to one witness who testified before the Commission, there is "tremendous potential [for the two nations to cooperate] in these fields."<sup>188</sup>

Globally, China is increasingly active in striving for energy security in ways that portend direct competition for energy resources with the United States. This is producing a possibility of conflict between the two nations. As Amy Myers Jaffe testified before the Commission in 2003, China views the United States as a potential enemy, largely as a result of the possibility of energy-related conflict.<sup>189</sup> In order to avoid such an outcome, which could entail terrible human and economic costs for both nations and threaten global stability, it is vital for the United States to work with China to attempt to remove or reduce the points of friction.

The United States needs to work diligently to persuade China to participate with the International Energy Agency (IEA) and switch its strategy of acquiring and hoarding oil reserves to purchasing its supplies on the open market. As recommended in the Commission's 2004 Annual Report, China should work with the IEA to develop a meaningful strategic petroleum reserve and coordinate the release of stocks in supply disruption crises or speculation-driven price spikes.<sup>190</sup> The Commission also encouraged increased bilateral cooperation in improving China's energy efficiency and environmental performance.<sup>191</sup> Recently, Deputy Secretary of State Robert Zoellick called on China to work with the United States and other nations on energy-related issues, including working through the IEA to build and manage strategic reserves.<sup>192</sup> While a number of existing institutions have addressed portions of this agenda, its importance warrants greater attention.

China also can profit from U.S. technical assistance in a number of areas to increase the efficiency of its energy consumption and thereby reduce demand. Among these are energy use intensity reduction, clean coal technologies, coal-to-liquids technologies,<sup>193</sup> and combustion efficiency improvements. Both nations could benefit from joint R&D programs—or from multilateral programs in which they both participate—directed toward (1) areas where greater efficiency can be realized, (2) switching some current reliance on oil to coal and natural gas—supplies of both being estimated to last longer and to be more easily obtained than oil—and doing so in ways that will not result in environmental damage, and (3) enhancing the economic, technical, and logistical feasibility of using renewable energy sources in lieu of some portion of the projected increases in demand for oil. The United States and China also could work together to develop and implement utilization of “next generation fuels” such as hydrogen.

Inertia is likely to increase rather than decrease the likelihood that competition for energy sources, particularly oil, will create differences between China and the United States in coming years, and if these differences are permitted to grow into significantly conflicting interests and objectives, there is a risk that the conflicts will escalate into long-term animosity. It is profoundly in the interests of both nations to avoid this outcome. Conscious, concerted, intensive efforts need to be made by the U.S. government to enlist China in the types of cooperative activities described above. To the fullest extent possible, the United States should try to catalyze the development of such efforts on a multilateral basis. In undertaking these efforts, the United States will need to be cognizant that China will only agree to participate if it sees its own interests advanced by the effort.

## **RECOMMENDATIONS**

### *Addressing China's Regional Activities*

- The Commission recommends that Congress work with the Administration to assess China's objectives and tactics in regions around the globe and identify the extent to which Chinese interests run, or could run, contrary to U.S. interests. Specific areas

and issues about which the Commission is concerned include China's efforts to—

- Secure energy resources in the Western Hemisphere, which may lead the United States to depend more heavily on Middle East oil.
- Improve its relations with, and obtain access to the oil and minerals of, problematic countries such as Iran, Sudan, and Zimbabwe that frustrate U.S. and other nations' efforts to curb the objectionable behavior of such countries.
- Push U.S. counterterrorism forces in Central Asia out of the region.
- Improve its rapport with India at the expense of the strengthening relationship between the United States and India. To facilitate this effort, Congress should urge the Administration to increase intelligence capabilities focused on China and its global activities to increase U.S. knowledge about China's objectives and tactics.
- The Commission recommends that Congress encourage the President and the Secretaries of State and Defense to continue to press their European counterparts to maintain the EU embargo on weapons sales to China. U.S. officials must emphasize in the starkest terms that removal of the embargo is not merited by significant improvements in China's human rights actions. They also must stress that flows of weapons to China that might result from lifting the embargo could increase the risk of conflict between China and the United States and also increase the likely cost to the United States of any such conflict in time, money, materiel, and casualties—and that, consequently, the United States will view lifting the embargo with grave concern.
- The Congress should urge the Administration to reach out to and work with regional alliances, institutions, and organizations to preserve other sources of power and influence that can help to maintain political and power equilibrium in the world's various regions that may be adversely affected and distorted by a rising China.
- The Commission recommends that Congress examine whether China is eroding Hong Kong's autonomy in violation of its commitments under the Sino-British Joint Declaration of 1984, the Hong Kong Basic Law, and the principle of 'one country, two systems.' If it concludes this is occurring, Congress should determine whether to recommend to the President that he invoke the provisions of the U.S.-Hong Kong Policy Act, i.e. "whenever the President determines that Hong Kong is not sufficiently autonomous to justify treatment under a particular law of the United States ... the President may issue an Executive Order suspending the certification of section 201(a) regarding continued separate application of U.S. laws with respect to Hong Kong." The Commission believes it is important that the authorities in Beijing be aware that the question of Hong Kong's status is a matter of special concern to the Congress.

*Addressing China's Proliferation Practices and Record*

- Current sanctions against Chinese companies that proliferate equipment and technology related to WMD and their delivery systems should be broadened and harmonized for increased effectiveness. The Commission recommends that Congress expand current sanctions regimes to extend penalties to the parent company of a subsidiary that engages in proliferation activities, regardless of the parent company's knowledge of or involvement in the problematic transaction. Access to U.S. markets (including capital markets), technology transfers, and U.S. government grants and loans should be restricted from proliferating companies and their parent companies and related subsidiaries irrespective of the related firms' knowledge of the transfers in question.
- In cases where diplomatic efforts are unsuccessful in spurring the government of a country such as China to take effective actions to halt proliferating activity, the United States should use its economic leverage to ensure action. In connection with the recommendation above that Congress broaden and harmonize proliferation sanctions, and consonant with recommendations contained in its 2002 and 2004 Annual Reports, the Commission recommends that Congress amend all current statutes pertaining to proliferation to—
  - Coordinate and increase the array of sanctions the President is authorized to invoke against foreign governments that directly proliferate WMD, their delivery systems, and associated technologies to include increased import and export limitations; restrictions on access to U.S. capital markets; restrictions on U.S. direct investment; U.S. opposition to loans from international financial institutions; prohibition of loans from U.S. banks; reduction or elimination of foreign assistance; prohibition of arms sales and military financing; elimination of U.S. government credit or credit guarantees; prohibition of U.S. government procurement from any company based in the offending country; and restrictions on science and technology cooperation with or transfers to the offending country. The new authority should require the President to report to Congress the rationale for and proposed duration of the sanctions within 72 hours of imposing them and, in any case where the President waives imposition of such a sanction, the authority should require the President to notify Congress of the justification for that waiver.
  - Authorize the President to impose the same sanctions listed above, where applicable, against a country or the government of a country in cases where companies in the country are persistently engaged in proliferation of WMD, their delivery systems, and associated technologies and where the government does not take effective steps to curtail those activities.
- The Commission recommends that the Congress urge the Administration to work closely with other countries to address Chinese proliferation issues.

*Improving Port Security*

- The Commission recommends that Congress direct the Department of Homeland Security to give greater priority to threats posed by waterborne shipping. As part of this effort, specific attention must be paid to the need for enhancing inspection of container seals and ensuring that appropriate paperwork accompanies these containers. Import and export containers must be refused entry without proper documentation. Proper attention must be given to ensuring that bonded agents and other personnel are able to appropriately and adequately inspect containers. Technological approaches to inspecting containers and ships must supplement, not replace, human inspections.
- Congress should press the Administration to give greater priority to its Megaports Initiative and highlight the need for China to reach agreement on this program. Refusal to cooperate on the Megaports Initiative should trigger enhanced inspection procedures on products coming from ports that have been determined to be of concern to U.S. security officials.

*Pressing China to Curtail North Korea's Nuclear Weapons Programs*

- China should be commended for its diplomatic activity in bringing North Korea back to the Six-Party Talks and for circulating the set of principles to which all parties agreed on September 19, 2005. The Commission recommends that Congress call on the Administration to press China to use its substantial leverage with North Korea to secure its adherence to the agreed principles.
- If North Korea fails to abide by the agreed principles it signed in September 2005, the Commission recommends that Congress direct the Administration to devise and pursue alternative methods to address this problem outside the Six-Party Talks. In such a case, Congress also should encourage the Administration to propose a United Nations Security Council resolution that at a minimum condemns North Korea's February 10, 2005 statement and calls on it to dismantle its nuclear weapons programs and nuclear weapons. China's response to, and vote on, such a resolution will reveal its sincerity in pressuring North Korea to resolve this matter.

*Addressing China's Energy Policies*

- The Commission recommends that Congress:
  - Mandate the establishment of a "U.S.-China Energy Working Group" in which both nations are represented by senior government officials, supported by an advisory group composed of representatives of relevant industry, environmental, academic, research and non-governmental organizations and members of Congress. The Group should have the responsibility to (1) identify areas where both nations can most profitably work together for mutual benefit on energy issues and challenges; (2) identify and rank areas and issues with respect to which there is a significant possibility that U.S.-China energy-related con-

- flicts will develop; (3) offer recommendations to both governments for resolving energy-related problems and disagreements; (4) offer recommendations to both governments for promoting development and use of conservation and efficiency mechanisms, alternative fuels, and other means of securing energy self-sufficiency and reducing the need for imported energy sources, especially oil; and (5) oversee and make recommendations to both governments concerning joint research and development activities in energy-related fields;
- Encourage the initiation of new cooperative efforts with China to (1) increase the efficiency of its energy use, including energy use intensity reduction, clean coal technologies, coal-to-liquids technologies, and combustion efficiency improvements; (2) shift some current reliance on oil to coal (using advanced clean coal technology) and natural gas; and (3) explore and pursue the economic, technical, and logistical feasibility of using renewable energy sources in lieu of some portion of the projected increase in oil use. At the same time, China should be strongly encouraged to (1) abandon its policy of acquiring oil at the wellhead or field in a mercantilist fashion; (2) procure oil and gas according to international practices (i.e. purchasing it on the open international marketplace); and (3) cease providing assistance, arms, and proliferation-related technologies to problematic states in possible return for access to their energy resources; and
  - Urge the Administration to use all available bilateral and multilateral diplomatic means to persuade China to change its approach to energy security with respect to oil resources by (1) purchasing oil for import in the open international oil market; (2) coordinating its activities with the IEA; and (3) engaging in the IEA's efforts to build oil stocks and release them on a coordinated basis in the event of supply disruptions or speculation-driven price spikes.
  - The Commission urges Congress to instruct the U.S. intelligence community to increase its intelligence collection with respect to Chinese activities in Africa, Central Asia, and, especially, the Western Hemisphere, in order to advise both appropriate Executive Branch and Legislative Branch officials of energy-related actions and trends that warrant careful attention and response.



**Appendix A Summary of Proliferation Sanctions Against Chinese Companies** <sup>194</sup>

Entity/Person	Reason: Statutes	Effective Dates
<ul style="list-style-type: none"> <li>—China Great Wall Industry Corporation</li> <li>—China Precision Machinery Import/Export Corp. (CPMIEC)</li> </ul>	Missile Proliferation: § 73(a)(2)(A), Arms Export Control Act § 11B(b)(1)(B)(i), Export Administration Act (Category II items in MTCR Annex to Pakistan)	June 25, 1991 waived on March 23, 1992
Ministry of Aerospace Industry, including CPMIEC, and related entities, including: —China National Space Administration —China Aerospace Corp. —Aviation Industries of China —CPMIEC —China Great Wall Industry Corp. or Group —Chinese Academy of Space Technology —Beijing Wan Yuan Industry Corp. (aka Wanyuan Company or China Academy of Launch Vehicle Technology) —China Haiying Company —Shanghai Astronautics Industry Bureau —China Chang Feng Group (aka China Changfeng Company)	Missile Proliferation: § 73(a)(2)(A), Arms Export Control Act § 11B(b)(1)(B)(i), Export Administration Act (Category II items in MTCR Annex to Pakistan)	August 24, 1993 waived on November 1, 1994
5 PRC Citizens: —Liao Minglong —Tian Yi —Chen Qingchang (aka Q.C. Chen) —Pan Yongming —Shao Xingsheng 2 PRC Companies: —Nanjing Chemical Industries Group —Jiangsu Yongli Chemical Engineering and Technology Import/Export Corp. 1 Hong Kong Company: —Cheong Yee Ltd.	CW Proliferation: § 81(c), Arms Export Control Act § 11C(c), Export Administration Act (dual-use chemical precursors, equipment, and/or technology to Iran)	May 21, 1997 remain in effect
—Jiangsu Yongli Chemicals and Technology Import/Export Corp.	CW/BW Proliferation: § 3, Iran Nonproliferation Act	June 14, 2001 for two years
—China Metallurgical Equipment Corp. (aka CMEC, MECC)	Missile Proliferation: § 73(a)(2)(A), Arms Export Control Act § 11B(b)(1)(B)(i), Export Administration Act (MTCR Category II items to Pakistan)	September 1, 2001 for two years

**Appendix A Summary of Proliferation Sanctions Against Chinese Companies** <sup>194</sup>

Entity/Person	Reason: Statutes	Effective Dates
<ul style="list-style-type: none"> <li>—Liyang Chemical Equipment</li> <li>—China Machinery and Electric Equipment Import/Export Co.</li> <li>—Q.C. Chen</li> </ul>	CW/BW Proliferation: § 3, Iran Nonproliferation Act (Australia Group Controls)	January 16, 2002 for two years
<ul style="list-style-type: none"> <li>—Liyang Yunlong (aka Liyang Chemical Equipment Co.)</li> <li>—Zibo Chemical Equipment Plant (aka Chemet Global Ltd.)</li> <li>—China National Machinery and Electric Equipment Import and Export Co.</li> <li>—Wha Cheong Tai Co.</li> <li>—China Shipbuilding Trading Co.</li> <li>—CPMIEC</li> <li>—China Aero-Technology Import/Export Corp. (CATIC)</li> <li>—Q.C. Chen</li> </ul>	Weapons Proliferation: § 3, Iran Nonproliferation Act (AG-controlled items and conventional weapons-related technology related to unspecified missiles)	May 9, 2002 for two years
<ul style="list-style-type: none"> <li>—Jiangsu Yongli Chemicals and Technology Import Export Corp.</li> <li>—Q.C. Chen</li> <li>—China Machinery and Equipment Import Export Corp.</li> <li>—China National Machinery and Equipment Import Export Corp.</li> <li>—CMEC Machinery and Electric Equipment Import Export Co.</li> <li>—CMEC Machinery and Electrical Import Export Co.</li> <li>—China Machinery and Electric Equipment Import Export Co.</li> <li>—Wha Cheong Tai Co.</li> <li>—China Shipbuilding Trading Co.</li> </ul>	Weapons Proliferation: § 1604(b), Iran-Iraq Arms Non-Proliferation Act and § 81(c), Arms Export Control Act § 11C(c), Export Administration Act (chemical weapons technology to Iran)	July 9, 2002 for two years for one year
<ul style="list-style-type: none"> <li>—North China Industries Corporation (NORINCO)</li> </ul>	Only under Iran-Iraq Arms Nonproliferation Act (cruise missile technology)	
<ul style="list-style-type: none"> <li>—Taian Foreign Trade General Corporation</li> <li>—Zibo Chemical Equipment Plant</li> <li>—Liyang Yunlong Chemical Equipment Group Company</li> <li>—NORINCO</li> <li>—CPMIEC</li> </ul>	Missile Proliferation: Executive Order 12938 (amended by Executive Order 13094) (missile technology to Iran)	May 23, 2003 for two years
<ul style="list-style-type: none"> <li>—CPMIEC</li> </ul>	Missile Proliferation: § 3, Iran Nonproliferation Act	June 26, 2003 for two years
	Missile Proliferation: Executive Order 12938 (as amended by Executive Order 13094) (missile technology to publicly unnamed country)	July 30, 2003 for indefinite period

<p>—NORINCO</p>	<p>Missile Proliferation: § 73(a)(2)(A) and (C), Arms Export Control Act § 11B(b)(1)(B)(i) and (iii), Export Administration Act (Substantial contribution in proliferation of MTCR Category II technology to publicly unnamed country)</p>	<p>September 19, 2003 for two years; waiver for one year on import ban for non-NORINCO products; waiver extended on September 18, 2004 for six months; waiver extended on March 18, 2005 for six months; waiver extended on September 18, 2005 for six months</p>
<p>—Beijing Institute of Opto-Electric Technology (BIOET) —NORINCO —CPMIEC —Oriental Scientific Instruments Corporation (OSIC) —Zibo Chemical Equipment Plant (aka Chemet Global Ltd., South Industries Science and Technology Trading Company) —Xinshidai (aka China Xinshidai Company, XSD, China New Era Group, or New Era Group)</p>	<p>Weapons Proliferation: § 3, Iran Nonproliferation Act (unspecified transfers to Iran controlled under multilateral export control lists or having the potential to make a material contribution to WMD or cruise or ballistic missiles)</p>	<p>April 1, 2004 for two years</p>
<p>—Beijing Institute of Aerodynamics —BIOET —China Great Wall Industry Corporation —NORINCO —LIMMT Economic and Trade Company, Ltd. —OSIC —South Industries Science and Technology Trading Co.</p>	<p>Missile Proliferation: Executive Order 12938 (as amended by Executive Order 13094) (material contribution to missile proliferation in publicly unnamed country)</p>	<p>September 20, 2004 for two years</p>
<p>—Liaoning Jiayi Metals and Minerals Co. —Q.C. Chen —Wah Cheong Tai Co. Ltd. —Shanghai Triple International Ltd.</p>	<p>Weapons Proliferation: § 3, Iran Nonproliferation Act (unspecified transfers to Iran controlled under multilateral export control lists or having the potential to make a material contribution to WMD or cruise or ballistic missiles)</p>	<p>September 23, 2004 for two years</p>
<p>—Beijing Alite Technologies Co. Ltd. —CAITC —China Great Wall Industry Corp. —NORINCO —Q.C. Chen —Wah Cheong Tai Co. (aka Wah Cheong Tai Co., Hua Chang Tai Co.) —Zibo Chemet Equipment Corp. (aka Chemet Global Ltd.)</p>	<p>Weapons Proliferation: § 3, Iran Nonproliferation Act (unspecified transfers to Iran controlled under multilateral export control lists or having the potential to make a material contribution to WMD or cruise or ballistic missiles)</p>	<p>November 24, 2004 for two years</p>
<p>—Beijing Alite Technologies Co. Ltd. —CAITC —China Great Wall Industry Corp. —NORINCO —Q.C. Chen —Wah Cheong Tai Co. (aka Wah Cheong Tai Co., Hua Chang Tai Co.) —Zibo Chemet Equipment Corp. (aka Chemet Global Ltd.)</p>	<p>Weapons Proliferation: § 3, Iran Nonproliferation Act (unspecified transfers to Iran controlled under multilateral export control lists or having the potential to make a material contribution to WMD or cruise or ballistic missiles)</p>	<p>December 27, 2004 for two years</p>

## **Appendix B Joint Statement of the Fourth Round of the Six-Party Talks**

Beijing, September 19, 2005<sup>195</sup>

The following is a text of the joint statement at the conclusion of the fourth round of Six-Party Talks, as released in Beijing on September 19, 2005 by the Ministry of Foreign Affairs of the People's Republic of China.

### **Joint Statement of the Fourth Round of the Six-Party Talks Beijing 19 September 2005**

The Fourth Round of the Six-Party Talks was held in Beijing, China among the People's Republic of China, the Democratic People's Republic of Korea, Japan, the Republic of Korea, the Russian Federation, and the United States of America from July 26th to August 7th, and from September 13th to 19th, 2005.

Mr. Wu Dawei, Vice Minister of Foreign Affairs of the PRC, Mr. Kim Gye Gwan, Vice Minister of Foreign Affairs of the DPRK; Mr. Kenichiro Sasae, Director-General for Asian and Oceanian Affairs, Ministry of Foreign Affairs of Japan; Mr. Song Min-soon, Deputy Minister of Foreign Affairs and Trade of the ROK; Mr. Alexandr Alekseyev, Deputy Minister of Foreign Affairs of the Russian Federation; and Mr. Christopher Hill, Assistant Secretary of State for East Asian and Pacific Affairs of the United States attended the talks as heads of their respective delegations.

Vice Foreign Minister Wu Dawei chaired the talks.

For the cause of peace and stability on the Korean Peninsula and in Northeast Asia at large, the Six Parties held, in the spirit of mutual respect and equality, serious and practical talks concerning the denuclearization of the Korean Peninsula on the basis of the common understanding of the previous three rounds of talks, and agreed, in this context, to the following:

1. The Six Parties unanimously reaffirmed that the goal of the Six-Party Talks is the verifiable denuclearization of the Korean Peninsula in a peaceful manner. The DPRK committed to abandoning all nuclear weapons and existing nuclear programs and returning, at an early date, to the Treaty on the Non-Proliferation of Nuclear Weapons and to IAEA safeguards. The United States affirmed that it has no nuclear weapons on the Korean Peninsula and has no intention to attack or invade the DPRK with nuclear or conventional weapons.

The ROK reaffirmed its commitment not to receive or deploy nuclear weapons in accordance with the 1992 Joint Declaration of the Denuclearization of the Korean Peninsula, while affirming that there exist no nuclear weapons within its territory. The 1992 Joint Declaration of the Denuclearization of the Korean Peninsula should be observed and implemented. The DPRK stated that it has the right to peaceful uses of nuclear energy. The other parties expressed their respect and agreed to discuss, at an appropriate time, the subject of the provision of light water reactor to the DPRK.

2. The Six Parties undertook, in their relations, to abide by the purposes and principles of the Charter of the United Nations and recognized norms of international relations. The DPRK and the United States undertook to respect each other's sovereignty, exist peacefully together, and take steps to normalize their relations subject to their respective bilateral policies. The DPRK and Japan undertook to take steps to normalize their relations in accordance with the Pyongyang Declaration, on the basis of the settlement of unfortunate past and the outstanding issues of concern.

3. The Six Parties undertook to promote economic cooperation in the fields of energy, trade and investment, bilaterally and/or multilaterally.

China, Japan, ROK, Russia and the US stated their willingness to provide energy assistance to the DPRK. The ROK reaffirmed its proposal of July 12th 2005 concerning the provision of 2 million kilowatts of electric power to the DPRK.

4. The Six Parties committed to joint efforts for lasting peace and stability in Northeast Asia. The directly related parties will negotiate a permanent peace regime on the Korean Peninsula at an appropriate separate forum. The Six Parties agreed to explore ways and means for promoting security cooperation in Northeast Asia.

5. The Six Parties agreed to take coordinated steps to implement the aforementioned consensus in a phased manner in line with the principle of "commitment for commitment, action for action."

6. The Six Parties agreed to hold the Fifth Round of the Six-Party Talks in Beijing in early November 2005 at a date to be determined through consultations.

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## CHAPTER 5

### CHINA'S MEDIA AND INFORMATION CONTROL

#### Key Findings

- China's economic reforms have not led to fundamental changes in its policy of controlling the flow of information. China's Internet filtering system is the most sophisticated in the world and uses numerous techniques to minimize Chinese citizens' exposure to topics the Chinese Communist Party sees as threatening to its rule, including official corruption, freedom, and democracy, or to its standards of decency. In addition to technical controls, China discourages free expression by encouraging collective responsibility and self-censorship, reinforced by occasional high-profile incarcerations. China reportedly has as many as thirty thousand individuals whose job it is to police the Internet.
- The Chinese government encourages nationalist sentiment in the news media and online. Anti-U.S., anti-Japanese, and anti-democratic views are rarely censored while anti-government sentiments are heavily monitored and removed as soon as they are spotted by the government Internet police.
- Some U.S. firms that wish to establish, maintain, or expand their presence in the Chinese market have assisted the government in its effort to control speech and have assisted in official actions against Internet users.

#### Overview

The Chinese government's extensive and persistent controls over the flow of information in the media and over the Internet pose an ongoing security concern for the United States. Through these controls, China's government plays a commanding role in the formation of public opinion about the United States and U.S. policies, which can in turn undermine U.S. diplomatic efforts. These practices also risk creating an environment prone to misunderstanding and miscalculation in the bilateral relationship, particularly during times of crisis.

China's Internet filtering system has grown markedly in size and sophistication over the last two years and is currently the most sophisticated Internet control system in the world. Search techniques that precisely target prohibited content but entail little blocking of similar but less sensitive materials make the Chinese system more effective but less obvious to the casual Internet user. In addition, the Chinese authorities' focus on Chinese language content rather than content in English or other foreign languages draws less attention from foreign critics but does not appreciably dilute the effectiveness of the censorship.

China's control of information media exacerbates and perpetuates a xenophobic—and at times particularly anti-American—Chinese nationalism. The Commission remains concerned about the long-term effects of these practices on a new generation of Chinese citizens who have been persistently subjected to a highly controlled and manipulated information environment.

The Commission held a hearing on April 14, 2005 to address the mechanisms and methods used by China's government to control information, including the Internet and news media. The hearing particularly sought to understand how government control and influence affects Chinese popular opinion of the United States and its policies.

The Commission also used the opportunity to publicly release and hear testimony about a report from the OpenNet Initiative (ONI)<sup>1</sup> titled "Internet Filtering in China in 2004–2005: A Country Study." The report maps China's system of multiple control points and notes the adaptability of the system in response to efforts to circumvent controls. It further documents the opaque nature of China's Internet control system. Guiding laws and regulations are vague in defining prohibited content, and citizens have no opportunity to view which sites are blocked or method for appealing the decision to block a site. ONI concludes that "China's legal and technological systems combine to form a broad, potent, and effective means of controlling the information that Chinese users can see and share on the Internet."<sup>2</sup>

### **China's Information Control Mechanisms**

China remains adept at controlling information flows within the country, which affects U.S. interests by influencing public opinion about the United States and its policies. Chinese information control can affect the United States in other ways as well, such as by exacerbating global public health threats. Despite international criticism over the suppression of information during the 2002–2003 SARS crisis, the Chinese government continues to filter news on infectious diseases. China's state-run press denounced the research of Dr. Guan Yi, a leading investigator of avian flu, and the government limited his ongoing research of this potential global pandemic.<sup>3</sup>

### ***Internet***

China's Internet population has continued its exponential growth, reaching 103 million by June 2005.<sup>4</sup> In October 2004, Premier Wen Jiabao announced a strategy for using the Internet and information resources to continue or accelerate the country's economic modernization, formalizing what was already the government's practice.<sup>5</sup> But partly because other media for expressing discontent or gathering information are more heavily and effectively policed, the Internet remains a key medium for information exchanges that challenge government policies and control. China's government therefore has sustained its efforts to control the Internet, citing such concerns as state security, public decency, and youth health. China's basic strategy of using the Internet to modernize the economy while retaining political control of its use has not changed.



China's government uses several techniques to minimize Chinese citizens' exposure to topics the Chinese Communist Party sees as threatening to its rule or as indecent. These include hard techniques such as routers that disrupt user attempts to access sensitive Web sites, software that detects sensitive key words and prevents user connections to these sources, and programs that block Internet discussion board and chat room postings.<sup>6</sup> Soft methods are also employed, including burdensome licensing requirements for Internet cafes and harsh but selective enforcement that prompts self-censorship among users.<sup>7</sup>

In September 2005, China updated its regulations for Internet news with a proclamation that largely reiterated existing and vaguely worded prohibitions on such acts as creating social uncertainty, endangering the unification of the country, promoting superstition, or harming the country's reputation. Two new rules banned use of the Internet to organize illegal activities or protests.<sup>8</sup>

China is said to have the largest prison population of cyberdissidents in the world. As of June 2004, there were 61 cyberdissidents in jail for criticizing the Chinese government.<sup>9</sup> Amnesty International's latest annual report documented more than 50 people who had been detained or imprisoned for Internet activities.<sup>10</sup> According to another report, 13 Internet essayists were tried, sentenced, and denied appeals between October and December of 2003 alone.<sup>11</sup> China set the stage for future criminal treatment of Internet users by requiring all domestic Web sites to register with authorities by June 30, 2005, closing those that did not comply.<sup>12</sup>

### ***News Media***

There have been both surface improvements and negative developments regarding media freedom in China, but it would be misleading to view them as indicative of any fundamental change in the disposition of China's government toward the more open flow of information. In October 2004, a Chinese court ruled against a libel claim by a state-owned enterprise. The defending magazine was cleared on the grounds that it had used plausible sources. Several prominent journalists were released in November 2004, leading some to hope this was an indicator that the government was allowing journalists more leeway—an expectation that has since proven hollow. Criticism of certain government officials and policies was also permitted before Hu Jintao fully consolidated power, as a function of intra-Party political struggles.

Offsetting these positive developments, the Committee to Protect Journalists reports that 42 journalists were in Chinese jails at the end of 2004. Reporters Without Borders tallies 27 journalists in prison, more than in any other country. A sample of prominent developments includes the October 2005 closure of an online news and discussion site following its reports of protests in the village of Taishi over corruption accusations.<sup>13</sup> In December 2004, several prominent magazine editors lost their jobs after printing stories critical of the government.<sup>14</sup> And in July 2005, a journalist received a ten-year sentence for posting on the Internet a copy of a government letter to newspapers advising them that the return of Tiananmen dissidents would be a socially destabilizing force.<sup>15</sup>

Overall, the environment for news media in China has not appreciably changed with regard to government control. Journalists and news organizations remain at risk of political or economic reprisal as well as criminal charges. Journalists and editors continue to respond to this environment by self-censoring their work.

China's news media, particularly newspapers, have become more market oriented, even as political controls remain in force. In July 2003, China reduced the state-run media presence, shutting down many state-owned local newspapers and eliminating mandatory subscriptions for peasants and government officials. The major state-owned news sources were maintained, while private media outlets expanded dramatically in number.<sup>16</sup>

Journalists face expanding market pressures to report on subjects of interest to their readers, which has led to an increasing danger from non-government sources. The government has failed to protect journalists from these threats, and may be complicit in some of them. For example, a journalist had two fingers cut off in response to his investigative reporting.<sup>17</sup> In the absence of a strong rule of law, and given the government's hostile disposition regarding journalists, increases in reporting on corruption, criminal activity, and misconduct of local businesses have made journalists targets of physical attacks. The number of these incidents has risen in the past two years.<sup>18</sup>

### **Effect on U.S. Interests**

#### ***Government Control of Chinese Public Opinion***

China's technical ability to promote or suppress information gives the government strong influence over public opinion. The Chinese government can trumpet its opinion through a variety of transparent and disguised outlets while suppressing alternative opinions or facts contrary to the government line. By doing so, the government can induce public protests against foreign countries and their policies. The government also has the influence to disperse such ongoing protests or head off potential protests by changing the flow of information, particularly in coordination with police action. At times, it exercises both of these options on the same issue, fanning public discontent with a foreign country, then quieting the protests before they become unruly.

With government support and acquiescence, the Internet is used in China to express and concentrate nationalist sentiment. Chinese Web sites, for example, collected 22 million signatures petitioning against Japan's effort to gain a seat on the U.N. Security Council.<sup>19</sup> Comments on these sites criticized China's government for not taking a stance against Japan's bid. The Internet was also used to organize recent protests at the Japanese Embassy.<sup>20</sup>

Selective censorship is partially responsible for the prevalence of nationalism on the Internet. China's government also engenders nationalism by employing unidentified commentators who promote the government line in Internet discussions.<sup>21</sup> Yet Internet nationalism is often more vociferous than the official government line and sometimes goes so far as to criticize China's government for softness in response to foreign aggression or impropriety. During anti-Japanese protests in China in April and May of 2005, tens of millions of Chinese cell phone users received a text message from the

government. The message urged citizens to “[e]xpress patriotism rationally. Don’t take part in illegal protests. Don’t make trouble.”<sup>22</sup> This incident demonstrates in a startling manner the will and ability of the government to actively mold public opinion—even though the government message in this case was a calming one. The government’s ability to control information has expanded dramatically, and with it the government’s ability to manipulate public opinion.

### ***Setting the Context for Future Tensions***

China’s nationalism is concentrated on perceptions of Taiwan, Japan, and the United States.<sup>23</sup> An aversion to U.S. policies considered hegemonic and imperialist flows naturally from early communist descriptions of Western powers as plundering empires, and from later assertions by China that the Soviet Union and the United States were unjustly attempting to control and subjugate other countries. Given China’s strong emphasis on economic growth, contemporary nationalism often paints U.S. actions as intentional impediments to China’s development—for instance, claiming that the U.S. interest in human rights and environmentalism is solely an oblique attempt to constrain or deny China’s growth.

Chinese propaganda additionally targets democracy in concept and in practice.<sup>24</sup> Democratic nations and democratic events such as elections are portrayed as promoting chaos and exacerbating internal societal fissures. This directly contradicts the U.S. strategy of encouraging democracy and freedom worldwide, which is formulated as both a normative and strategic goal.<sup>25</sup>

China’s government undoubtedly plays a heavy role in establishing and propagating the nationalist narrative, but it does not have total control over the growth and direction of nationalist sentiments. China’s encouragement of anti-U.S. nationalism limits the effectiveness of U.S. public diplomacy and other efforts in the region. It also enhances the risks of misperception and miscalculation in the bilateral relationship, particularly during potential crisis situations.

### **U.S. Response**

#### ***Radio Free Asia and Voice of America***

The United States continues to provide uncensored news to Chinese citizens through Radio Free Asia (RFA) and Voice of America (VOA). These services are disseminated to their Chinese audiences via radio stations and Web sites. China continues to jam RFA and VOA radio signals and block RFA and VOA Web sites. China’s jamming clearly violates accepted international agreements, and contributes to the government’s ability to manipulate public opinion.<sup>26</sup>

#### ***Internet Anti-Censorship Program***

The Commission in the past has advocated the establishment of a government program to counteract China’s Internet censorship. The Broadcasting Board of Governors’ (BBG) Internet anti-censorship program addresses this recommendation. In fiscal year 2004, \$1 million was appropriated to the BBG to assist its efforts to allow Chinese Internet users to circumvent China’s Internet controls and

receive uncensored news information.<sup>27</sup> In FY 2005, \$1 million again was appropriated for the program.

The BBG submitted a spending report in April 2004 indicating that it intended to use the bulk of the money to fund Chinese-language email distribution programs which provide news, features, and directions to often-changing proxy Web sites to Internet users in China. Proxy sites allow users to navigate the Internet without being blocked by China's government censorship controls. Preliminary work was also begun on efforts to use text messaging as a way to deliver news and other information to interested users inside China, mapping the physical system underlying China's Internet firewall, and exploring how volunteers outside China might help Chinese users access more information and mask the source of that information.<sup>28</sup>

The Commission believes that the BBG's program has been effective in providing Chinese Internet users with access to otherwise unavailable information. Moreover, the program is scalable and could magnify its effect if supported with increased resources.

In addition to increases in scale, the U.S. Internet anti-censorship program could become more effective through increased sophistication. In 2004, the OpenNet Initiative conducted research on the BBG program to provide Internet users in both Iran and China the opportunity to access the Internet without censorship from those governments. The United States employed filters to prevent access to adult content. However, these filters were poorly designed, which had the inadvertent effect of blocking thousands of useful and non-controversial sites such as sites for the U.S. embassy, a presidential election campaign, and a popular email service.<sup>29</sup> ONI concluded that the United States was over-blocking in its own effort to control what Iranian and Chinese users could view.

### ***Global Internet Freedom Office***

While the BBG Internet anti-censorship program has been successful, the Commission believes that a more robust and integrated strategy by the U.S. government is needed. The Commission continues to support the establishment of an executive branch office dedicated to monitoring the status of foreign government Internet censorship efforts and to developing and deploying Internet anti-censorship technology to counter foreign jamming and censorship.

### ***Responsible Corporate Involvement***

U.S. companies continue to play an active role in China's Internet censorship, providing hardware, software, and content filtering services. While these interactions between U.S. corporations and China's government may be legitimate commercial decisions, in sum they had the effect of helping to build and legitimize the government's media censorship efforts.

Even outside direct relationships with China's government, the policies of Western companies may affect Chinese Internet users. Yahoo signed a voluntary code of conduct, obliging it to prevent Chinese Internet users from expressing anti-government sentiments.<sup>30</sup> It followed through on this pledge by helping the government locate and imprison a journalist for sending a private email

to a pro-democracy Web site.<sup>31</sup> A senior executive justified this action by noting, “I do not like the outcome of what happens with these things. . . . But we have to follow the law.”<sup>32</sup> Microsoft launched a new Chinese language Web log service that prohibits the use of terms such as “democracy,” “freedom,” and “human rights” in certain sections.<sup>33</sup> Google has decided to display in its Chinese-language news searches only those results that are accessible to Chinese users, stimulating a discussion about the relative values of self-censorship and good service. Google argues that its users would be poorly served by a display of news sites that they could not access.<sup>34</sup> Additionally, Google has acquired a non-controlling share of a Chinese Internet service provider that filters user activities, while Yahoo has launched its own.<sup>35</sup>

The U.S. government has articulated a desire for freedom of information in China and worldwide, and implemented a BBG program to obstruct Chinese government filtration of Internet content. At the same time, U.S. companies have provided hardware for China’s system of control, and made operating decisions that conform to the preference of China’s government for censorship on the Internet.

### RECOMMENDATIONS

- The Commission recommends that Congress increase funding for the BBG’s Internet anti-censorship activities targeted at China. The BBG should be encouraged to refine its efforts to prevent illegitimate use of its services in order to avoid incidentally blocking inoffensive Web sites.
- The Commission recommends that Congress prohibit disclosure by U.S. companies to the Chinese government, in the absence of formal legal action by the Chinese government, of information about Chinese users or authors of online content. Congress should require that where a U.S. company is compelled to act, it shall inform the U.S. government. A compilation of this information should be made publicly available semi-annually.
- The Commission recommends that Congress create an entity within the executive branch to develop a comprehensive strategy to combat state-sponsored blocking of the Internet and persecution or harassment of users. The strategy should include the development and deployment of anti-censorship technologies. The strategy must adhere to certain universally recognized limitations that may appropriately be imposed, but should minimize incidental blocking of inoffensive Web sites.
- The Commission recommends that Congress urge the Executive Branch to respond to the Chinese government’s efforts to block VOA and RFA broadcasts and Web sites by vigorously and frequently raising to high-level officials of China’s government the United States’ displeasure with this practice of censorship and requesting that the government cease this practice. Additionally, Congress should recommend that the executive branch monitor the broadcasts in the United States of electronic media controlled by the Chinese government, such as China Central Television (CCTV), and develop and implement a plan to issue corrections

of factual errors contained in those broadcasts and disseminate them to news media and influential persons and organizations within Chinese-speaking communities in the United States as well as examine other actions that may be appropriate to directly counter these practices.

#### ENDNOTES

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22. Jane Macartney, "Message to the Mob: China Texts Protest Ban," *The Times*, May 2, 2005.
23. U.S.-China Economic and Security Review Commission, *Hearing on China's State Control Mechanisms and Methods*, testimony of Edward Friedman, April 14, 2005, p. 115.
24. U.S.-China Economic and Security Review Commission, *Hearing on China's State Control Mechanisms and Methods*, testimony of Yu Maochun, April 14, 2005, p. 121. This refers to China's portrayal of Western-style democracy, including such events as elections and debates over civil liberties. China at times employs a unique and misleading interpretation of the term democracy in a positive light, such as in speaking of a dictatorship of the Communist Party that is purportedly attuned to popular desires. See, for example: Information Office of the State Council of the Peo-

ple's Republic of China, *Building of Political Democracy in China*, (Beijing, China: October 2005).

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27. P.L. 108-199.

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## THE COMMISSION'S RECOMMENDATIONS

### *Addressing China's Currency Manipulation*

1. China's recent exchange rate policy reforms have to date resulted in only a 2.1 percent appreciation of the renminbi (RMB) against the U.S. dollar, leaving the RMB highly undervalued. In the absence of immediate steps to allow the RMB to appreciate by at least 25 percent against the U.S. dollar or a transparent trade-weighted basket of international currencies, the Commission recommends that Congress pursue a three-track policy to move China to take appropriate action to revalue the RMB:
  - Congress should press the Administration to file a WTO dispute regarding China's exchange rate practices. These practices continue to violate a number of its WTO and IMF membership obligations, including the WTO prohibition on export subsidies and the IMF proscription of currency manipulation. Congress should press the Administration to respond to China's violation of its international obligations by working with U.S. trading partners to bring to bear on China the mechanisms of all relevant international institutions.
  - Congress should consider imposing an immediate, across-the-board tariff on Chinese imports at the level determined necessary to gain prompt action by China to strengthen significantly the value of the RMB. The United States can justify such an action under WTO Article XXI, which allows members to take necessary actions to protect their national security. China's undervalued currency has contributed to a loss of U.S. manufacturing, which is a national security concern for the United States.
  - Congress should reduce the ability of the Treasury Department to use technical definitions to avoid classifying China as a currency manipulator by amending the 1988 Omnibus Trade Act to (i) include a clear definition of currency manipulation, and (ii) eliminate the requirement that a country must be running a material global trade surplus in order for the Secretary of the Treasury to determine that the country is manipulating its currency to gain a trade advantage.
  - The Commission recommends that Congress urge the Treasury Department to maintain a high level of pressure on China to take more significant actions expeditiously to revalue its currency and, if such actions are not forthcoming by the time Treasury issues its next exchange rate report, to designate China as a currency manipulator and initiate bilateral and IMF negotiations.

***Challenging China's IPR Violations***

2. The Commission recommends that Congress support the U.S. Trade Representative in taking immediate action under U.S. law and in international venues pertaining to China's violation of IPR obligations, particularly China's failure to meet the requisite standards of effective enforcement, including criminal enforcement, explicitly imposed by the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement.

***Enhancing U.S. Trade Remedies***

3. The Commission recommends that Congress enact legislation to make countervailing duties applicable to non-market economies.
4. The Commission recommends that Congress facilitate the use of the Section 421 China-specific safeguard negotiated as part of China's WTO accession. Congress should consider authorizing compensation to petitioners in the Section 421 safeguard process for legal fees incurred in cases where the ITC finds that market disruption has occurred but the President has denied relief. Congress should also consider eliminating presidential discretion in the application of relief through Section 421 petitions or limiting discretion to the consideration of non-economic national security factors.
5. The Commission recommends that Congress repeal the new shipper bonding privilege that has allowed many importers of Chinese goods to avoid payment of antidumping duties. Importers of goods subject to antidumping or countervailing duties should be required to deposit in cash the amount of any estimated applicable duty.
6. The Commission recommends that Congress maintain the Continued Dumping and Subsidies Offset Act of 2000 (CDSOA), notwithstanding the WTO determination that it is inconsistent with the WTO Agreement. Congress should press the Administration to seek explicit recognition of the existing right of WTO Members to distribute monies collected from antidumping and countervailing duties during the Doha Round negotiations and the review of the WTO's dispute resolution mechanism.

***Countering China's Government Subsidies and Discriminatory Trade Practices***

7. The Commission recommends that Congress direct the Government Accountability Office (GAO) to investigate China's system of government subsidies for manufacturing, including tax incentives, preferential access to credit and capital from financial institutions owned or influenced by the state, subsidized utilities, and investment conditions requiring technology transfers. The investigation should focus in particular on the extent to which state-owned or state-invested banks in China provide loans to state-owned, state-invested, and other domestic industries on a noncommercial, preferential basis. The results of this investigation should be provided in a report to Congress that assesses whether any of these practices may be actionable subsidies under the WTO and lays out specific steps the U.S. government can take to address these practices.

8. The Commission recommends that Congress urge USTR to investigate the strength of potential cases against Chinese subsidies categorized as actionable, and to file WTO disputes concerning any subsidies that meet WTO definitions for prohibited subsidies.<sup>1</sup> For example, scrutiny is warranted regarding China's provision of extensive subsidies for the expansion of its domestic paper products industry, which, combined with the elimination of tariffs on raw logs and high grade paper machines and the maintenance or increase of tariffs on imports of finished wood products, supports the expansion of China's wood and paper products manufacturing industry at the expense of its trading partners' industries.

#### ***Retaining China's Non-Market Economy Status***

9. The Commission recommends that Congress require that the Department of Commerce obtain Congressional approval before implementing any determination that China has achieved market economy status as a country or for one or more sectors. Congress should ensure that China continues to be treated as a non-market economy in the application of antidumping and countervailing duties through 2016, as is explicitly permitted by China's WTO accession agreement, unless China clearly meets the statutory criteria for market economy status.

#### ***Evaluating WTO Decisions and Conducting Future Trade Negotiations***

10. Many areas of China's WTO accession agreement impose dramatically unequal tariffs on comparable categories of Chinese and U.S. goods. China has developed at a pace far faster than was envisioned when its WTO accession was approved and these unequal tariff rates now heavily disadvantage U.S. exporters, accelerate import competition in the U.S. market, and are no longer supportable. The Commission recommends that Congress direct USTR to examine the potential for rectifying this situation as part of the Doha Round negotiations.

#### ***Bolstering U.S. Competitiveness***

11. The Commission recommends that Congress direct the Commerce Department to investigate ways to diminish the transfer of technology to China that is vital to U.S. national security and economic competitiveness by way of production transfers required to facilitate sales (offsets), particularly in the aerospace field. The investigation should identify the extent to which such transfers are required by Chinese government rules or regulations for commercial sales and therefore are potentially WTO inconsistent. Further, the Commission recommends that Congress encourage the Administration to enter into negotiations with the European Union aimed at reaching an agreement to take a united approach in countering efforts by China

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<sup>1</sup>As defined by the Agreement on Subsidies and Countervailing Measures, prohibited subsidies are benefits contingent upon export performance or import substitution. A WTO dispute regarding prohibited subsidies meets with an accelerated process. Actionable subsidies are those that harm the interest or industry of a trading partner.

to explicitly or implicitly require production offsets as a condition of its aircraft purchases.

12. The Commission recommends that Congress convene a summit of industry and labor representatives from the U.S. textile and apparel industries and senior executive branch officials to assess the potential impact and develop appropriate policy responses to the crisis affecting these industries. Among the issues to be examined should be how termination of the China textile safeguard under U.S. trade law at the end of 2008 will accelerate current trends, long-term implications of post-2008 Chinese sourcing trends, and the implications for the United States of shifts in textile and apparel production.
13. The Commission recommends that Congress develop a long-term national competitiveness strategy with the goal of maintaining and enhancing the U.S. standard of living, economic and technological vitality, and strength in industries critical to national security and economic security. The strategy should include the education and training of a workforce capable of responding to the rapid changes of a globalized economy. It should create policy, tax, and economic environments that encourage domestic production leading to the retention and expansion of higher value-added jobs in the United States. Finally, it should recognize specific industries that are vital to national or economic security, and ensure that a sufficient U.S. industry remains intact in those sectors.
14. The Commission recommends that Congress revise U.S. international tax policy to remove incentives for U.S. firms to shift production out of the country.

#### ***Mandating Corporate Reporting***

15. The Commission recommends that Congress establish and fund a federally mandated corporate reporting system to gather sufficient data to provide a comprehensive understanding of the trade and investment relationship with China. Under such a system:
  - U.S. firms should be required to report to the Commerce Department their investments in China, the shift of production capacity and jobs resulting from these investments, both from within the United States to overseas and from one overseas location to another, and their contracting relationships with Chinese firms.
  - The Commerce Department should maintain an authoritative account of U.S. firms' R&D investments in China and a comprehensive assessment of their activities including any technology transfers, offsets, or R&D cooperation agreed to as part of the investment.

#### ***Supporting Dislocated Workers***

16. The Commission recommends that Congress fund information sessions and a public awareness campaign to inform laid-off workers about existing and newly established programs such as Trade Adjustment Assistance (TAA). Further, many workers

adversely affected by trade are still excluded from receiving TAA assistance. Eligibility for TAA should be expanded to cover the broad array of workers adversely affected by trade with China, including those in the service sector and others who have not traditionally been covered. Funding should be increased to ensure that all eligible workers are able to participate fully.

***Coordinating with the European Union and Japan on China Trade and Security Matters***

17. The Commission recommends that Congress work with the Administration to undertake more active efforts to coordinate with the European Union (EU), Japan, and other interested nations as appropriate to address mutual trade- and security-related concerns with China. Among these areas should be the following:
  - European governments and Japan share U.S. concerns about continuing large-scale IPR violations in China. Brussels, Tokyo, and Washington should coordinate their strategies on improving Chinese IPR compliance, particularly through joint action in the WTO.
  - U.S., EU, and Japanese officials should work together within the International Monetary Fund (IMF), the WTO, and other appropriate fora to move China toward a more meaningful upward revaluation of the Chinese RMB that is more reflective of current economic realities.
  - U.S., EU, and Japanese officials should work to enhance the effectiveness of the TRM within the WTO and consider undertaking an annual joint assessment of China's compliance record, in conjunction with China's other major trade partners if possible, that could serve as an alternative mechanism for measuring and improving China's compliance shortfalls.
  - U.S. and EU officials should engage with each other to evaluate China's progress toward meeting U.S. and EU criteria for market economy status with the goal of arriving at a consistent analysis that ensures that China will have taken concrete and irreversible steps to earn market economy status before the benefits of such status are conferred.
  - U.S., EU, and Japanese officials should develop coordinated responses to shared security concerns. Among the issues that should be considered is the EU's arms embargo on China, a major concern of both Japan and the United States.

***Chinese Activity in Global Capital Markets***

18. The Commission recommends that Congress encourage the Administration to use Executive Order 13382 to freeze the assets of Chinese firms involved in WMD or missile-related proliferation, or Chinese companies or financial institutions that may be assisting or lending to such proliferators. Congress also should encourage the Administration to expand the provisions of Executive Order 13382 so the U.S. property of a parent company can be frozen if the parent knows or has reason to know

about the proliferation activities undertaken by its subsidiaries, or so the U.S. property of financial institutions can be frozen if they know or have reason to know of the involvement of their lending customers in proliferation activities.

19. The Commission recommends that Congress urge the Securities and Exchange Commission to work directly with its regulatory counterparts in other nations as well as through the International Organization of Securities Commissions to press for the harmonization and independent and robust enforcement of securities laws, especially as they relate to corporate governance and reporting, transparency, and disclosure requirements.
20. The Commission reiterates the recommendation in its 2004 Annual Report that Congress reinstate the provision of the 2003 Intelligence Authorization Act (P.L. 107–306, Sec 827) directing the Director of Central Intelligence to prepare an annual report identifying Chinese or other foreign companies engaged in proliferation of weapons of mass destruction or their delivery systems that have raised, or attempted to raise, funds in U.S. capital markets.
21. The Commission recommends that Congress instruct the Securities and Exchange Commission to notify the National Security Council (NSC) when any Chinese firm seeks to list on a U.S. capital market, and urge the NSC upon receipt of such a notification to consider carefully all relevant intelligence and determine if the firm is involved in WMD or ballistic missile proliferation, support for terrorism, or other security-related abuses and, if so, to utilize the appropriate provisions of Executive Order 13382.

***Developing a National Strategy for Technology Competitiveness***

22. As recommended in the Commission's 2004 Report to Congress, the U.S. government must develop a coordinated, comprehensive national technology competitiveness strategy designed to meet China's challenge to U.S. scientific and technological leadership. America's economic competitiveness, standard of living, and national security depend on such leadership. The Commission therefore recommends that Congress charge the Administration to develop and publish such a strategy in the same way it is presently required to develop and publish a national security strategy that deals with our military and political challenges around the world. Such a strategy should:
  - Identify future technology base goals
  - Recommend policies for directing funds toward maintaining the U.S. technology base
  - Initiate a national educational program, similar to the programs developed in the post-Sputnik era to enhance the level of math and science education at the K-through-12, undergraduate, and graduate levels in the United States

- Recommend appropriate tax and investment policies to encourage high-technology-related research, development, and manufacturing activities in the United States.
23. In establishing a national technology competitiveness strategy, it is critical to incorporate input from the U.S. technology industry to better align private-sector goals with national interests. To this end, the Commission recommends that the Congress create a task force regarding development and implementation of the national strategy. It should include representatives from the Office of Science and Technology Policy, the National Science Foundation, and appropriate cabinet departments such as the Department of Commerce to consult on a regular basis with select private sector leaders in key science and technology industries, representatives of the industries' skilled workers, and investment leaders, particularly venture capitalists. The intent in initiating such a task force is to create a permanent structured dialogue between the Federal Government and the private sector on technology base issues that have a direct effect on U.S. economic and national security. The task force should be required to report its findings and recommendations to Congress on an annual basis.
  24. The Commission recommends that Congress direct the Department of Commerce and the Office of the U.S. Trade Representative (USTR) to conduct a comprehensive study and report to Congress on China's development of unique domestic technology standards and whether non-performance-based standards are creating an unjustified market barrier to U.S. goods. Congress should direct USTR, if the study finds that China's standard setting process is acting as a market access restriction, to identify standards under development and to intervene with Chinese officials early in the standard development process, and to consider filing a WTO case to address restrictive standards that are already in effect.
  25. Because of the importance of promoting interaction and exchange as a way of enhancing U.S. values and interests in the world and also of promoting U.S. economic interests, and because of the difficulties experienced in traveling to the United States by many business travelers who wish to expand trade relationships, the Commission recommends that Congress direct the President to review our nation's policies regarding student visas and business travel, ensuring that appropriate emphasis is placed on protecting the U.S. technological and economic base and U.S. security interests.

***Maintaining the U.S. Defense Industrial Base***

26. In order to maintain a strong U.S. technological base in the key defense industries, the Commission recommends that Congress urge the President to conduct a study and recommend appropriate incentives—such as tax policy, energy policy, etc.—for domestic investment in research and development and in production in crucial defense-related industries.

27. With China pursuing a coordinated strategy to attract investment in the semiconductor industry and in light of the extreme importance and urgency of ensuring a secure domestic supply of high-performance microchips for U.S. defense needs, the Commission recommends that Congress direct DoD to prepare an assessment of its future microchip needs and establish a carefully designed acquisition program based on that assessment that will secure a sufficient number of other “trusted and assured sources” of integrated circuits in addition to IBM (that participates in DoD’s “Trusted Foundry Program”).
28. The Commission recommends that DoD prepare an assessment of (1) China’s anticipated naval buildup over the next decade and its stated plans to source 100 percent of the necessary systems and components required for this buildup, and (2), in order to usefully compare China’s planned naval capability to U.S. naval capability, the ships, and the ship components and systems, that will be needed to meet U.S. military requirements over the next 20 years and the projected sourcing plan for all required ships, components, and systems extending to all levels of manufacturers and suppliers—specifically noting anticipated sourcing dependence on China. This exercise should provide a prognosis of the long-term viability of U.S. domestic manufacturers of ships, components, and systems needed to meet the requirements, and the critical industrial skill base those manufacturers will need—and should highlight anticipated problem areas.

***Tracking China’s Technology Development and Defense-Related Acquisitions***

29. The Commission recommends that Congress increase intelligence community resources for collection and analysis focused on China’s technology development. It is crucial that U.S. policy makers have access to current, accurate, and complete information on China’s technological development.
30. The Commission recommends that Congress direct the Administration to begin preparing and submitting the quadrennial reviews required by law (P. L. 102–558) of any strategies by foreign countries and companies to acquire critical defense technologies. No such report has been prepared or delivered since the first report was issued in 1994.
31. The Bureau of Economic Analysis currently compiles international trade data for each ATP product. The Commission recommends that Congress direct the Department of Commerce to present more detailed ATP trade data in a user-friendly format in its monthly publication, U.S. Trade in International Goods and Services. The data should be presented in a table that quantifies U.S. trade in each of the ATP products with the United States’ top ten ATP trading partners, of which China is one. This table should present, for each of the ten countries: (1) the value of U.S. imports of each ATP product from the country; (2) the value of U.S. exports of each ATP product to the country; (3) the country’s trade balance with the U.S. for each ATP product; and (4) the percentage of total U.S. imports



of each ATP product accounted for by imports from that country. These data will facilitate analysis of the import dependency of the United States on specific ATP products and, more precisely, on specific ATP products from specific countries.

***Proposed Amendments to the Exon-Florio Provision***

32. The current Committee on Foreign Investment in the United States (CFIUS) process does not allow for Congressional oversight. The Commission recommends that the Exon-Florio provision be amended to require CFIUS to provide Congress notice each proposed transaction CFIUS is requested to approve. In addition, CFIUS should be required to report to Congress on the disposition of each case it considered.
33. Since economic security is an integral part of “national security,” the Exon-Florio provision should be amended to specifically require CFIUS to consider economic security as well as national security in making decisions.
34. This Commission recommends that Congress urge the President to transfer the chairmanship of CFIUS to another of its member agencies.
35. Congress should amend Exon-Florio Provision to require post-transaction reviews of CFIUS filings that have received full investigations, and that the results of these reviews be provided to Congress.

***Responding to China’s Military Power and Supporting Taiwan’s Right to Voluntarily Assent to a Solution to the Taiwan Situation***

36. The Commission believes that there is an urgent need for Congress to encourage increasing U.S. military capabilities in the Western Pacific in response to growing Chinese capabilities and deployments in the area.
37. The Commission recommends that Congress reaffirm that any solution to the Taiwan problem must have the voluntary assent of the people of Taiwan.
38. The Commission recommends that Congress and the Administration review the issue of defense coordination with Taiwan. The Commission believes that the arms sales package should remain on offer, and it further believes that Congress should take steps to facilitate strong working relationships through such measures as authorizing the exchange of general and flag officers, conducting interactive combat data exchange with Taiwan defense forces, providing increased opportunities for Taiwan officers to be trained in the United States, and establishing institutional relationships with the Legislative Yuan to improve the oversight of defense matters.
39. The Commission recommends that Congress enact legislation instructing the President and the appropriate officials of his cabinet to seek initiation of discussions with China with the objective of developing and implementing new confidence building measures (CBMs) that facilitate resolution of tensions that

may develop between the two nations and to minimize misunderstanding between the nations' civilian and military leaders at the strategic, operational, and tactical levels. These CBMs could include communications mechanisms, opportunities for opposite number leaders to meet and establish relationships with each other, regular information-sharing devices, and hot lines between DoD and the PRC's Ministry of Defense.

40. The Commission recommends that Congress mandate a thorough investigation by appropriate agencies of cyber attacks originating from China against U.S. networks. To the extent that China is determined to be responsible for, complicit in, or negligent for its failure to adequately dissuade Chinese citizens from conducting such cyber attacks, and that this action constitutes an unfriendly act against the United States, Congress should require the President to notify it of the measures that he will take under existing law, or that he recommends Congress enact, to prevent or dissuade future attacks against U.S. networks.

#### ***Addressing China's Regional Activities***

41. The Commission recommends that Congress work with the Administration to assess China's objectives and tactics in regions around the globe and identify the extent to which Chinese interests run, or could run, contrary to U.S. interests. Specific areas and issues about which the Commission is concerned include China's efforts to:
  - Secure energy resources in the Western Hemisphere, which may lead the United States to depend more heavily on Middle East oil
  - Improve its relations with, and obtain access to the oil and minerals of, problematic countries such as Iran, Sudan and Zimbabwe that frustrate U.S. and other nations' efforts to curb the objectionable behavior of such countries
  - Push U.S. counterterrorism forces in Central Asia out of the region
  - Improve its rapport with India at the expense of the strengthening relationship between the United States and India. To facilitate this effort, Congress should urge the Administration to increase intelligence capabilities focused on China and its global activities to increase U.S. knowledge about China's objectives and tactics.
42. The Commission recommends that Congress encourage the President and the Secretaries of State and Defense to continue to press their European counterparts to maintain the EU embargo on weapons sales to China. U.S. officials must emphasize in the starkest terms that removal of the embargo is not merited by significant improvements in China's human rights actions. They also must stress that flows of weapons to China that might result from lifting the embargo could increase the risk of conflict between China and the United States and also increase the likely cost to the United States of any such conflict in time, money, materiel, and casualties—and that, con-

sequently, the United States will view lifting the embargo with grave concern.

43. The Congress should urge the Administration to reach out to and work with regional alliances, institutions, and organizations to preserve other sources of power and influence that can help to maintain political and power equilibrium in the world's various regions that may be adversely affected and distorted by a rising China.
44. The Commission recommends that Congress examine whether China is eroding Hong Kong's autonomy in violation of its commitments under the Sino-British Joint Declaration of 1984, the Hong Kong Basic Law, and the principle of 'one country, two systems.' If it concludes this is occurring, Congress should determine whether to recommend to the President that he invoke the provisions of the U.S.-Hong Kong Policy Act, i.e. "whenever the President determines that Hong Kong is not sufficiently autonomous to justify treatment under a particular law of the United States . . . the President may issue an Executive Order suspending the certification of section 201(a) regarding continued separate application of U.S. laws with respect to Hong Kong." The Commission believes it is important that the authorities in Beijing be aware that the question of Hong Kong's status is a matter of special concern to the Congress.

***Addressing China's Proliferation Practices and Record***

45. Current sanctions against Chinese companies that proliferate equipment and technology related to WMD and their delivery systems should be broadened and harmonized for increased effectiveness. The Commission recommends that Congress expand current sanctions regimes to extend penalties to the parent company of a subsidiary that engages in proliferation activities, regardless of the parent company's knowledge of or involvement in the problematic transaction. Access to U.S. markets (including capital markets), technology transfers, and U.S. government grants and loans should be restricted from proliferating companies and their parent companies and related subsidiaries irrespective of the related firms' knowledge of the transfers in question.
46. In cases where diplomatic efforts are unsuccessful in spurring the government of a country such as China to take effective actions to halt proliferating activity, the United States should use its economic leverage to ensure action. In connection with the recommendation above that Congress broaden and harmonize proliferation sanctions, and consonant with recommendations contained in its 2002 and 2004 Annual Reports, the Commission recommends that Congress amend all current statutes pertaining to proliferation to—
  - Coordinate and increase the array of sanctions the President is authorized to invoke against foreign governments that directly proliferate WMD, their delivery systems, and associated technologies to include increased import and export limitations; restrictions on access to U.S. capital markets; re-

restrictions on U.S. direct investment; U.S. opposition to loans from international financial institutions; prohibition of loans from U.S. banks; reduction or elimination of foreign assistance; prohibition of arms sales and military financing; elimination of U.S. government credit or credit guarantees; prohibition of U.S. government procurement from any company based in the offending country; and restrictions on science and technology cooperation with or transfers to the offending country. The new authority should require the President to report to Congress the rationale for and proposed duration of the sanctions within 72 hours of imposing them and, in any case where the President waives imposition of such a sanction, the authority should require the President to notify Congress of the justification for that waiver.

—Authorize the President to impose the same sanctions listed above, where applicable, against a country or the government of a country in cases where companies in the country are persistently engaged in proliferation of WMD, their delivery systems, and associated technologies and where the government does not take effective steps to curtail those activities.

47. The Commission recommends that the Congress urge the Administration to work closely with other countries to address Chinese proliferation issues.

#### ***Improving Port Security***

48. The Commission recommends that Congress direct the Department of Homeland Security to give greater priority to threats posed by waterborne shipping. As part of this effort, specific attention must be paid to the need for enhancing inspection of container seals and ensuring that appropriate paperwork accompanies these containers. Import and export containers must be refused entry without proper documentation. Proper attention must be given to ensuring that bonded agents and other personnel are able to appropriately and adequately inspect containers. Technological approaches to inspecting containers and ships must supplement, not replace, human inspections.
49. Congress should press the Administration to give greater priority to its Megaports Initiative and highlight the need for China to reach agreement on this program. Refusal to cooperate on the Megaports Initiative should trigger enhanced inspection procedures on products coming from ports that have been determined to be of concern to U.S. security officials.

#### ***Pressing China to Curtail North Korea's Nuclear Weapons Programs***

50. China should be commended for its diplomatic activity in bringing North Korea back to the Six-Party Talks and for circulating the set of principles to which all parties agreed on September 19, 2005. The Commission recommends that Congress call on the Administration to press China to use its substantial leverage with North Korea to secure its adherence to the agreed principles.

51. If North Korea fails to abide by the agreed principles it signed in September 2005, the Commission recommends that Congress direct the Administration to devise and pursue alternative methods to address this problem outside the Six-Party Talks. In such a case, Congress also should encourage the Administration to propose a United Nations Security Council resolution that at a minimum condemns North Korea's February 10, 2005 statement and calls on it to dismantle its nuclear weapons programs and nuclear weapons. China's response to, and vote on, such a resolution will reveal its sincerity in pressuring North Korea to resolve this matter.

***Addressing China's Energy Policies***

52. The Commission recommends that Congress:
- Mandate the establishment of a "U.S.-China Energy Working Group" in which both nations are represented by senior government officials, supported by an advisory group composed of representatives of relevant industry, environmental, academic, research and non-governmental organizations and members of Congress. The Group should have the responsibility to (1) identify areas where both nations can most profitably work together for mutual benefit on energy issues and challenges; (2) identify and rank areas and issues with respect to which there is a significant possibility that U.S.-China energy-related conflicts will develop; (3) offer recommendations to both governments for resolving energy-related problems and disagreements; (4) offer recommendations to both governments for promoting development and use of conservation and efficiency mechanisms, alternative fuels, and other means of securing energy self-sufficiency and reducing the need for imported energy sources, especially oil; and (5) oversee and make recommendations to both governments concerning joint research and development activities in energy-related fields;
  - Encourage the initiation of new cooperative efforts with China to (1) increase the efficiency of its energy use, including energy use intensity reduction, clean coal technologies, coal-to-liquids technologies, and combustion efficiency improvements; (2) shift some current reliance on oil to coal (using advanced clean coal technology) and natural gas; and (3) explore and pursue the economic, technical, and logistical feasibility of using renewable energy sources in lieu of some portion of the projected increase in oil use. At the same time, China should be strongly encouraged to (1) abandon its policy of acquiring oil at the wellhead or field in a mercantilist fashion; (2) procure oil and gas according to international practices (i.e. purchasing it on the open international marketplace); and (3) cease providing assistance, arms, and proliferation-related technologies to problematic states in possible return for access to their energy resources; and
  - Urge the Administration to use all available bilateral and multilateral diplomatic means to persuade China to change its approach to energy security with respect to oil resources

by (1) purchasing oil for import in the open international oil market; (2) coordinating its activities with the International Energy Agency (IEA); and (3) engaging in the IEA's efforts to build oil stocks and release them on a coordinated basis in the event of supply disruptions or speculation-driven price spikes.

53. The Commission urges Congress to instruct the U.S. intelligence community to increase its intelligence collection with respect to Chinese activities in Africa, Central Asia, and, especially, the Western Hemisphere, in order to advise both appropriate executive branch and Legislative Branch officials of energy-related actions and trends that warrant careful attention and response.

#### ***Addressing China's Control of the Media***

54. The Commission recommends that Congress increase funding for the BBG's Internet anti-censorship activities targeted at China. The BBG should be encouraged to refine its efforts to prevent illegitimate use of its services in order to avoid incidentally blocking inoffensive Web sites.
55. The Commission recommends that Congress prohibit disclosure by U.S. companies to the Chinese government, in the absence of formal legal action by the Chinese government, of information about Chinese users or authors of online content. Congress should require that where a U.S. company is compelled to act, it shall inform the U.S. government. A compilation of this information should be made publicly available semi-annually.
56. The Commission recommends that Congress create an entity within the executive branch to develop a comprehensive strategy to combat state-sponsored blocking of the Internet and persecution or harassment of users. The strategy should include the development and deployment of anti-censorship technologies. The strategy must adhere to certain universally recognized limitations that may appropriately be imposed, but should minimize incidental blocking of inoffensive Web sites.
57. The Commission recommends that Congress urge the executive branch to respond to the Chinese government's efforts to block VOA and RFA broadcasts and Web sites by vigorously and frequently raising to high-level officials of China's government the United State's displeasure with this practice of censorship and requesting that the government cease this practice. Additionally, Congress should recommend that the executive branch monitor the broadcasts in the U.S. of electronic media controlled by the Chinese government, such as China Central Television (CCTV), and develop and implement a plan to issue corrections of factual errors contained in those broadcasts and disseminate them to news media and influential persons and organizations within Chinese-speaking communities in the U.S., as well as examine other actions that may be appropriate to directly counter these practices.

## **ADDITIONAL VIEWS OF COMMISSIONER STEPHEN D. BRYEN**

While I am voting in favor of the Report as a whole, I oppose and dissent from two of its recommendations.

The first pertains to the appropriate means for addressing the over-valuation of China's currency. The majority of the Commission is absolutely right that China's currency is over-valued, but I believe the recommendations it proposes to Congress for remedying the problem are unrealistic, given the fact that China is providing considerable currency support to the United States through the purchase of U.S. Treasury bonds. Relying on the WTO to solve the currency problem is not realistic. I believe the Report and its recommendations need to face this issue squarely.

My second concern is about the Committee on Foreign Investment in the United States (CFIUS). The Commission recommends that Congress engage itself in the CFIUS process. Doing this will so confound the process that foreign investment in the United States will be chilled. Foreign investment is critically important to the American economy and creates relationships that help limit international adventurism and trade wars. Even China's investment in the United States can be a good thing so long as it is not in security-sensitive industries. Shifting the chairmanship of CFIUS will not change U.S. policy and is unnecessary. I see no compelling evidence that the CFIUS process and its outcomes have resulted in any harm to America's national security. In fact, the CFIUS system has worked very well and has operated responsibly.

For the reasons I have noted, I oppose and dissent from the indicated recommendations. In other respects, I believe the Commission has carefully considered the myriad important issues in the U.S.-China relationship and has offered sound recommendations to the Congress for addressing them and I consequently support the remainder of the Report and its recommendations.

## **ADDITIONAL VIEWS OF COMMISSIONER PATRICK A. MULLOY**

The Members of the Commission by working together in a bipartisan manner, and with the assistance of a very able staff, have been able to achieve a near unanimous consensus on the complex issues we were charged by Congress to address. There are three issues addressed in the Report upon which I want to put a special emphasis because I believe they are of great importance in responding to the challenges of a rising China.

The first is that just because this Report makes hard-hitting criticisms of a number of China's economic, political, and military policies, it does not mean the Commission believes we cannot work with that nation or are out to demonize it. The Report notes that China does have a vision and strategy to build a high tech economy, raise the standard of living of its people, and strengthen its comprehensive national power. It does not quarrel with the right of China's leaders to pursue such goals as long as they do so in a manner that is consistent with their countries' international obligations, and in a fashion that is not designed to erode our nation's important interests including our economic well being and the standard of living of our citizens. To make that point absolutely clear, the Commission states the following on the very first page of the Report's Executive Summary:

The U.S.-China relationship is not inescapably destined to be adversarial. ... Perhaps the greatest challenge that faces the United States is to develop a coherent strategic framework for approaching China in a way that does protect vital U.S. interests while recognizing legitimate Chinese aspirations, minimizing the likelihood of conflict, building cooperative practices and institutions, and advancing both countries' long-term interests wherever that is possible. ...

Calling attention to and seeking changes in certain Chinese practices and policies that impinge on America's legitimate interests should not be equated with demonizing China.

This Report also states that some of the policies toward China being pursued by U.S. multinational corporations are contributing to our massive and growing trade imbalance with China and the erosion of America's technological and industrial base. This should not imply that corporate interests are somehow malevolent. It is rather a recognition of the fact that there can be fundamental conflicts between the goals of U.S. companies (which are operating in a system that requires and rewards them to make profits,) and our broader national interests. This Report describes policies China has in place that are designed to give U.S. and other foreign corporations economic incentives to serve that nation's interests. In recognition of this fact, the Commission states quite clearly in the Introduction to this Report that America's "elected officials must reclaim control of the policy agenda" of our economic relationship with China from the corporate sector. Our public officials must develop policies that give U.S. companies incentives to serve America's national interest by keeping and creating in this country good



paying, high tech jobs that sustain high living standards and contribute to the maintenance of our defense industrial and tax bases. This must be a top priority.

Some will claim that this Report blames China for our own nation's failure to have a vision and policies to help our citizens compete successfully in a now global economy. This is not the case. The Commission recognizes our own national shortcomings and calls on our Government to correct the consumption, savings and investing imbalances that are factors contributing to our trade and current account deficits. Also, as we did in our 2004 Report, the Commission calls on our Government to develop a coordinated, comprehensive national policy and strategy to maintain our scientific and technological leadership. The National Academies of Science and Engineering, along with the Institute of Medicine, released a very important report on October 12, 2005 entitled "Rising Above the Gathering Storm." It voices concerns similar to those voiced by this Commission about our nation's eroding technological and scientific base, and calls for specific steps to help arrest such erosion. I believe our policymakers are beginning to understand the urgency of addressing such issues. This does not mean, however, that we must wait until our own house is completely in order before we can address policies and practices being pursued by China that exacerbate our own shortcomings. We can and must pursue both courses simultaneously as they are inter-related. We will not be successful in arresting the erosion of our industrial base if we do not understand and deal with the deleterious impact some of China's economic policies are having on our economy.

I feel fortunate to have been part of the bipartisan team that worked diligently to produce the 2005 Report of the U.S.-China Economic and Security Review Commission to Congress. I hope the elected representatives of our people will find it helpful to them in shaping new policies that will ensure the U.S.-China trade, economic, and political relationship benefits both nations.

## **DISSENTING VIEWS OF COMMISSIONER WILLIAM REINSCH**

With regret I must once again dissent from this Report, as I did in 2002. I had hoped when I supported the 2004 report that it represented an evolution in a more responsible direction in terms of both rhetoric and recommendations. Unfortunately, the Commission majority has instead returned to the paranoia, and heavy-handed use of leverage of its first report.

There is no question that the U.S.-China relationship remains difficult, and the report correctly notes that hoped-for progress over the past several years has not always occurred. Intellectual property protection remains a serious problem, with Chinese enforcement lagging badly behind enactment of its laws. WTO accession compliance is not what was promised, as numerous business groups have reported. China's "currency reforms" have so far been too little to have an impact, although their creation of a more flexible trading band holds the promise of further progress. Perhaps most troubling, crackdowns on the media, Internet users and dissidents suggest the Hu Jintao government is more repressive than its predecessor. Progress on these issues will be difficult, even with a well-intentioned government, but there is growing well-placed concern that the Chinese government's intentions may not be good.

This year's Report does a thorough job of detailing these problems as well as many others. Where it errs is in its failure to recognize areas where progress and cooperation have occurred, and in its adoption of recommendations that would make the situation worse rather than better.

The Report's tilt is embodied in its negative tone. The indictments of China may change, but the verdict is always the same—guilty. The Report's perspective is simple and simplistic: we are right; China is wrong; the only issue is how to force them to do what we want. The recommendations are equally simplistic—we should tell them what we want them to do and then sanction them if they don't do it. The Report consistently implies the Chinese deserve blame for acting in their own interest rather than ours. It is ironic that the Report implicitly criticizes the Chinese for viewing the U.S. as a hegemon at the same time it presents a view of U.S. interests in Asia that can only be described as hegemonic. The Commission majority has once again tried to avoid characterizing China as a "threat;" yet the belief that it is permeates every page, suggesting that the Commission majority would abandon the policy of engagement that has characterized the last five administrations in favor of a policy of frustration implemented by sanctions.

It is clear that the Commission majority has never met a sanction it didn't like or didn't want to impose on China. Despite overwhelming evidence that unilateral sanctions fail to achieve their objectives and at the same time impose significant costs on the sanctioning nation, the Commission continues to recommend their imposition or expansion. The cost of doing so, however, will be to tear the fabric of engagement that the last five administrations have so painstakingly built up.

The Commission's recommendations for sanctions are clearly based on its conclusion that the United States has substantial le-

verage over China due to the latter's enormous trade surplus with us, a conclusion I believe is naïve. Instead, it will take patience, subtlety and diplomatic creativity more than the sledge hammer use of "leverage" advocated in this Report to achieve progress.

The Commission majority has also not hesitated to adopt the policy of "do as I say, not as I do," best exemplified in its recommendation that the United States ignore the WTO requirement that we repeal the "Byrd Amendment" at the same time the Commission criticizes Chinese failure to comply with its WTO obligations. (The question of why the Commission is making a recommendation on the Byrd Amendment at all, which is at best tangentially related to China, is another mystery in this Report.)

In addition, the recommendation for the onerous corporate reporting requirement is administratively burdensome and confusing and will make the American business community assume the costs of our foreign policy. As with unilateral sanctions, such a provision disadvantages the American business community, cedes the playing field to our European and Asian competitors who cheerfully pick up what our companies leave behind, and does not help us achieve our policy goals.

In the category, "If it ain't broke, why are we fixing it," the recommendations relating to CFIUS would inject Congress into a process that has been functioning effectively and cast doubt on the United States' longstanding open investment policy, not to mention endorsing a policy that we have in the past criticized other nations for adopting. Likewise, the section on Chinese involvement in Western capital markets concludes that the government ought to be doing more to influence or limit investor choices, despite evidence that the market itself appears to be addressing the problem.

Finally, while the Report correctly points out that the United States itself bears the responsibility for many of its economic problems—and has some intelligent proposals for addressing them—the report for the third time fails to address China's domestic economic problems. It deals with Chinese actions that disadvantage the United States and virtually ignores growing signs of internal economic difficulties that could seriously compromise growth and create internal economic and political crises that would at best preoccupy and at worst directly threaten the current government, factors that would have a significant impact on the bilateral relationship. The simplistic assumption is two straight lines—China is growing stronger while the United States grows weaker.

Last year, I expressed the hope that the next report would be able "to move beyond the simplistic 'we're right; they're wrong' approach and undertake more sophisticated analysis that better explains the complexities of the bilateral relationship and the long term implications for the United States of China's economic and political growth and development." Unfortunately, this report not only fails to reach that goal, it actually moves farther away from it, so I must dissent from it.



**APPENDIX I**  
**UNITED STATES-CHINA ECONOMIC AND  
SECURITY REVIEW COMMISSION CHARTER**

**22 USCS/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 (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).

**§ 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 USCS § 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 USCS § 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 USCS § 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 Review 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 USCS § 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. 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;”.

(2) RESPONSIBILITIES OF THE COMMISSION.—The United States-China Commission shall focus, in lieu of any other areas of work or study, on the following:

(A) PROLIFERATION PRACTICES.—The Commission shall analyze and assess the Chinese role in the proliferation of weapons of mass destruction and other weapons (including dual use technologies) to terrorist-sponsoring states, and suggest possible steps which the United States might take, including economic sanctions, to encourage the Chinese to stop such practices.

(B) ECONOMIC REFORMS AND UNITED STATES ECONOMIC TRANSFERS.—The Commission shall analyze and assess the qualitative and quantitative nature of the shift of United States production activities to China, including the relocation of high-technology, manufacturing, and R&D facilities; the impact of these transfers on United States national security, including political influence by the Chinese Government over American firms, dependence of the United States national security industrial base on Chinese imports, the adequacy of United States export control laws, and the effect of these transfers on United States economic security, employment, and the standard of living of the American people; analyze China’s national budget and assess China’s fiscal strength to address internal instability problems and assess the likelihood of externalization of such problems.

(C) ENERGY.—The Commission shall evaluate and assess how China’s large and growing economy will impact upon world energy supplies and the role the United States can play, including joint R&D efforts and technological assistance, in influencing China’s energy policy.

(D) UNITED STATES CAPITAL MARKETS.—The Commission shall evaluate the extent of Chinese access to, and use of United States capital markets, and whether the existing disclosure and transparency rules are adequate to identify Chinese companies which are active in United States markets and are also engaged in proliferation activities or other activities harmful to United States security interests.

(E) CORPORATE REPORTING.—The Commission shall assess United States trade and investment relationship with China, including the need for corporate reporting on United States invest-

ments in China and incentives that China may be offering to United States corporations to relocate production and R&D to China.

(F) REGIONAL ECONOMIC AND SECURITY IMPACTS.—The Commission shall assess the extent of China’s “hollowing out” of Asian manufacturing economies, and the impact on United States economic and security interests in the region; review the triangular economic and security relationship among the United States, Taipei and Beijing, including Beijing’s military modernization and force deployments aimed at Taipei, and the adequacy of United States executive branch coordination and consultation with Congress on United States arms sales and defense relationship with Taipei.

(G) UNITED STATES-CHINA BILATERAL PROGRAMS.—The Commission shall assess science and technology programs to evaluate if the United States is developing an adequate coordinating mechanism with appropriate review by the intelligence community with Congress; assess the degree of non-compliance by China and United States-China agreements on prison labor imports and intellectual property rights; evaluate United States enforcement policies; and recommend what new measures the United States Government might take to strengthen our laws and enforcement activities and to encourage compliance by the Chinese.

(H) WORLD TRADE ORGANIZATION COMPLIANCE.—The Commission shall review China’s record of compliance to date with its accession agreement to the WTO, and explore what incentives and policy initiatives should be pursued to promote further compliance by China.

(I) MEDIA CONTROL.—The Commission shall evaluate Chinese government efforts to influence and control perceptions of the United States and its policies through the internet, the Chinese print and electronic media, and Chinese internal propaganda.

(3) EFFECTIVE DATE.—This section shall take effect on the date of enactment of this Act [February 20, 2003].

## APPENDIX II BACKGROUND ON COMMISSIONERS

### **Hon. C. Richard D'Amato, Chairman**

Chairman C. Richard D'Amato was reappointed to the U.S.-China Economic and Security Review Commission by Senate Democratic Leader Harry Reid on October 5, 2005, for a two-year term expiring December 31, 2007. He served as the Chairman and Vice Chairman of the Commission beginning in April 2001, and was unanimously approved on July 19, 2004, to serve as the Commission Chairman for the 2004–2005 report cycle. He is an attorney, and a member of the Maryland and D.C. 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 1999–2000.

From 1988–98, Chairman D'Amato was the Democratic Counsel for the Committee on Appropriations of the United States 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 1980–88 as senior foreign policy and defense advisor to the 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.

Chairman D'Amato began his career as Legislative Director for Congressman James Jeffords (Ind.–VT) from 1975–78, 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 dinners 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, Annapolis Maritime Museum, The Johns Hopkins Cuba Exchange Program, and the University of Oxford Congressional Visitors program.

Chairman D'Amato received his B.A. (cum laude) from Cornell University in 1964, and served on the Cornell Board of Trustees's

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 University Law Center (JD, 1980). He resides in Annapolis with his wife, Dee.

### **Roger W. Robinson, Jr., Vice Chairman**

Vice Chairman Roger W. Robinson, Jr., was reappointed to the U.S.-China Economic and Security Review Commission by Senate Majority Leader Bill Frist on May 7, 2003, for a three-year term expiring December 31, 2005. He served as the Chairman of the Commission from October 18, 2002 through July 19, 2004, and was unanimously approved to serve as the Commission Vice Chairman for the 2004–2005 report cycle.

Mr. Robinson is president and CEO of Conflict Securities Advisory Group, Inc. ([www.conflictsecurities.com](http://www.conflictsecurities.com)), a Washington, D.C.-based company that offers impartial research and advisory services in the field of global security risk management (i.e., the links of publicly-traded companies to terrorist-sponsoring states and proliferation-related concerns). He is also president of RWR Inc., a consulting firm established in 1985 that provides strategic planning services and analyses of breaking geopolitical developments that could potentially impact on international equity, debt, and currency markets.

Prior to forming these firms, he was Senior Director of International Economic Affairs at the National Security Council. He worked at the White House from March 1982 until September 1985. Between January 1984 and April 1985, Chairman Robinson also served as Executive Secretary of the Senior Interdepartmental Group-International Economic Policy, a Cabinet-level body that reported through the National Security Council (NSC) to the President. As Senior Director, Chairman Robinson had responsibility for all economic, financial, trade, and energy relationships of the United States worldwide for NSC.

Prior to joining the NSC staff, Vice Chairman Robinson was a vice president in the International Department of the Chase Manhattan Bank in New York City. As a banker, he had responsibilities for Chase's loan portfolio in the USSR, Eastern and Central Europe, and Yugoslavia for five years. He also served for some two and a half years as a staff assistant to former Chase Chairman David Rockefeller and earlier on assignment with the Chase branch in Tokyo.

Mr. Robinson has published extensively on security-related risk in the global capital markets and earlier on East-West economic and financial relations. He has served as an expert witness on numerous occasions before both Senate and House committees. In addition, he is a frequent radio commentator and makes regular broadcast media appearances.

He holds a B.A. from Duke University and an M.A. in international affairs from the George Washington University. He served for some seven years as a member of the Board of Visitors at the Sanford Institute of Public Policy at Duke University and presently serves on other Boards. Chairman Robinson is also co-founder of the Prague Security Studies Institute in the Czech Republic.

**Carolyn Bartholomew**

Commissioner Carolyn Bartholomew was reappointed to the U.S.-China Economic and Security Review Commission on December 16, 2003, by House Democratic Leader Nancy Pelosi for a two-year term expiring December 31, 2005.

Ms. Bartholomew worked at senior levels in the U.S. Congress, serving as long-term Counsel, Legislative Director, and most recently, Chief of Staff, to U.S. House of Representatives Democratic Leader Nancy Pelosi. She also served as a Professional Staff Member on the House Permanent Select Committee on Intelligence. Previously, she was 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, focused primarily on trade, human rights, and the proliferation of weapons of mass destruction. Commissioner Bartholomew was a lead staff on legislation to establish the Department of Homeland Security and led efforts in the establishment and funding of global AIDS programs and the promotion of human rights and democratization in countries around the world. Commissioner Bartholomew 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.

Commissioner Bartholomew received her B.A. from the University of Minnesota, graduating cum laude in 1979. She received her M.A. in 1984 from Duke University and received her J.D. from Georgetown University Law Center in 1994. She is a member of the State Bar of California.

**George Becker**

Commissioner George Becker was reappointed to the U.S.-China Economic & Security Review Commission by Democratic Leader Nancy Pelosi for a three-year term expiring December 31, 2005. He previously served on the Commission as a Member beginning February 2001 through January 7, 2003.

A second-generation steelworker, Commissioner Becker grew up across the street from Granite City Steel in Illinois, where he went to work with an open-hearth labor gang at age fifteen during the summer of 1944. From that beginning, Commissioner Becker rose through the ranks until being elected in 1993 and again in 1997 for two terms as the sixth international president of the United Steelworkers of America (USWA), representing 750,000 industrial workers in the U.S. and Canada.

Prior to being named to the Commission, Commissioner Becker completed a Congressional appointment on the U.S. Trade Deficit Review Commission in 2000. He also served appointments during the Clinton Administration to the President's Export Council and the U.S. Trade and Environmental Policy Advisory Committee. As

an AFL-CIO vice president and executive council member, Commissioner Becker chaired the national labor federation's powerful Economic Policy Committee. He was a leader in the 1995 revitalization of the AFL-CIO that elected John Sweeney as the current president.

Commissioner Becker was elected two terms in 1985 and 1989 as the USWA's international vice president for administration. While vice president, he headed the union's organizing program and the Aluminum Industry Conference for collective bargaining. Among several corporate campaigns he led involving major labor disputes, the best known was against Ravenswood Aluminum Corp. that achieved the historic firing of 1,300 permanent scab replacement workers and the return to work of 1,600 steelworkers after a twenty-month lockout that ended in 1992.

His working class background includes employment as a crane operator at General Steel Castings and an assembler at General Motors' Fisher Body plant in St. Louis. After serving in the Marine Corps, Commissioner Becker became active in the USWA while an inspector at Dow Chemical's aluminum rolling mill in Madison, IL, where he was elected as the Local 4804 president. He was appointed a USWA staff representative in 1965, negotiating labor contracts and developing a reputation as an expert on occupational health issues. His interest in job safety took him to the union's Pittsburgh headquarters as a technician in the Safety and Health Dept.

He helped establish some of the first national health standards adopted by the U.S. Occupational Safety and Health Administration for workers exposed to lead, arsenic, and other toxic substances.

Commissioner Becker's USWA presidency has been marked by many major achievements, including a major restructuring of the USWA's regional districts and executive board; mergers of the 98,000-member United Rubber Workers in 1995 and the 40,000-member Aluminum, Brick and Glass Workers in 1997; plus a successful twenty-eight-month worldwide campaign for a labor agreement and the return to work of 6,000 permanently terminated workers at Bridgestone/Firestone Corp.

He served as the executive committee member of the Geneva-based International Metalworkers Federation and chairman of the world rubber council of the International Federation of Chemical, Energy, Mine and General Workers' Unions in Brussels.

#### **Stephen D. Bryen, Ph.D.**

Commissioner Stephen D. Bryen was reappointed to the U.S.-China Economic and Security Review Commission for a three-year term expiring on December 31, 2005, by Speaker Dennis Hastert, U.S. House of Representatives. He previously served as a Member of the Commission from April 2001 through January 7, 2003.

Commissioner Bryen is the president of Finmeccanica, Inc., which represents Finmeccanica S.p.A. in the United States. The company manufactures defense, aerospace and commercial products. Dr. Bryen is a former Deputy Under Secretary of Defense and Founder and First Director of the Defense Technology Security Administration.



**Thomas Donnelly**

Commissioner Thomas Donnelly was appointed by Senate Majority Leader Bill Frist for a two-year term expiring December 31, 2006.

Thomas Donnelly is resident fellow in defense and security policy studies at the American Enterprise Institute, where he researches U.S. grand strategy and military requirements in the post-Cold War world. He is also a contributing writer to the Weekly Standard online and the author of AEI's monthly National Security Outlook.

Donnelly began his career as a journalist in 1978 at the Journal newspapers in the Washington, D.C. suburbs, and moved to Army Times in 1980. In 1985 he helped launch Defense News, becoming the paper's deputy editor in 1987. Later that year, he returned to Army Times as editor. During his six years as editor, he reinvigorated the paper's design and news coverage while writing major stories on Operation Just Cause in Panama, the Gulf War, and the mission to Somalia. In 1994, he became executive editor of the National Interest.

In 1995, he joined the professional staff of the House Committee on Armed Services and soon was named head of the policy group. His major contributions to the Committee's work included overseeing Committee activities concerning the operations of U.S. forces in the Balkans, leading the Committee's investigation of the Khobar Towers bombing in Saudi Arabia and worldwide readiness problems, and establishing a series of hearings and Committee white papers on American security interests in the post-Cold War world. In addition, Donnelly drafted significant legislative initiatives to reform the Defense Department's readiness reporting system, explore the promise of the current revolution in military affairs, monitor developments in the Chinese military, understand the military and strategic effects of an expanded NATO alliance, and shape the requirements for the 1997 and 2001 Quadrennial Defense Reviews.

Donnelly's most recent book is *Operation Iraqi Freedom: A Strategic Assessment* (AEI Press, 2004). He is also the author of a forthcoming study, *The Defense Requirements of the Bush Doctrine* (AEI Press, 2005). Previously, Donnelly co-wrote two books. The first, *Operation Just Cause: The Storming of Panama*, has been recognized as the most complete work on the 1989 U.S. invasion of Panama, praised by one reviewer as "the definitive study of modern campaign planning . . . destined to be studied at war colleges for years to come." *Clash of Chariots: A History of Armored Warfare*, was published by Berkeley Books in 1996. Donnelly's writings have been featured in the Washington Post, Foreign Affairs, Wall Street Journal, Weekly Standard, Los Angeles Times, National Interest, Jane's Defence Week, and numerous other newspapers and journals.

Donnelly is a Washington, D.C. native, born June 13, 1953, and educated at Sidwell Friends School; Ithaca College, from which he holds a baccalaureate degree in philosophy; and John Hopkins' Nitze School of Advanced International Studies, from which he holds a master's degree. He lives in the Washington suburbs with his wife and two sons.

**June Teufel Dreyer, Ph.D.**

Commissioner June Teufel Dreyer was reappointed to the U.S.-China Economic and Security Review Commission by Speaker of the House Dennis Hastert on January 23, 2004, for a two-year term expiring December 31, 2005.

Commissioner Dreyer is a Professor, Department of Political Science at the University of Miami, Coral Gables, Florida. Dr. Dreyer is also a Senior Fellow of the Foreign Policy Research Institute. She received her Bachelor's degree from Wellesley College and her master's and Ph.D. degrees from Harvard University. Dr. Dreyer formerly served as Senior Far East Specialist at the Library of Congress and Asia advisor to the Chief of Naval Operations. Her research work centers on ethnic minorities; the Chinese military; Asian-Pacific regional relations; and Taiwan politics. A frequent visitor to the Far East, Dr. Dreyer is the author of *China's Forty Millions: Minority Nationalities and National Integration in the People's Republic of China*, published by Harvard University Press, and *China's Political System: Modernization and Tradition*, published by Longman and now in its fifth edition. She is co-author of *U.S. China Relations in the Twenty-First Century*, and of *Contemporary Tibet: Politics, Development, and Society in a Disputed Region*. Her articles have appeared in numerous scholarly journals. She and her husband, Dr. Edward Dreyer, have two children.

**Hon. Patrick A. Mulloy**

Commissioner Patrick A. Mulloy was reappointed to the U.S.-China Economic and Security Review Commission on January 1, 2005, by Senate Democratic Leader Tom Daschle to a two-year term expiring on December 31, 2006. Commissioner Mulloy previously served as a Member from April 2001 to January 7, 2003.

Prior to assuming his current responsibilities, Commissioner Mulloy was nominated by President Clinton and confirmed by the U.S. Senate as Assistant Secretary for Market Access and Compliance in the Department of Commerce's International Trade Administration, where he served from 1998 to 2001. In that position, Commissioner Mulloy directed a trade policy unit of over two hundred international trade specialists, which focused worldwide on removing foreign barriers to U.S. exports and on ensuring that foreign countries comply with trade agreements negotiated with the United States. This latter activity involved discussions both in the World Trade Organization (WTO) and with individual governments. He traveled extensively, meeting with foreign leaders to advance market-opening programs in the European Union, Eastern Europe, 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.

Prior to his employment as Assistant Secretary, Commissioner Mulloy served fifteen years in 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 Super-

vision 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 dealing with foreign bribery, exchange rates, international debt, and export controls.

Before coming to the Senate, Commissioner Mulloy served as a senior attorney in the Antitrust Division of the U.S. Department of Justice, where he directed a staff of lawyers and economists, which supervised participation by 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 at the U.S. Department of State, where he served in the Office of U.N. Political Affairs, the Office of International Environmental and Oceans Affairs, and as Vice Consul in the U.S. Consulate General in Montreal, Canada.

Commissioner Mulloy, a native of Kingston, Pennsylvania, holds an LL.M. from Harvard University Law School, a J.D. from George Washington University Law School, an M.A. from the University of Notre Dame, and a B.A. from King's College.

He is presently an adjunct professor of international trade law at the law schools of both Catholic University and George Mason University, and periodically lectures on trade and financial matters at the National Defense University's Industrial College of the Armed Forces.

He resides in Alexandria, Virginia, with his wife, Marjorie, and they have three children.

#### **Hon. William A. Reinsch**

Commissioner William A. Reinsch was reappointed to the U.S.-China Economic and Security Review Commission by Senate Democratic Leader Harry Reid on October 5, 2005, for a two-year term expiring December 31, 2007.

On April 2, 2001, Commissioner Reinsch joined the National Foreign Trade Council as president. The council, founded in 1914, is the only business organization dedicated solely to trade policy, export finance, international tax, and human resource issues. The organization represents over 300 companies through its offices in New York and Washington, D.C.

Prior to joining the National Foreign Trade Council, Reinsch served as Under Secretary for Export Administration in the U.S. Department of Commerce. As head of the Bureau of Export Administration, he was charged with administering and enforcing the export control policies of the U.S. government, as well as its anti-boycott laws. In addition, the bureau is part of an interagency team helping Russia and other newly emerging nations develop effective export control systems and convert their defense industries to civilian production. Through its Office of Strategic Industries and Economic Security, the bureau is also responsible for monitoring and protecting the health of U.S. industries critical to our national security and defense industrial base and assisting in domestic de-

fense conversion efforts. Major accomplishments during his tenure included: refocusing controls in light of economic globalization, most notably on high-performance computers, microprocessors, encryption, and other items; the first complete revision of the Export Administration regulations in over forty years; revising the interagency process for reviewing applications; permitting electronic filing of applications over the Internet; and increasing the bureau's budget by 87 percent.

From 1991 through 1993, Commissioner Reinsch was a senior Legislative Assistant to Senator John D. Rockefeller IV, 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.

From 1977 to 1991, Commissioner Reinsch served on the staff of the late Senator John Heinz as Chief Legislative Assistant, focusing on foreign trade and competitiveness policy issues. During that period, Senator Heinz was either Chairman or Ranking Minority Member of the Banking Committee's Subcommittee on International Finance. He was also a Member of the International Trade Subcommittee of the Finance Committee. Commissioner Reinsch provided staff support for the Senator on both Subcommittees, which included participation in five revisions of the Export Administration Act and work on four major trade bills. Prior to 1977, Commissioner 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.

During his tenure as Under Secretary, Commissioner Reinsch delivered more than two hundred speeches and testified fifty-three times before various Committees of Congress. His recent publications include "Why China Matters to the Health of the U.S. Economy," in *Economics and National Security: The Case of China, 2002*; "The Role and Effectiveness of U.S. Export Control Policy in the Age of Globalization," *The Monitor* (Center for International Trade and Security, spring 2000); "Export Controls in the Age of Globalization," *The Monitor* (Center for International Trade and Security, summer 1999); "Should Uncle Sam Control U.S. Technology Exports?" *Insight Magazine*, September 8, 1997; "Encryption Policy Strikes a Balance," *Journal of Commerce*, March 5, 1997; "Building a New Economic Relationship with Japan," in I.M. Destler and Yankelovich, D., eds., *Beyond the Beltway: Engaging the Public in U.S. Foreign Policy*, W.W. Norton, April 1994.

In addition to his legislative work, Commissioner Reinsch has served as an adjunct associate professor at the University of Maryland University College Graduate School of Management and Technology since 1990, teaching a course in international trade and trade policy. He is also president of the Saint Mark Elderly Housing Corporation, a non-profit corporation that runs Saint Mark House, a home for the frail elderly in Rockville, Maryland.

Commissioner Reinsch received a B.A. degree in International Relations from the Johns Hopkins University and an M.A. degree from the Johns Hopkins School of Advanced International Studies. He lives in Bethesda, Maryland, with his wife and two sons.

### **Hon. Fred Dalton Thompson**

Commissioner Fred Thompson was appointed to the Commission by Senate Majority Leader Bill Frist for a two-year term expiring December 31, 2006. Senator Thompson's service in the United States Senate (1994–2002) was a continuation of a distinguished career across both the public and private arenas. In his first campaign for public office, Thompson was elected by the people of Tennessee in 1994 to the remaining two years of an unexpired Senate term. When he was returned for a full term in 1996, he received more votes than any previous candidate for any office in Tennessee history. In 1997, Thompson was elected Chairman of the Senate Committee on Governmental Affairs, making him among the most junior senators in history to serve as Chairman of a major Senate Committee. He was also a Member of the Finance Committee and the Senate Select Committee on Intelligence. Thompson chose not to run for re-election in 2002. He resumed his legal and consulting work; is a frequent speaker; and is a regular on the long-running TV drama, *Law & Order*. Thompson is a former president of the Federal City Council in Washington and a current member of the Council on Foreign Relations. He is also a Visiting Fellow with the American Enterprise Institute.

Prior to his election to the U. S. Senate, Thompson maintained law offices in Nashville and Washington and served as Special Counsel to both the Senate Select Committee on Intelligence and the Senate Committee on Foreign Relations. He is also the author of the Watergate memoir, "At That Point In Time." Having grown up in Lawrenceburg, Tennessee, Thompson attended Memphis State University, where he earned an undergraduate degree in philosophy and political science. He went on to receive a law degree from Vanderbilt University. Two years later, Thompson was named an Assistant United States Attorney and, at the age of 30, was appointed Minority Counsel to the Senate Watergate Committee, where he served in 1973 and 1974.

Thompson has appeared in 18 motion pictures, including feature roles in "Cape Fear," "In the Line of Fire," "Die Hard II," and "The Hunt for Red October." He has also appeared in numerous television series and movies.

Senator Thompson lives in Nashville, Tennessee and Washington, D.C. He has two sons, Tony and Daniel, and five grandchildren. In June of 2002, Thompson married Jeri Kehn, a political and media consultant. They have a daughter, Hayden, who was born in 2003.

### **Michael R. Wessel**

Commissioner Michael R. Wessel was appointed to the U.S.-China Economic and Security Review Commission by House Democratic Leader Nancy Pelosi on January 4, 2005, for a two-year term expiring December 31, 2006.

Commissioner Wessel is a senior vice president at the Downey McGrath Group, Inc., a public affairs consulting firm offering expertise in government, politics, and international affairs. He served on the staff of House Democratic Leader Richard A. Gephardt for more than twenty years, leaving his position as General Counsel in

March 1998. In addition to his duties as General Counsel, Commissioner Wessel was Mr. 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 twenty years on Capitol Hill, Commissioner Wessel served in a number of positions: He was Mr. 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 to 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.

He 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 10 percent Tax Plan, a comprehensive tax reform initiative that would enable roughly four out of five taxpayers to pay no more than a ten percent rate in federal income taxes. It became the principal Democratic tax reform alternative. In 1988, he served as National Issues Director to Gephardt's Presidential campaign. During the 1992 Clinton/Gore campaign, he assisted on a broad range of issues and served as a Senior Policy Advisor to the Clinton/Gore 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-Edwards campaign.

He has coauthored a number of articles with Democratic Leader Gephardt and a book, *An Even Better Place: America in the 21st Century* (Public Affairs, 1999). Commissioner Wessel has served as a Commissioner on the U.S.-China Economic and Security Review Commission since its creation. 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.

Commissioner Wessel holds a B.A. and a J.D. from George Washington University. He is a member of the bar of the District of Columbia and Pennsylvania. He and his wife Andrea have four children.

#### **Larry M. Wortzel, Ph.D.**

Commissioner Larry M. Wortzel was appointed to the U.S.-China Economic and Security Review Commission on November 9, 2001, and reappointed on January 4, 2005, by House Speaker Dennis Hastert for a two-year term expiring December 31, 2006.

Commissioner Wortzel is a visiting fellow at The Heritage Foundation, an influential think tank based in Washington, DC. He previously served as the Director of the Asian Studies Center and vice president for foreign policy at the Foundation.

A leading authority on China, Asia, national security, and military strategy, Commissioner Wortzel joined Heritage in November 1999 upon completing a distinguished thirty-two-year career in the U.S. armed forces. His last military position was as director of the Strategic Studies Institute of the U.S. Army War College.

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 Infantry Officer Candidate School, as well as both Airborne and Ranger schools. After serving four years as an infantry officer in Korea and at Fort Benning, Georgia, he shifted to military intelligence. Wortzel traveled regularly to throughout Asia while serving the U.S. Pacific Command as a political-military affairs analyst 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. In addition, for the Army Intelligence and Security Command, he managed programs to gather foreign intelligence.

From 1988 to 1990, Commissioner Wortzel was Assistant Army Attaché at the U.S. Embassy in China, where he witnessed and reported on the Tiananmen Massacre. After assignments as an Army strategist and managing Army intelligence officers, he returned to China in 1995 as the Army Attaché. In December 1997, he became a faculty member of the U.S. Army War College, serving as director of the Strategic Studies Institute. He retired from the Army as a colonel.

Commissioner Wortzel's books include *Class in China: Stratification in a Classless Society* (Greenwood Press, 1987), *China's Military Modernization: International Implications* (Greenwood, 1988), *The Chinese Armed Forces in the 21st Century* (Carlisle, PA, 1999), and *Dictionary of Contemporary Chinese Military History* (Greenwood, 1999). He 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 B.A. from Columbus College, Georgia, and his M.A. and Ph.D. from the University of Hawaii. He and his wife, Christine, have two married sons and two grandchildren.





## **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).

### **September 16, 2005, 2005: Public Hearing on "The Library of Congress Chinese Language Collection," Washington, D.C.**

Commissioners present: C. Richard D'Amato, Chairman; Roger W. Robinson Jr., Vice Chairman; June Teufel Dreyer, Patrick A. Mulloy, Michael R. Wessel, Larry M. Wortzel (Co-Chair).

Witnesses: Carolyn T. Brown, Ph.D., Library of Congress; Hwa-Wei Lee, Ph.D., Library of Congress; David Shambaugh, Ph.D., George Washington University; James Mulvenon, Ph.D., Center for Intelligence Research and Analysis; Chi Wang, Ph.D., U.S.-China Policy Foundation.

### **September 15, 2005: Public Hearing on "China's Military Modernization and Cross-strait Balance," Washington, D.C.**

Commissioners present: C. Richard D'Amato, Chairman, (Hearing Co-Chair); Roger W. Robinson Jr., Vice Chairman; George Becker, Stephen D. Bryen (Hearing Co-Chair), Thomas Donnelly (Hearing Co-Chair), June Teufel Dreyer, Patrick A. Mulloy, William A. Reinsch, Fred Thompson, Michael R. Wessel, Larry M. Wortzel (Co-Chair).

Congressional Perspectives: Rob Simmons, U.S. Congressman from the State of Connecticut.

Witnesses: James Keith, Department of State; Retired Rear Admiral Eric McVadon, Institute of Foreign Policy Analysis; Laurent Murawiec, Ph.D., Hudson Institute; Joan Johnson-Freese, Ph.D., Naval War College; Dennis Blasko, Independent Consultant; Roger Cliff, Ph.D., The RAND Corporation; James Mulvenon, Ph.D., Center for Intelligence Research and Analysis; Kurt Campbell, Ph.D., Center for Strategic and International Studies (CSIS); Dan Blumenthal, American Enterprise Institute; Thomas J. Christensen, Ph.D., Princeton University; Fu S. Mei, Taiwan Security Analysis Center (TAISAC); Adam Cobb, Ph.D., USAF Air War College; Richard Bush, The Brookings Institution; Merritt T. Cooke, G3C Strategy; Vincent Wei-cheng Wang, Ph.D., University of Richmond.

**August 11, 2005: Public Hearing on  
“China and the Capital Markets,”  
Washington, D.C.**

Commissioners present: C. Richard D’Amato, Chairman; Roger W. Robinson Jr., Vice Chairman, (Co-Chair); June Teufel Dreyer, Patrick A. Mulloy, Michael R. Wessel (Co-Chair), Larry M. Wortzel.

Witnesses: Michael Geczi, The Torrenzano Group; Robert G. DeLaMater, Sullivan & Cromwell LLP; Pieter Bottelier, Ph.D., Johns Hopkins University (SAIS); Marshall W. Meyer, Ph.D., University of Pennsylvania; Solomon Tadesse, Ph.D., University of South Carolina; Don Straszheim, Straszheim Global Investors; Frank Gaffney, The Center for Security Policy; Howard Chao, O’Melveny & Myers.

**July 21–22, 2005: Public Hearing on  
“China’s Growing Global Influence:  
Objectives and Strategies,”  
Washington, DC**

Commissioners present: C. Richard D’Amato, Chairman; Roger W. Robinson Jr., Vice Chairman; Carolyn Bartholomew (Hearing Co-Chair), George Becker, Stephen D. Bryen, Thomas Donnelly, June Teufel Dreyer (Hearing Co-Chair), Patrick A. Mulloy, William A. Reinsch, Michael R. Wessel (Hearing Co-Chair).

Congressional Perspectives: Russell Feingold, U.S. Senator from the State of Wisconsin; James Inhofe, Senator From the State of Oklahoma; J. Randy Forbes, U.S. Congressman from the State of Virginia.

Witnesses: Gal Luft, Ph.D., The Institute for the Analysis of Global Security; Fared Mohamedi, PFC Energy; Randall Schriver, Armitage International; Steven Tsang, Ph.D., St. Antony’s College (Oxford); Avery Goldstein, Ph.D., University of Pennsylvania; Charles McMillion, MBG Information Services; Ambassador Princeton Lyman, The Council on Foreign Relations; Ambassador David Shinn, George Washington University; Cynthia Watson, Ph.D., National War College; Claudio Loser, Ph.D., The Inter-American Dialogue; Al Santoli, The Asian-America Initiative; Robin Niblett, Ph.D., The Center for Strategic and International Studies (CSIS); Christopher Dent, Ph.D., University of Leeds; Daniel Blumenthal, The American Enterprise Institute; Michael Chinworth, Ph.D., Vanderbilt University; Marvin C. Ott, Ph.D., The National War College; Bronson Percival, The C.N.A. Corporation; John Garver, Ph.D., The Georgia Institute of Technology; Madhav Nalapat, Ph.D. Manipal Academy; Paul Goble, Ph.D., University of Tartu; Herman Pirchner, Jr., The American Foreign Policy Council.

**June 23, 2005: Public Hearing on  
“U.S.-China Trade Impacts on the Defense  
Industrial Base,”  
Washington, DC**

Commissioners present: C. Richard D’Amato, Chairman; Roger W. Robinson Jr., Vice Chairman; Carolyn Bartholomew, George

Becker, Stephen D. Bryen, Thomas Donnelly, June Teufel Dreyer, Patrick A. Mulloy, William A. Reinsch (Hearing Co-Chair), Michael R. Wessel (Hearing Co-Chair), Larry M. Wortzel (Co-Chair).

Congressional Perspectives: Donald A. Manzullo, U.S. Congressman from the State of Illinois.

Witnesses: Peter Lichtenbaum, Acting Under Secretary for Industry and Security, U.S. Department of Commerce; William Schneider, Ph.D., International Planning Services Inc.; Pierre Chao, Center for Strategic and International Studies (CSIS); Paul Freedenberg, Ph.D., Association for Manufacturing Technology; Jack Shilling, Ph.D., Allegheny Technologies; William Howard, Ph.D., Defense Science Board Task Force on High Performance Microchip Supply; James Lewis, Ph.D., Center for Strategic and International Studies (CSIS); Amy Praeger, American Shipbuilding Association.

**May 19–20, 2005: Public Hearing on  
“China and the Future of Globalization,”  
New York, NY**

Commissioners present: C. Richard D’Amato, Chairman, (Hearing Co-Chair); Roger W. Robinson Jr., Vice Chairman, (Hearing Co-Chair); Carolyn Bartholomew, George Becker, Thomas Donnelly, June Teufel Dreyer, Patrick A. Mulloy, William A. Reinsch, Larry M. Wortzel.

Witnesses: Ambassador Richard N. Haass, Council on Foreign Relations; Arvind Panagariya, Ph.D., Columbia University; Ralph E. Gomory, Alfred P. Sloan Foundation; Richard B. Freeman, Ph.D., Harvard University; Richard N. Cooper, Ph.D., Harvard University; Clyde Prestowitz, Economic Strategy Institute; Ambassador Richard McCormack, Center for Strategic & International Studies (CSIS); Oded Shenkar, Ph.D., Ohio State University; Robert A. Blecker, Ph.D., American University; William H. Overholt, The RAND Corporation; Dean Baker, Center for Economic and Policy Research; James K. Galbraith, Ph.D., University of Texas at Austin; Catherine L. Mann, Institute for International Economics; William J. Jones, Cummins-Allison Corporation; Ron Blackwell, ALF-CIO; Gary G. Hamilton, Ph.D., University of Washington; Gary Clyde Hufbauer, Institute for International Economics; H. David Rosenbloom, New York University School of Law; David R. Tillinghast, Baker & McKenzie LLP; William Wolman, Economist, written statement for the record; Paul Craig Roberts, Hoover Institution.

**April 21–22, 2005: Public Hearing on  
“China’s High Technology Development,”  
Palo Alto, CA**

Commissioners present: C. Richard D’Amato, Chairman; Roger W. Robinson Jr., Vice Chairman; Carolyn Bartholomew, June Teufel Dreyer, Patrick A. Mulloy (Hearing Co-Chair), William A. Reinsch, Larry M. Wortzel.

Witnesses: William J. Perry, Stanford Institute for International Studies; James C. Morgan, Applied Materials, Inc.; George M. Scalise, Semiconductor Industry Association; Alan C. Wong, Nvidia Corporation; Gary Edward Rieschel, Mobius Venture Capital; G. Carl Everett, Accel Partners; Richard P. Suttmeier, Ph.D., University of Oregon; Michael Pillsbury, Atlantic Council of the United States; Denis Fred Simon, Ph.D., State University of New York; Kathleen A. Walsh, Henry L. Stimson Center; Henry S. Rowen, Ph.D., Stanford University; John Zysman, Ph.D., University of California at Berkeley; Ernest H. Preeg, Manufacturers Alliance/MAPI; Eamonn Fingleton, Author; William T. Archey, American Electronics Association (AeA); John Ciacchella, A.T. Kearney; Rhett Dawson, Information Technology Industry Council (ITI); John Gage, Sun Microsystems Inc.; Mark FitzGerald, Banc of America Securities LLC; Anthony F. Rock, Assistant Secretary of State; Larry H. Weber, National Science Foundation (NSF); John G. Malcolm, Motion Picture Association of America; Darcy Antonellis, Warner Bros. Entertainment Inc.; Pat Choate, Manufacturing Policy Project; Ted C. Fishman, Author; Oded Shenkar, Ph.D., Ohio State University, written statement for the record.

**April 14, 2005: Public Hearing on  
“China’s State Control Mechanisms,”  
Washington, DC**

Commissioners present: C. Richard D’Amato, Chairman; Carolyn Bartholomew, George Becker, Thomas Donnelly, June Teufel Dreyer (Hearing Co-Chair), Patrick A. Mulloy, William A. Reinsch (Hearing Co-Chair), Larry M. Wortzel.

Congressional Perspectives: David Wu, U.S. Congressman from the State of Oregon; Dan Burton, U.S. Congressman from the State of Indiana.

Witnesses: Susan O’Sullivan, U.S. Department of State; John G. Palfrey, Jr., Harvard Law School; Derek Bambauer, Harvard Law School; Nart Villeneuve, University of Toronto; Jiao Guobiao, Beijing University; Perry Link, Princeton University; Richard Baum, Ph.D., University of California at Los Angeles; James C. Mulvenon, Ph.D., Center for Intelligence Research and Analysis; Xiao Qiang, University of California at Berkeley; Kenneth Berman, International Broadcasting Bureau; Frank Smyth, The Committee to Protect Journalists; Edward Friedman, Ph.D., University of Wisconsin; Yu Maochun, Ph.D., United States Naval Academy; Murray Scot Tanner, Ph.D., RAND Corporation; He Qinglian, Human Rights in China; Li Qiang, China Labor Watch; Dan Southerland, Radio Free Asia, written statement for the record; William C. Baum, Voice of America, written statement for the record.

**March 10, 2005: Public Hearing on  
“China’s Growth as a Regional Economic Power:  
Impacts and Implications,”  
Washington, DC**

Commissioners present: C. Richard D’Amato, Chairman; Roger W. Robinson Jr., Vice Chairman; Carolyn Bartholomew (Hearing

Co-Chair), George Becker, Stephen D. Bryen, Thomas Donnelly, June Teufel Dreyer, Patrick A. Mulloy, William A. Reinsch, Fred Thompson (Hearing Co-Chair), Michael R. Wessel, Larry M. Wortzel (Co-Chair).

Congressional Perspectives: Edward J. Markey, U.S. Congressman from the State of Massachusetts; Curt Weldon, U.S. Congressman from the State of Pennsylvania; Solomon P. Ortiz, U.S. Congressman from the State of Texas, written statement for the record.

Witnesses: Peter W. Rodman, Assistant Secretary of Defense for International Security Affairs; Stephen G. Rademaker, Assistant Secretary for Arms Control; Ashton B. Carter, Ph.D., John F. Kennedy School of Government, Harvard University; Gary Milhollin, Ph.D., University of Wisconsin Law School; Daniel A. Pinkston, Ph.D., Monterey Institute of International Studies; Selig S. Harrison, Woodrow Wilson International Center for Scholars; Balbina Y. Hwang, The Heritage Foundation; Henry Sokolski, The Non-proliferation Policy Education Center; Joseph E. DeTrani, Special Envoy for Six-Party Talks.

**February 3–4, 2005: Public Hearing on  
“China and the WTO: Assessing and  
Enforcing Compliance,”  
Washington, DC.**

Commissioners present: C. Richard D’Amato, Chairman; Roger W. Robinson Jr., Vice Chairman; Carolyn Bartholomew, George Becker, June Teufel Dreyer (Hearing Co-Chair), Patrick A. Mulloy (Hearing Co-Chair), William A. Reinsch, Fred Thompson, Michael R. Wessel, Larry M. Wortzel.

Congressional perspectives: Sherrod Brown, U.S. Congressman from the State of Ohio; Sander Levin, U.S. Congressman from the State of Michigan; Tim Ryan, U.S. Congressman from the State of Ohio; Bob Ney, U.S. Congressman from Ohio; Charles E. Schumer, U.S. Senator from the State of New York; Lindsey Graham, U.S. Senator From the State of South Carolina; Ted Strickland, U.S. Congressman from the State of Ohio; Robert C. Byrd, U.S. Senator from the state of West Virginia; Mary Landrieu, U.S. Senator from the State of Louisiana; Byron Dorgan, U.S. Senator from the State of North Dakota. Larry E. Craig, U.S. Senator from the State of Idaho, written statement for the record; Mike DeWine, U.S. Senator from the State of Ohio, written statement for the record; Daniel K. Inouye, U.S. Senator from the State of Hawaii, written statement for the record.

Witnesses: Henry A. Levine, Deputy Assistant Secretary of Commerce for Asia Market Access and Compliance; Shaun E. Donnelly, Deputy Assistant Secretary of State, Economic Bureau Trade Policy Promotion; Terence P. Steward, Esq., Stewart and Stewart; Alan Wm. Wolff, Partner, Dewey Ballantine LLP; C. Fred Bergsten, Institute for International Economics; Franklin J. Vargo, National Association of Manufacturers; David A. Hartquist, Esq., China Currency Coalition; Cass Johnson, National Council of Textile Organizations; Auggie Tantillo, American Manufacturing Trade Action Coalition; Harris Raynor, UNITE HERE; Erik O. Autor, Na-

tional Retail Federation; Julia K. Hughes, U.S. Association of Importers of Textiles and Apparel; Loren Yager, Government Accountability Office (GAO); Eric H. Smith, International Intellectual Property Alliance (IIPA); Timothy P. Trainer, International AntiCounterfeiting Coalition, Inc.; Jason Berman, International Federation of the Phonographic Industries; Nancy E. Foster, U.S. Apple Association; Gary C. Martin, North American Export Grain Association; Michael J. Coursey, Collier Shannon Scott PLLC; Kevin M. Burke, American Apparel & Footwear Association, written statement for the record; Randal Quarles, Assistant Secretary of Treasury for International Affairs, written statement for the record; Timothy P. Trainer, International AntiCounterfeiting Coalition, Inc.

**January 13, 2005: Public Hearing on  
“U.S.-China Trade and investment:  
Impact on Pacific Northwest Industries,”  
Washington, DC.**

Commissioners present: C. Richard D’Amato, Chairman; George Becker (Hearing Co-Chair), Carolyn Bartholomew, June Teufel Dreyer, Robert F. Ellsworth, William A. Reinsch, Michael Wessel, Larry M. Wortzel.

Congressional Perspectives: Jim McDermott, U.S. Congressman from the State of Washington.

Witnesses: Joseph J. Borich, Washington State China Relations Council; Rick Bender, Washington State AFL–CIO; Robert E. Scott, Economic Policy Institute; John F. Walsh, Walsh Aviation; Owen E. Herrnstadt, International Association of Machinists and Aerospace Workers (IAM); Mark Blondin, International Association of Machinists and Aerospace Workers, IAM; Richard Schneider, IAM; Heidi Wood, Morgan Stanley; Marcus Courtney, Washington Alliance of Technology Workers; Ronil Hira, Ph.D., Institute of Electrical and Electronics Engineers-United States of America; Jesse M. Feder, Business Software Alliance (BSA); Thomas I. Wahl, Ph.D., Washington State University; Christian Schlect, Northwest Horticultural Council (NHC); Rod Christensen, Far West Spear-mint Oil Administrative Committee; M.R. Dinsmore, Port of Seattle; Nathaniel “Sam” Ruda, Port of Portland; David A. Blackburn, Thomas G. Faria Corporation; Charles Dale Lovett, Pulp and Paperworkers Resource Council (PPRC); Ivan Eastin, Ph.D., University of Washington; James R. Cranney, Jr., U.S. Apple Association.

**December 2, 2004: Symposium on  
“Transatlantic Perspectives on Economic and  
Security Relations with China,”  
Prague, Czech Republic**

Commissioners present: C. Richard D’Amato, Vice Chairman; Roger W. Robinson Jr., Vice Chairman; June Teufel Dreyer, Larry M. Wortzel.

Participants: Jan Ruml, Senate of the Czech Republic; Jiří Schneider, Foreign ministry of the Czech Republic; Josef Jarab, Senate Committee on International Affairs, Defense, and Security;

Jean-Pierre Cabestan, French National Center for Scientific Research (CNRS); Jan Musil, Skoda Energo; Oldrich Schwarz, Libra Management Group Limited; Vladimir Matousek, Czech-Moravian Confederation of Trade Unions; Volker Riemann, Skoda Auto a.s.; Michele Tajariol, Tajmac-ZPS.

**November 30, 2004: Symposium on  
“Transatlantic Perspectives on Economic and  
Security Relations with China,”  
Brussels, Belgium**

Commissioners present: C. Richard D’Amato (Hearing Co-Chair), Chairman; Carolyn Bartholomew, George Becker, June Teufel Dreyer, Robert F. Ellsworth (Hearing Co-Chair), Patrick A. Mulloy, Larry M. Wortzel.

Participants: John Monks, European Trade Union Confederation; Peter Nightingale, Euro-China Business Association; Francesco Marchi, European Apparel and Textile Organization; Peter Ferdinand, University of Warwick; Bernhard Speyer, Deutsche Bank Research/Economics; Frank Umbach, Research Institute of the Council on Foreign Relations (DGAP); Willem van der Geest, European Institute for Asia Studies; Charles Tannock, Member of European Parliament; Jim Cloos, General Secretariat of the Council of the European Union; Philippe van Amersfoort, European Commission Directorate General for External Relations; Francoise Lemoine, Centre D’Etudes Prospectives Et D’Informations Internationales (CEPII); Kay Möller, German Institute for International and Security Affairs.

**September 23, 2004: Public Hearing on  
“U.S.-China Trade and Investment:  
Impact on Key Manufacturing and Industrial Sectors,”  
Akron, OH**

Commissioners present: C. Richard D’Amato, Chairman; Carolyn Bartholomew, George Becker, June Teufel Dreyer (Hearing Co-Chair); Patrick A. Mulloy, William A. Reinsch, Michael R. Wessel (Hearing Co-Chair); Larry M. Wortzel.

Witnesses: William A. Burga, Ohio AFL–CIO; Jon Honeck, Policy Matters Ohio; David Hansen, Ohio Manufacturers’ Association; Jeff Otterstedt, Clow Water Systems; Ron Gettelfinger, UAW; Stephen Girsky, Morgan Stanley; James G. Pearl accompanied by Scott Tackett, Denman Tire Corporation; David McCall, United Steelworkers of America; David W. Johnson, Summitville Tiles; Jerry Vanden Eynden accompanied by Brad Root, Lancaster Colony Glassware and Candle Group on behalf of Candle-Lite and National Candle Association; Douglas Bartlett, Bartlett Manufacturing Company; Dan Imbrogno, Ohio Screw Products; John Colm, WIRE-Net; Bruce A. Cain, Xcel mold and Machine; Jim Evans, Gentzler Tool and Die; John C. Folk, United Steelworkers of America; James C. Newport, United Steelworkers of America; John Russo, Ph.D., Warren P. Williamson College of Business Administration, Youngstown State University; Reverend Anne Hagler.

**Alphabetical Listing of Panelists Testifying before USCC**

<b>Panelist Name</b>	<b>Panelist Affiliation</b>	<b>USCC Hearing</b>
Autor, Erik O.	National Retail Federation	February 3–4, 2005
Baker, Dean	Center for Economic and Policy Research	May 19–20, 2005
Bartlett, Doug	Bartlett Manufacturing Company	September 23, 2004
Baum, Richard	University of California at Los Angeles	April 14, 2005
Bergsten, C. Fred	Institute for International Economics	February 3–4, 2005
Berman, Jason	International Federation of the Phonographic Industries	February 3–4, 2005
Berman, Ken	Broadcasting Board of Governors	April 14, 2005
Blackwell, Ron	AFL–CIO	May 19–20, 2005
Blasko, Dennis	Independent Consultant	September 15, 2005
Blecker, Robert A.	American University	May 19–20, 2005
Blumenthal, Dan	American Enterprise Institute	September 15, 2005
Blumenthal, Daniel	American Enterprise Institute	July 21–22, 2005
Bottelier, Pieter	SAIS	August 11, 2005
Brown, Carolyn T.	Library of Congress	September 16, 2005
Brown, Sherrod	Congressman	February 3–4, 2005
Burga, William A.	Ohio AFL–CIO	September 23, 2004
Burton, Dan	Congressman	April 14, 2005
Bush, Richard	Brookings Institute	September 15, 2005
Byrd, Robert	Senator	February 3–4, 2005
Cabestan, Jean-Pierre	French National Center for Scientific Research	December 2, 2004
Cain, Bruce	XCEL Mold & Machine	September 23, 2004
Campbell, Kurt	CSIS	September 15, 2005
Carter, Ashton	Harvard University	March 10, 2005
Chao, Howard	O'Melveny & Myers	August 11, 2005
Chao, Pierre	CSIS	June 23, 2005
Chinworth, Michael	Vanderbilt University	July 21–22, 2005
Christensen, Thomas J.	Princeton University	September 15, 2005
Cliff, Sr., Roger	RAND Corporation	September 15, 2005



**Alphabetical Listing of Panelists Testifying before USCC—  
Continued**

<b>Panelist Name</b>	<b>Panelist Affiliation</b>	<b>USCC Hearing</b>
Cloos, Jim	General Secretariat of the Council of the European Union	November 30, 2004
Cobb, Adam	USAF Air War College	September 15, 2005
Colm, John	WIRE-Net	September 23, 2004
Cooke, Merritt T.	Bryn Mawr	September 15, 2005
Cooper, Richard N.	Harvard University	May 19–20, 2005
Coursey, Michael	Collier Shannon Scott PLLC	February 3–4, 2005
DeLaMater, Robert G.	Sullivan & Cromwell LLP	August 11, 2005
Dent, Christopher	University of Leeds	July 21–22, 2005
DeTrani, Joseph	U.S Department of State	March 10, 2005
DeWine, Mike	Senator	February 3–4, 2005
Dorgan, Byron	Senator	February 3–4, 2005
Evans, Jim	Gentzler Tool & Die	September 23, 2004
Feingold, Russell	Senator	July 21–22, 2005
Ferdinand, Peter	University of Warwick	November 30, 2004
Forbes, J. Randy	Congressman	July 21–22, 2005
Foster, Nancy	U.S. Apple Association	February 3–4, 2005
Freedenberg, Paul	Association for Manufacturing Technology	June 23, 2005
Freeman, Richard B.	Harvard University	May 19–20, 2005
Friedman, Edward	University of Wisconsin-Madison	April 14, 2005
Gaffney, Frank	The Center for Security Policy	August 11, 2005
Galbraith, James K.	University of Texas	May 19–20, 2005
Garver, John	Georgia Institute of Technology	July 21–22, 2005
Geczi, Michael	The Torrenzano Group	August 11, 2005
Gettelfinger, Ron	United Auto Workers	September 23, 2004
Girsky, Stephen	Morgan Stanley	September 23, 2004
Goble, Paul	University of Tartu	July 21–22, 2005
Goldstein, Avery	University of Pennsylvania	July 21–22, 2005
Gomory, Ralph	Alfred P. Sloan Foundation	May 19–20, 2005
Graham, Lindsey	Senator	February 3–4, 2005

**Alphabetical Listing of Panelists Testifying before USCC—  
Continued**

<b>Panelist Name</b>	<b>Panelist Affiliation</b>	<b>USCC Hearing</b>
Guobiao, Jiao	Beijing University	April 14, 2005
Haass, Richard N.	Ambassador	May 19–20, 2005
Hamilton, Gary	University of Washington	May 19–20, 2005
Hansen, David	Ohio Manufacturers Association	September 23, 2004
Harrison, Selig	Center for International Policy	March 10, 2005
Hartquist, David	Collier Shannon Scott PLLC	February 3–4, 2005
Honeck, Jon	Policy Matters	September 23, 2004
Howard, William	Department of Defense	June 23, 2005
Hufbauer, Gary Clyde	Institute for International Economics	May 19–20, 2005
Hughes, Julia	U.S. Association of Importers of Textiles and Apparel	February 3–4, 2005
Hwang, Balbina	Heritage Foundation	March 10, 2005
Imbrogno, Dan	Ohio Screw Products	September 23, 2004
Inhofe, James	Senator	July 21–22, 2005
Jarab, Josef	Senate Committee on International Affairs	December 2, 2004
Johnson, Cass	National Council of Textile Organizations	February 3–4, 2005
Johnson, David W.	Summitville Tile	September 23, 2004
Johnson-Freese, Joan	Naval War College	September 15, 2005
Jones, William J.	Cummins-Allison Corp.	May 19–20, 2005
Keith, James	Department of State	September 15, 2005
Landrieu, Mary	Senator	February 3–4, 2005
Lee, Hwa-Wei	Library of Congress	September 16, 2005
Lemoine, Francoise	Centre D'Etudes Prospectives	November 30, 2004
Levin, Sander	Congressman	February 3–4, 2005
Levine, Henry A.	Deputy Assistant Secretary Of Commerce for Asia Pacific Policy	February 3–4, 2005
Lewis, James	CSIS	June 23, 2005
Lichtenbaum, Peter	U.S. Dept of Commerce	June 23, 2005
Link, Perry	Princeton University	April 14, 2005

**Alphabetical Listing of Panelists Testifying before USCC—  
Continued**

<b>Panelist Name</b>	<b>Panelist Affiliation</b>	<b>USCC Hearing</b>
Loser, Claudio	Inter-American Dialogue	July 21–22, 2005
Luft, Gal	Institute for the Analysis of Global Security	July 21–22, 2005
Lyman, Princeton	Council on Foreign Relations	July 21–22, 2005
Mann, Catherine L.	Institute for International Economics	May 19–20, 2005
Manzullo, Donald A.	Congressman	June 23, 2005
Maochun, Yu	U.S. Naval Academy	April 14, 2005
Marchi, Francesco	European Apparel and Textile Organization	November 30, 2004
Markey, Edward J.	Congressman	March 10, 2005
Martin, Gary C.	North American Export Grain Association	February 3–4, 2005
Matousek, Vladimir	Czech-Moravian Confederation of Trade Unions	December 2, 2004
McCall, Dave	United Steelworkers of America	September 23, 2004
McCormack, Richard	CSIS	May 19–20, 2005
McMilion, Charles	MBG Information Services	July 21–22, 2005
McVadon, Eric	Institute of Foreign Policy Analysis	September 15, 2005
Mei, Fu S.	TAISAC	September 15, 2005
Meyer, Marshall W.	University of Pennsylvania	August 11, 2005
Milhollin, Gary	Wisconsin Project on Nuclear Arms Control	March 10, 2005
Mohamedi, Fareed	PFC Energy	July 21–22, 2005
Moller, Kay	German Institute for International and Security Affairs	November 30, 2004
Monks, John	European Trade Union	November 30, 2004
Mulvenon, James	Center for Intelligence Research and Analysis	April 14, 2005
Mulvenon, James	Center for Intelligence Research and Analysis	September 15, 2005
Mulvenon, James	Center for Intelligence Research and Analysis	September 16, 2005
Murawiec, Laurent	Hudson Institute	September 15, 2005

**Alphabetical Listing of Panelists Testifying before USCC—  
Continued**

<b>Panelist Name</b>	<b>Panelist Affiliation</b>	<b>USCC Hearing</b>
Murphy, David	Ferriot, Inc.	September 23, 2004
Musil, Jan	Škoda Energo	December 2, 2004
Nalapat, Madhav	Manipal Academy	July 21–22, 2005
Newport, James C.	United Steelworkers of America	September 23, 2004
Ney, Bob	Congressman	February 3–4, 2005
Niblett, Robin	CSIS	July 21–22, 2005
Nightingale, Peter	Euro-China Business Association	November 30, 2004
Ortiz, Solomon P.	Congressman	March 10, 2005
O'Sullivan, Susan	Department of State	April 14, 2005
Ott, Marvin C.	National War College	July 21–22, 2005
Otterstedt, Jeff	CLOW Water Systems Company	September 23, 2004
Overholt, William	RAND Corporation	May 19–20, 2005
Palfrey, John	Harvard Law School	April 14, 2005
Panagariya, Arvind	Columbia University	May 19–20, 2005
Percival, Bronson	C.N.A. Corporation	July 21–22, 2005
Pinkston, Daniel A.	Monterey Institute of International Studies	March 10, 2005
Pirchner, Jr., Herman	American Foreign Policy Council	July 21–22, 2005
Praeger, Amy	American Shipbuilding Association	June 23, 2005
Prestowitz, Clyde	Economic Strategy Institute	May 19–20, 2005
Qiang, Li	China Labor Watch	April 14, 2005
Qiang, Xiao	University of California at Berkeley	April 14, 2005
Qinglian, He	Human Rights in China	April 14, 2005
Rademaker, Stephen G.	Assistant Secretary of State for Arms Control	March 10, 2005
Raynor, Harris	UNITE HERE	February 3–4, 2005
Riemann, Volker	Škoda Auto	December 2, 2004
Rodman, Peter W.	Assistant Secretary of Defense for International Security Affairs	March 10, 2005

**Alphabetical Listing of Panelists Testifying before USCC—  
Continued**

<b>Panelist Name</b>	<b>Panelist Affiliation</b>	<b>USCC Hearing</b>
Rosenbloom, H. David	NYU School of Law	May 19–20, 2005
Ruml, Jan	Senate of the Czech Republic	December 2, 2004
Russo, John B.	Youngstown State University	September 23, 2004
Ryan, Tim	Congressman	February 3–4, 2005
Santoli, Al	Asia-America Initiative	July 21–22, 2005
Schilling, Jack	Allegheny Technologies, Inc.	June 23, 2005
Schneider, Jiří	Foreign Ministry of the Czech Republic	December 2, 2004
Schneider, William	International Planning Services, Inc.	June 23, 2005
Schriver, Randall	Armitage International	July 21–22, 2005
Schwarz, Oldrich	Libra Management Group Ltd.	December 2, 2004
Shambaugh, David	George Washington University	September 16, 2005
Shenkar, Oded	Fisher College of Business	May 19–20, 2005
Shinn, David	George Washington University	July 21–22, 2005
Simmons, Rob	Congressman	September 15, 2005
Smith, Eric	International Intellectual Property Alliance	February 3–4, 2005
Smyth, Frank	Committee to Protect Journalists	April 14, 2005
Sokolski, Henry	Nonproliferation Policy Education Center	March 10, 2005
Speyer, Bernhard	Deutsche Bank	November 30, 2004
Stewart, Terence P.	Stewart & Stewart Law Offices	February 3–4, 2005
Straszheim, Don	Straszheim Global Investors	August 11, 2005
Strickland, Ted	Congressman	February 3–4, 2005
Tackett, Scott	Denman Tire Corp.	September 23, 2004
Tadesse, Solomon	University of South Carolina	August 11, 2005
Tajariol, Michele	Tajmac-ZPS	December 2, 2004
Tanner, Murray Scot	RAND Corporation	April 14, 2005
Tannock, Charles	Member of European Parliament	November 30, 2004

**Alphabetical Listing of Panelists Testifying before USCC—  
Continued**

<b>Panelist Name</b>	<b>Panelist Affiliation</b>	<b>USCC Hearing</b>
Tantillo, Auggie	American Manufacturing Trade Action Committee	February 3–4, 2005
Tillinghast, David R.	Baker & McKenzie LLP	May 19–20, 2005
Trainer, Timothy	International AntiCounterfeiting Coalition	February 3–4, 2005
Tsang, Steven	Oxford University	July 21–22, 2005
Umbach, Frank	Research Institute of the German Council on Foreign Relations	November 30, 2004
van Amersfoort, Philippe	European Commission Directorate General for External Relations	November 30, 2004
van der Geest, Willem	European Institute for Asia Studies	November 30, 2004
Vanden Eynden, Jerry and Brad I. Root	National Candle Association	September 23, 2004
Vargo, Franklin	National Association of Manufacturers	February 3–4, 2005
Villeneuve, Nart	University of Toronto	April 14, 2005
Wang, Chi	U.S.-China Policy Foundation	September 16, 2005
Wang, Vincent Wei-cheng	University of Richmond	September 15, 2005
Watson, Cynthia	National War College	July 21–22, 2005
Wayne, E. Anthony	Assistant Secretary of State for Economic and Business Affairs	February 3–4, 2005
Weldon, Curt	Congressman	March 10, 2005
Wolff, Alan	Dewey Ballantine LLP	February 3–4, 2005
Wu, David	Congressman	April 14, 2005
Yager, Loren	Government Accountability Office	February 3–4, 2005

## APPENDIX IV

### LIST OF RESEARCH MATERIAL

The material listed below is available online at the Commission's Web site [www.uscc.gov](http://www.uscc.gov). The research papers were prepared at the request of the Commission to support its deliberations and are intended to promote greater public understanding of the issues addressed by the Commission. However, inclusion in the Report does not imply an endorsement by the Commission or any individual Commissioner of views expressed in the material.

#### Commissioned Research Papers

- Kate Bronfenbrenner and Stephanie Luce, *The Changing Nature of Corporate Global Restructuring: The Impact of Production Shifts on Jobs in the U.S., China, and Around the Globe* (Cornell University—University of Massachusetts Amherst, October 14, 2004).
- Pat Choate, *A Great Wall of Patents: China and American Inventors—Selected Consequences of Proposed U.S. Patent “Reforms”* (Manufacturing Policy Project, October 2005).
- Pat Choate and Edward A. Miller, *U.S.-China Advanced Technology Trade: An Analysis for the U.S.-China Economic and Security Review Commission* (Manufacturing Policy Project, April 2005).
- Charles W. McMillion, *Briefing Paper for the Commission's Field Investigation on China's High Technology Development* (MBG Information Services, April 21–22, 2005).
- Charles W. McMillion, *Briefing paper for the Commission's Field Investigation on The Impact of U.S.-China Trade & Investment on Key Manufacturing Sectors* (MBG Information Services, September 23, 2004).
- Charles W. McMillion, *Briefing paper for the Commission's Field Investigation on The Impact of U.S.-China Trade & Investment on Pacific Northwest Industries* (MBG Information Services, October 14, 2004).
- Michael P. Pillsbury, *China's Progress in Technological Competitiveness: The Need for a New Assessment* (April 21, 2005).
- Robert E. Scott, *U.S.-China Trade, 1989–2003: Impact on Jobs and Industries, Nationally and State-by-State* (Economic Policy Institute, January 2005).

- Terence P. Stewart, *China and the WTO-Year 3: A Research Report Prepared for the U.S.-China Economic and Security Review Commission* (Stewart and Stewart, January 21, 2005).

#### **Commission's Trade Law Advisory Group**

This group is comprised of: Linda A. Andros, Esq., Dewey Ballantine LLP; David A. Hartquist, Esq., Collier Shannon Scott; Robert E. Lighthizer, Esq., Skadden, Arps, Slate, Meagher & Flom LLP; Roger B. Schagrin, Esq., Schagrin Associates; and Terence P. Stewart, Esq., Stewart & Stewart.

- *Any Change to China's Non-Market Economy Status Must be Based on the Criteria Specified Under U.S. Antidumping Law* (August 18, 2005).
- *Challenges Facing the Use of Antidumping Law: A Critical Period for the Administration and Congressional Action* (July 20, 2005).
- *Challenges Facing the Use of Antidumping Law: A Critical Period for the Administration and Congressional Action, an Updated Report* (May 16, 2005).

#### **U.S.-China Trade Data and Analyses**

All data have been prepared by Charles W. McMillion of MBG Information Services. This material is available at the Commission's website ([www.uscc.gov](http://www.uscc.gov)) and is updated on a weekly basis.

- "Broad Economic and Trade Trends of the U.S. and China." October 17, 2005.
- "Industry and Job Trends of the U.S. and China." October 17, 2005.
- "State and Local Economic and Trade Developments of the U.S. and China." October 1, 2005.

#### **Translated Articles**

All the papers and articles by Chinese authors listed below were screened and/or translated by a research team headed by Maochun Yu, Ph.D., U.S. Naval Academy, from open sources on the Chinese Internet.

- Wang Jisi. "The Logic of the American Hegemony." *The Study Times [Xuexi Shibao]*, December 10, 2003. <<http://www.usa-mil.com/news/2003-12-10/2003j12u10m15b28o25t.asp>>
- Ding Xin. "National Defense Through Peace vs. Rise Through Military Means: A Comparative Study of Chinese and Japanese



National Security Strategies During the First Sino-Japanese War (1894–1895).”

<<http://www.cc.org.cn/newcc/browwenzhang.php?articleid=3924>>

- Ni Lexiong, “Sea Power and China’s Development.” *People’s Liberation Daily*, April 17, 2005.



## **APPENDIX V ABBREVIATIONS**

ABC	Agricultural Bank of China
ADR	American Depository Receipt
AF&PA	American Forest and Paper Association
AIT	American Institute in Taiwan
AMRAAMs	advanced medium-range air-to-air missiles
APEC	Asia Pacific Economic Cooperation
ASA	American Shipbuilding Association
ASAT	anti-satellite
ASCM	Anti-Ship Cruise Missile
ASEAN	Association of Southeast Asian Nations
ASL	Anti-Secession Law
ASW	anti-submarine warfare
ATP	advanced technology product
AWACS	airborne warning and control system
BBG	Broadcasting Board of Governors
bcm	billion cubic meters
BHA	Boeing and Hafei Aviation Industry Corporation
Bl/d	barrels per day
BLS	Bureau of Labor Statistics
BOC	Bank of China
BW	biological weapons
BWC	Biological Weapons Convention
C4ISR	command, control, communications, computer, intelligence and strategic reconnaissance
CIAC	China Aviation Industry Corporation
CATIC	China National Aero-Technology Import and Export Corporation
CBMs	Confidence Building Measures
CCB	China Construction Bank
CCT	Clean Coal Technology
CCTV	China Central Television
CCP	Chinese Communist Party
CDSOA	Continued Dumping and Subsidies Offset Act
CEO	chief executive officer
CEPA	Closer Economic Partnership Arrangement
CFIUS	Committee on Foreign Investments in the United States
CIA	Central Intelligence Agency
CIT	Court of International Trade
CITA	Committee for the Implementation of Textile Agreements
CNA	computer network attacks
CNOOC	China National Offshore Oil Corporation

CNPC	China National Petroleum Company
CPMIEC	China Precision Machinery Import/Export Corporation
CRS	Congressional Research Service
CSI	Container Security Initiative
CSRC	China Securities Regulatory Commission
CSSC	China State Shipbuilding Corporation
CTCL	China Telecom Corporation Limited
CVD	countervailing duty
CW	chemical weapons
CWC	Chemical Weapons Convention
DCI	Director of Central Intelligence
DoD	Department of Defense
DoE	Department of Energy
DPP	Democratic Peoples Party
DPRK	Democratic People's Republic of Korea (North Korea)
DSB	Defense Science Board
DVD	digital video disc
ECM	electronic countermeasure
EIA	Energy Information Administration
EIU	Economist Intelligence Unit
EPI	Economic Policy Institute
EU	European Union
FBI	Federal Bureau of Investigation
FBIS	Foreign Broadcast Information Service
FDI	foreign direct investment
FSU	former Soviet Union
FTA	free trade agreement
GAO	General Accounting Office
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GNSS	global navigation satellite system
HKE <sub>x</sub>	Hong Kong Stock Exchange
HTI	Hydrocarbon Technologies, Inc.
IBM	International Business Machines
IAEA	International Atomic Energy Association
ICBC	Industrial and Commerce Bank of China
ICBM	intercontinental ballistic missile
IEEPA	International Economic Emergency Powers Act
IEA	International Energy Agency
IEO	International Energy Outlook
IIPA	International Intellectual Property Alliance
IMF	International Monetary Fund
IP	intellectual property
IPO	initial public offering
IPR	intellectual property rights
IT	information technology
ITC	International Trade Commission
JCCT	Joint Commission on Commerce and Trade
KMT	Kuomintang
LNG	liquid natural gas
LSE	London Stock Exchange
mbd	million barrels a day

MFA	Multi-fiber Arrangement
MFN	most-favored-nation
MND	Ministry of National Defense
MOC	Ministry of Culture
MOFCOM	Beijing's Ministry of Commerce
MOFTEC	Ministry of Foreign Trade and Economic Cooperation
MOU	memorandum of understanding
MPAA	Motion Picture Association of America
MRBMs	medium range ballistic missiles
MTCR	Missile Technology Control Regime
NAM	National Association of Manufacturers
NASDAQ	NASDAQ Exchange
NEMA	National Electrical Manufacturers Association
NATO	North Atlantic Treaty Organization
NME	nonmarket economy
NOCs	national oil companies
NORINCO	China North Industries Corporation
NPCSC	National People's Congress Standing Committee
NPL	nonperforming loan
NPT	Nuclear Nonproliferation Treaty
NSC	National Security Council
NSF	National Science Foundation
NSG	Nuclear Suppliers Group
NSI	National System of Innovation
NT	New Taiwan (Dollars)
NYSE	New York Stock Exchange
OECD	Organization for Economic Cooperation and Development
ONI	OpenNet Initiative
OPEC	Overseas Petroleum Exporting Countries
PC	Personal Computer
PCCW	Pacific Century CyberWorks
PICC	Property and Casualty Co.
PLA	People's Liberation Army
PLAAF	PLA Air Force
PLAN	PLA Navy
POWL	public offer without listing
PNTR	permanent normal trade relations
PRC	People's Republic of China
PSI	Proliferation Security Initiative
QFII	qualified foreign institutional investor
R&D	research and development
RFA	Radio Free Asia
RFID	radio frequency identification
RMB	renminbi
ROK	Republic of Korea
RTC	Resolution Trust Corporation
SARFT	State Administration of Radio, Film, and Television
S&L	savings and loan
S&T	science and technology
SAG	surface action group
SAM	surface to air missile

SAR	Special Administrative Region
SARS	severe acute respiratory syndrome
SCO	Shanghai Cooperation Organization
SEC	Securities and Exchange Commission
SETC	State Economic and Trade Commission
SIA	Semiconductor Industry Association
SIE	state-invested enterprise
SLAMRAAMs	surface launched advanced medium-range air-to-air missiles
SLBM	submarine launched ballistic missiles
SLOCs	sea lines of communications
SMIC	Semiconductor Manufacturing International Corp.
SOE	state-owned enterprises
SOX	Sarbanes-Oxley Act
SPS	sanitary and phytosanitary
SRBM	short-range ballistic missile
SSBN	nuclear ballistic missile submarine
SSN	nuclear attack submarine
TAA	Trade Adjustment Assistance
TBP	tributyl phosphate
TPRM	Trade Policy Review Mechanism
TRA	Taiwan Relations Act
TRIPS	Trade-related Aspects of Intellectual Property Rights
TRM	transitional review mechanism
TRQ	tariff-rate quota
UAE	United Arab Emirates
UAV	unmanned aerial vehicle
USTR	U.S. Trade Representative
USWA	United Steelworkers of America
VAT	value added tax
VCD	video compact disc
VOA	Voice of America
WHO	World Health Organization
WTO	World Trade Organization
WMD	weapons of mass destruction

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