Globalization as a Security Strategy: Power and Vulnerability in the "China Model"

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FOREIGN ECONOMIC POLICY IS A KEY ELEMENT of any country's security policy.[1] For China, autarky in the Mao Zedong years was a response to American containment and isolation and to perceived Soviet unreliability as an ally. Mao believed that he could resist pressure from both superpowers only by putting his country on the path of self-reliant development.[2] The policy worked in the sense that neither superpower could blackmail China economically or gain access to try to subvert the loyalty of Chinese elites or the public. Meanwhile, at tremendous cost to his people, Mao was able to develop a basic industrial economy with surpluses squeezed from agriculture. He sustained a large if backward military and developed a nuclear capability sufficient to deter a Soviet or American attack.

Deng Xiaoping, who came to power two years after Mao's death, sought a different balance of security gains and losses in a different orientation to

[1]Classic statements include David A. Baldwin, *Economic Statecraft* (Princeton, NJ: Princeton University Press, 1985); Paul Kennedy, *The Rise and Fall of Great Powers: Economic Change and Military Conflict from 1500 to 2000* (New York: Vintage Books, 1987); Robert Gilpin, *Global Political Economy: Understanding the International Economic Order* (Princeton, NJ: Princeton University Press, 2000); Robert O. Keohane and Joseph S. Nye, *Power and Interdependence: World Politics in Transition* (Boston, MA: Little, Brown, 1977).
[2]Alexander V. Pantsov with Steven I. Levine, *Mao: The Real Story* (New York: Simon & Schuster, 2012), chaps. 29, 30.

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the world economy. He abandoned autarky because the depressed living standards and rigid political repression that were required for self-reliant development had themselves become threats to the survival of the regime.[3] Deng's policy of "reform and opening"—the revolution (or some said counterrevolution) that made rapid economic growth possible—led to the phenomenal "rise of China," which saw the country's gross domestic product (GDP) shoot up at an average annual rate of 9.6 percent starting in 1978 to reach $6 trillion in 2010. This surge in economic power gave China the resources, starting in the 1990s, to make itself into a modern military power, to begin exercising soft power, and to influence negotiations in various international regimes.

But the "China model" of fast-paced growth was not a one-sided good for Beijing. The strategic choices that had to be taken to make the boom happen also entailed significant sacrifices for China's security. Growth was achieved by means of a deep engagement in the global economy that made China more vulnerable to pressures and influences from the outside world than it had ever been before. By moving from autarky to interdependence, China increased not only its power over the destinies of others, but also the power of others over its own destiny.

In this sense, the engagement policy pursued by the United States since 1972 achieved its key strategic goal of tying China's interests to the interests of the U.S.-created global order. Although China is in many respects dissatisfied with its level of economic, political, and military security and seeks to improve them, it has acquired too large a stake in the stability of the world order and the prosperity of the West to believe it can serve its own interests by frontally challenging the existing world order.

GAINS AND LOSSES TO THE TURN OF THE CENTURY

Usually viewed as an obvious choice and an unalloyed triumph, Beijing's embrace of globalization was, in fact, halting, costly, and ambivalent, embracing a set of dilemmas as troubling as the equal and opposite dilemmas entailed in Maoist autarky.[4] Chinese leaders did not follow a blueprint but, as Deng put it, "crossed the river by feeling the stones." As each step of reform produced positive results, Chinese leaders reluctantly yielded to pressure from advisers and foreign partners to do more.

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[3] Ezra F. Vogel, *Deng Xiaoping and the Transformation of China* (Cambridge, MA: The Belknap Press of Harvard University Press, 2011), chaps. 6, 7.

[4] A similar process is described in David W.P. Elliott, *Changing Worlds: Vietnam's Transition from Cold War to Globalization* (New York: Oxford University Press, 2012).

Even before Mao's death, Deng, then serving as Deputy Premier, had advocated a limited opening in trade policy. Deng's rivals denounced his ideas as currying favor with the capitalist world, promoting old-fashioned arts and crafts in preference to modern industry, and selling off national resources and sovereignty. Their denunciations were one of the factors in Deng's fall from power in 1975. Coming back to power after Mao's death, Deng pushed ahead by spreading the right to import and export foreign commodities from about a dozen specialized central government–owned corporations to what eventually became thousands of trading companies belonging to central government ministries, provincial governments, and government-owned enterprises. Foreign trade almost quadrupled from 10 percent of GDP in 1978 to 38 percent of GDP in 2001.

In the area of foreign investment, Deng initially sought only to accelerate the growth of exports by inserting capital and expertise into the export sector of the state-owned economy. In 1979, China adopted the Joint Venture Law, which limited foreign ownership to less than half the value of any enterprise. The government tried at first to limit foreign investment to four small special economic zones. In 1984, it extended incentives to 14 coastal cities and the island of Hainan; in 1988, it opened the entire coastal region from Liaoning in the north to Guangdong in the south to foreign investment; and in the 1990s, it removed virtually all remaining regional and sectoral restrictions.

China also began to accept foreign aid in 1978, breaking with its tradition of being solely an aid donor (although a small one) and accepting assistance from the United Nations Development Program (UNDP). In 1980, it rejoined the International Monetary Fund (IMF) and the World Bank and accepted aid from both; and in 1986, it joined the Asian Development Bank. By 2001, China had received a grand total of almost $40 billion in Overseas Development Assistance (ODA) from a host of multilateral organizations, such as the World Bank, the UNDP, other UN agencies, and a variety of countries, such as Japan and Canada.

These steps to engage with the world economy turned out to have come at a good time. The long historical process of globalization took another leap forward in the mid-1980s. Between 1980 and 2007, global GDP increased by an average of 3.1 percent a year. World trade quintupled during the same period from $4 trillion to $27.5 trillion. Having entered the waters, China was carried along on the current: Chinese trade grew thirty-fold from $25.8 billion in 1984 to $762 billion in 2005. By 2004, 30.8 percent of China's industrial output was produced by factories with foreign investment. The linkage and demonstration effects of foreign trade and investment on Chinese suppliers, consumers, and competitors led to higher quality performance across the economy. Through foreign partnerships, Chinese firms gained new technology, learned new management practices, and gained access to world markets. Even though growth was unequal, it was widespread. Every part of the country and every social class had a share. The number of Chinese below the official poverty line dropped from 250 million in 1978 to 25 million by 2005.[5]

But to gain these benefits, Chinese leaders had to compromise China's autonomy more than they had anticipated would be necessary. Opening the door to foreign trade and investment required changes in the regulatory environment and support systems for foreign economic interactions. From 1979 to 2000, China adopted hundreds of laws and regulations to govern foreign economic relations. It established specialized courts and other dispute resolution mechanisms. Visa restrictions had to be eased to cultivate the nascent tourist industry and to allow foreign businesspersons to visit easily. The flow of foreign visitors increased from 1.8 million in 1979 to 83.4 million in 2000 and kept growing after that. To accommodate them, the number of hotel rooms soared, with a massive shift from Soviet-style hotels to those meeting Western standards. Similar foreigner-friendly changes were made in banking, communications, and transportation.

By the late 1990s, foreign officials were monitoring Chinese tariffs, import quotas, certification requirements, factory hygiene, financial services, and retail networks. Moody's and Standard and Poor's passed judgment on China's credit worthiness. U.S. Customs, Food and Drug Administration, and Commerce Department officials showed up to inspect Chinese factories. Foreign lawyers pointed out enforcement failures and suggested revisions in laws and regulations. China had to introduce unfamiliar institutions, such as stock markets, brokerage firms, risk funds, commodities futures markets, and consulting firms. China had even found it necessary to amend its constitution in 1982 to include a commitment to protect "the lawful rights and interests" of foreign investors.

Moreover, each step toward prosperity made China's economic health more dependent than before on the health of foreign markets, especially those in the United States, which was China's largest export market until 2007, and the EU, which subsequently became the largest market. China's prosperity was tied to the health of the American dollar and the euro, which were the main currencies in which China, like other countries, conducted its foreign trade and kept its foreign exchange reserves.

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[5]Many of the economic data used here and elsewhere follow Barry Naughton, *The Chinese Economy: Transitions and Growth* (Boston, MA: MIT Press, 2007).

Most risky from a security standpoint were the deep effects that the opening exerted on society and culture. Between 1978 and 2003, China dispatched more than 700,000 students to study at institutions of higher education abroad, mostly in the United States, in an effort to rapidly acquire advanced technology. Fewer than 25 percent of these students returned upon graduation, and those who did often carried ideas that undermined China's official ideology. Western-educated and -oriented economists, bankers, lawyers, and traders gained a growing voice in shaping policies. Young people lost faith in old values, and, according to conservative Chinese critics, came to think that "even the moon is brighter in the West." Christianity took off and spread among the population, including tens of millions who participated in illegal "house churches" that local officials often tolerated because it would have been too disruptive to try to close them down. Corruption increased, and many observers rightly or wrongly attributed the increase to "foreign flies coming in the open window." In the eyes of Chinese conservatives, the 1989 democracy movement was a devil's brew of contradictory Western impacts: on the one hand, it was sparked by public opposition to inflation, and corruption associated with the open-door policy, and on the other, it expressed a pro-Western democratic and individualist ethos and was cheered on and even given some material support by people in Hong Kong and the West.

Not only did the open policy confront domestic opposition, it also engendered a wide range of conflicts with foreign partners. Trading partners accused Beijing of protectionism and dumping (exporting products at below cost). The advanced industrial countries pushed China to accept quotas on the exports of textiles and other products and to honor foreign standards of hygiene, packaging, labeling, and the environmental friendliness of goods destined for export. As the central government made concession after concession to outside demands, policy on the ground lagged behind due to local protectionism, corruption, and an inadequate legal system.[6] China's failure to fulfill its commitments generated new waves of conflict with other countries.

GETTING OUT BY GETTING DEEPER IN: JOINING THE WTO

Fuller engagement in the globalized economic system was the only path of escape from the dynamic of constant domestic criticism and international friction that marked the first two decades of the open-door

[6]Martin K. Dimitrov, *Piracy and the State: The Politics of Intellectual Property Rights in China* (New York: Cambridge University Press, 2009).

policy.[7] Such deepening of engagement required China to seek membership in the World Trade Organization (WTO). WTO membership would bind the hands of conservative domestic opponents of globalization and put the country's tempestuous economic relations with the rest of the world on a rule-bound basis that would be relatively insulated from foreign political pressure. But WTO membership could achieve these results only by entrenching China more deeply than ever in interdependence with its trading partners and by binding it more tightly in a complicated system of mutual commitments with its international partners.

WTO accession negotiations are inherently demanding. An applicant for membership has to reach agreement bilaterally with each current member (there were 90 members when China first applied, 142 by the time it had finished its talks) and then give the same benefits to all members ("most-favored-nation treatment"). All the concessions are made by the applicant, with each bilateral agreement providing the starting point for more demands by the next negotiating partner.

Negotiators were especially tough on China because it was the biggest nonmarket economy ever to try to join the organization. The core issues were how large a cost the rest of the world would pay to help China plunge more deeply into world markets and how rapidly China would lower its barriers to imports and foreign investments in exchange for enhanced access to WTO members' markets. The issues were politically toxic in both China and the West, and the negotiations dragged on for 15 years. The U.S.–China agreement was finally signed in 1999; after cleaning up remaining matters with several other members, China signed an accession agreement in November 2001 and entered the WTO in December 2001.

The accession agreement was more than 800 pages long, with thousands of specific commitments covering virtually all aspects of the economy. Under its provisions, China undertook to make sweeping changes in its economic policies, lowering tariffs, removing many nontariff barriers to imports, abolishing export subsidies, providing access to the Chinese market for foreign products on the same terms as domestic products ("national treatment"), improving legal protection for intellectual property, and allowing foreign-invested enterprises to enter hitherto-banned sensitive sectors, including distribution, franchising, transport, telecom value-added services, banking and financial services, insurance, securities, legal and accounting services, construction, and education. The government had to

[7]Much of the material in this section derives from Scott Harold, "Freeing Trade: Negotiating Domestic and International Obstacles on China's Long Road to the GATT/WTO 1971–2001" (Ph.D. diss., Columbia University, 2007).

repeal thousands of WTO-inconsistent laws and regulations and reform the courts, legal system, banking system, and relevant administrative agencies. These changes made China's economy one of the most open in the world.

Merely to negotiate these commitments, not to mention to implement them, China found it necessary to create and restructure numerous government agencies and hire or train thousands of specialized bureaucrats, thus changing the DNA of its own government institutions. Moreover, to satisfy suspicious U.S. negotiators, China had to agree to a transitional review mechanism, under which China, alone among WTO members, was to be reviewed annually for eight years for its compliance with the accession agreement. In exchange for meeting its commitments to liberalize its economy, China is scheduled to receive "full market economy status" in 2016, which will immunize it from certain kinds of trade disputes. Meanwhile, however, using the WTO dispute resolution mechanism, the United States and other trading partners have frequently sued China for dumping and have often won.

HOLDING SOMETHING BACK: THE "CHINA MODEL"

However, Beijing did not give everything away by joining the WTO. Instead of being forced to make a transition to a fully Western-style economy, Chinese policymakers created a distinctive state-directed yet marketized model that maintained key elements of self-control. The post-WTO "China model" drew strength from global trade and investment without compromising the primary role of the domestic market in its economic growth; benefited from but was not dominated by the surging private and foreign-invested sectors; and, above all, used market mechanisms to promote efficiency without undermining the state's ability to rule the economy's commanding heights.

To be sure, the new Chinese economy was in some ways a privatized market economy like those of the West. Private capitalists, including foreigners, could invest in most sectors. Private enterprises grew faster than state enterprises in the 1990s and 2000s. Prices of most goods were set by market mechanisms. Yet the state remained dominant to a far greater degree than in the West. The government continued to own all land, both rural and urban; to manage directly the energy industry, water supply, banking, and railway transportation; and to control those former state enterprises that had nominally been privatized via the Party's assignment of top managers,[8]

[8]Richard MacGregor, *The Party: The Secret World of China's Communist Rulers* (New York: HarperCollins, 2010).

the presence of Party committees, and government direction of bank credit. A thousand or so of the largest state-owned enterprises were turned into integrated "national champions" that dominated strategic sectors such as energy, telecoms, heavy industry, defense industry, mining, media, banking, and transport.[9] By 2010, 42 Chinese companies were listed in the *Fortune* Global 500, and a majority of them were more than 50 percent state-owned. Direct and indirect policy levers gave the government the major voice in determining the prices of land, labor, housing, energy, and credit. Although agriculture had been privatized, the state continued to influence the prices of agricultural products through land use controls, subsidies, and barriers to imports, among other measures.

The Chinese currency, the renminbi, was not easily convertible into foreign currencies. For trade purposes, it could be converted by anyone (on the current account), but for investments (the capital account), which are longer term and involve greater quantities of money, the currency could be exchanged only by qualified investors for certain types of investments. The exchange rate floated within a narrow band whose limits were set by the government through its buying and selling of foreign exchange, all of which it held in its own hands. The limit on free conversion of money on the capital account served as a powerful barrier to international speculation in the renminbi, which might otherwise have forced the government to allow its value to go up faster than policymakers wanted it to.

Although WTO membership opened the Chinese economy to foreign enterprises, domestic companies—aided by the economy's size and complexity, by cheap loans from government banks, and by some cheating on WTO rules—continued to dominate the domestic market. Meanwhile, under a "going-out" policy initiated soon after WTO entry, the government used the reciprocal opening of other economies to prod Chinese enterprises to compete in the global marketplace, helping them to succeed with credit from state-owned banks.

Nor did WTO membership make China dependent on foreign trade for its growth. To be sure, China's foreign trade ratio (foreign trade as a percentage of GDP) was high for a large continental economy, around 51.9 percent in 2008. Yet China ranked only 19th in foreign trade ratio in 2008, below Indonesia (54.5 percent) and not far above France (51.8 percent). Moreover, foreign trade consists of both imports and exports. Chinese exports consist mainly of products assembled by Chinese workers for

[9]Vikram Nehru, Aart Kraay, and Xiaoqing Yu, *China 2020: Development Challenges in the New Century* (Washington, DC: World Bank, 1997), 29–30.

foreign brand names from imported components. Chinese policymakers in the mid-1980s dubbed this strategy "two heads outside" (*liangtou zaiwai*) because both the source of components and the market for products were outside China. In such a global supply chain, profits attributable to engineering and design, brand value, and marketing are captured by the foreign owner of the brand name; profits attributable to the manufacture of high-value components go to external manufacturers (often elsewhere in Asia); and the yield to the Chinese economy is limited to the cost of labor for assembly.[10] Yet the full value of the exported product shows up in China's trade statistics.

In all, therefore, Chinese growth was less "export driven" than was the case with the so-called Asian tigers in the 1950s through the 1970s, in the sense that it did not depend on running a consistent trade surplus. Indeed, on a global basis, China's imports and exports were close to balanced for most of the open-door period, generating large surpluses only after 2005. During this time, the growing surplus with the United States (and smaller surpluses with other rich countries, especially in Europe) was balanced in most years by deficits with countries from which China purchased components, raw materials, and energy. Even after China began to run a net surplus of exports over imports, the contribution of net exports to the GDP did not exceed a couple of percentage points, often less.[11] The main drivers of growth were rising productivity and efficiency, infrastructure investment, and domestic demand generated by a more-affluent population. When foreign markets went into recession in 2008, China's domestic market was sufficiently large—with the aid of a substantial government stimulus package—to avoid a corresponding slump in the rate of growth.

In all these ways, China found a way to throw itself into the surging currents of globalization without handing control over its destiny to outside actors. Although many noncompetitive firms went out of business, their disappearance improved the economy's efficiency, and the firms that remained were stronger than before. Instead of globalization's fostering domestic instability, as many observers expected, the regime drew strength from prosperity. The government used surging budgetary resources to start building a social welfare net that blunted domestic dissent. And it used its

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[10]The datum is from Dong Tao, a Credit Suisse economist, quoted in David Barboza, "Some Assembly Needed: China as Asia Factory," *The New York Times*, 9 February 2006, accessed at http://www.nytimes.com/2006/02/09/business/worldbusiness/09asia.html, 8 August 2008. Another report said the value of exports to the Chinese economy was as little as 20 percent of the face value of the exported products; see David D. Hale and Lyric Hughes Hale, "Reconsidering Revaluation: The Wrong Approach to the U.S.–China Trade Imbalance," *Foreign Affairs* 87 (January–February 2008): 57–66.

[11]Information provided by Daniel H. Rosen, Rhodium Group, personal communication, 19 March 2013.

growing international respectability to cultivate its people's national pride, which strengthened its hold on power.

ECONOMIC POLICY: POWER POLITICS BY OTHER MEANS

China's importance as a trade and investment partner altered its strategic situation for the better.[12] By 2010, China ranked as the number two trading country in the world and was an important economic partner to all of the world's major powers. It was no longer conceivable that the West would unite to isolate China as it did in the era of containment. The post-Tiananmen sanctions were the last sanctions to be imposed on China, despite continuing human rights abuses and numerous economic disputes. Constituencies in the West that favored putting pressure on China—the human rights and labor movements, manufacturers crushed by Chinese competition, victims of copyright and patent infringement—found themselves politically checkmated by constituencies having a positive economic stake in relations with China—the financial industry, importers, firms with factories in China, and others. Strong business lobbies emerged in the United States and Europe that worked to stabilize relations with Beijing. Trade threats lost their credibility.[13]

Economic ties smoothed China's relations around its periphery. In Hong Kong, the business community supported retrocession to Chinese control in 1997, believing that economic ties with the mainland would do more for Hong Kong than would political reforms. In Taiwan, cross-strait trade and investment weakened support for independence. Trade and investment prospects contributed to South Korea's shift of diplomatic recognition from Taipei to Beijing in 1992. In the 2000s, Australia put new emphasis on good relations with China as its prosperity became increasingly tied to Chinese ore and energy purchases and mining investments. China's rise as a manufacturing assembly center for the more-advanced Asian economies created the first period of Asian economic integration in history, supporting China's assurance strategy in the region.[14] China's need for raw materials made it a key customer and hence

[12]The subhead for this section borrows a phrase from Jonathan Holslag, "China's Regional Dilemma: An Inquiry Into the Limits of China's Economic and Military Power" (Ph.D. diss., Vrije Universiteit Brussel, 2011).

[13]Ka Zeng, *Trade Threats, Trade Wars: Bargaining, Retaliation, and American Coercive Diplomacy* (Ann Arbor: University of Michigan Press, 2004).

[14]Hideo Ohashi, "China's Regional Trade and Investment Profile" in David Shambaugh, ed., *Power Shift: China and Asia's New Dynamics* (Berkeley: University of California Press, 2005), 71–95; Deng Ziliang and Zheng Yongnian, "China Reshapes the World Economy" in Wang Gungwu and Zheng Yongnian, eds., *China and the New International Order* (London: Routledge, 2008), 127–148.

a key diplomatic partner of many countries in Africa, Latin America, and the Middle East.

Economic ties opened the way to strategic access. Governments welcomed China to build roads, pipelines, ports, and railways, extending China's transport network deep into Vietnam, Burma, Nepal, Sri Lanka, Pakistan, Turkmenistan, Uzbekistan, Kazakhstan, and Mongolia. Such projects not only eased access to energy imports and opened China's hinterland to cross-border trade but helped tie neighboring economies more closely to China's and, in some cases, created logistical facilities with potential military use.[15]

Robust development gave China enough money to make the transition from foreign aid recipient to donor and lender. In 1982 the government established a Department of Foreign Aid in the Ministry of Foreign Economic Relations and Trade (later renamed the Ministry of Commerce). In the 1990s, it established three banks with international responsibilities—the China Development Bank, the China Agricultural Development Bank, and the China Exim Bank, the latter charged to create a program of concessional loans abroad. China does not publish official figures on foreign aid, but one scholar estimates that its ODA jumped from $500 million in 1996 to more than $3 billion by 2007.[16]

FUNDING MILITARY MODERNIZATION

The economic boom made possible a series of annual increases in China's military budget starting in 1989. The officially announced defense budget has risen in double digits virtually every year since 1990. Most analysts believe that an accurate estimate of total defense spending on a comparable basis to other countries' defense budgets would be double the official figure. In 2009, for example, according to a U.S. Department of Defense estimate, the official level of the Chinese defense budget expressed in U.S. dollars was about $70 billion, and the actual total of military-related spending was about $150 billion.[17]

Top priority has been given to building up the People's Liberation Army (PLA) Navy. Starting in the 1990s, China's shipbuilding complex began to produce a dozen new classes of ocean-going vessels with advanced weapon systems, including four types of submarines, five types of guided-missile

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[15] Jonathan Holslag, "China's Roads to Influence," *Asian Survey* 50 (July–August 2010): 641–662.
[16] Deborah Brautigam, *The Dragon's Gift: The Real Story of China in Africa* (New York: Oxford University Press, 2009), 179.
[17] *Military and Security Developments Involving the People's Republic of China, 2010* (Washington, DC: Office of the Secretary of Defense, 2010), 42–43.

destroyers, and three types of guided-missile frigates, and to convert an imported aircraft carrier for Chinese use. The acquisitions enabled the Navy to make the initial transition from a coastal defense force to an ocean-going, or blue water, force. Besides expanding its surface fleet, the PLA Navy has enhanced its submarine force with advanced weapons and sensors. A large new naval base on Hainan Island completed in the late 2000s signaled Beijing's intent to continue a robust submarine program and a commitment to defend its claims in the South China Sea.

The PLA Air Force engaged in a wholesale modernization of its inventory. It retired some 70 percent of its air fleet between 1990 and 2010, amounting to approximately 3,500 aircraft, and acquired several hundred advanced fighter planes. In addition, China has worked hard to improve its air defenses, by acquiring one of the world's largest surface-to-air missile forces and enhancing its system for detecting attacks, including the use of a small number of airborne early-warning and control aircraft.

The ground forces also acquired new hardware. Notable additions included third-generation Type-99 main battle tanks, which are gradually being introduced to group armies throughout China, as well as armored personnel carriers and infantry fighting vehicles. New generations of artillery and multiple rocket launchers are also being introduced.

The Second Artillery is in charge of China's ballistic missile forces, which include both nuclear and conventional warheads. The greatest expansion has taken place in China's arsenal of short-range ballistic missiles, which numbered about 1,200 by 2011. By virtue of sheer numbers, improved accuracy, and greater mobility, these conventionally armed rockets pose significant challenges to Taiwan and potentially also to countries around China's periphery.

Globalization reduced the effectiveness of rules and regulations used by the West to limit the flow of sensitive technologies to the People's Republic of China (PRC).[18] A mix of technology transfer through access to foreign commercial technology, technical assistance from Russia and Israel, espionage, and domestic research and development allowed China to attain near world levels in aerospace, information technology, telecommunications, and ship building. In 2008, the government created a civilian entity called the State Administration for Science, Technology, and Industry for National Defense (SASTIND) to handle research,

[18]Carla Hills and Dennis Blair, chairs, *U.S.–China Relations: An Affirmative Agenda, a Responsible Course*, Task Force Report (New York: Council on Foreign Relations, April 2007), 47–54.

testing, development, and evaluation of new military systems. SASTIND oversees a military–industrial complex of 10 large defense–industrial corporations that employ at least 2.5 million civilian workers.[19] Although indigenous military production capabilities have improved significantly in recent decades, it will still be necessary for China to continue to import some types of full systems and many component systems for the foreseeable future.

SOFT-POWER PAYOFFS

China's growing economic clout also brought Beijing a surge of soft power—the ability to exert influence beyond what a country wields through the use of force and money because of the appeal of its cultural values, its ideas, and the perceived success of its way of doing things.[20] When China's GDP passed Japan's in 2010 to make it the world's second-largest economy, China's leaders—and its financial officials—became global superstars, welcomed everywhere. Two symbols encapsulated the country's surging prestige: the incomprehensibly huge number affixed to its foreign exchange reserves, which passed the $2 trillion mark in 2005 and kept growing, and the eye- and ear-bursting opening ceremony of the 2008 Beijing Olympics—a grand enactment of vigor, vastness, and vaunting ambition.

Chinese foreign relations experts in the early 2000s had formed the consensus that soft power was a necessary part of comprehensive national power. It would reduce the fear of China's rise and create a more-welcoming environment for other forms of Chinese influence. They believed the core of China's soft power should be its culture—including traditional art, literature, philosophy, and the Chinese language—together with its contemporary image as a peace-loving nation standing for harmony at home and abroad.[21] Hu Jintao made this policy official in his report to the

[19]Tai Ming Cheung, *Fortifying China: The Struggle to Build a Modern Defense Economy* (Ithaca, NY: Cornell University Press, 2009); Evan Feigenbaum, *China's Techno-Warriors: National Security and Strategic Competition from the Nuclear to the Information Age* (Stanford, CA: Stanford University Press, 2003).

[20]Joseph S. Nye, Jr., *Soft Power: The Means to Success in World Politics* (New York: PublicAffairs, 2004); Joshua Kurlantzick, *China's Charm Offensive: How China's Soft Power Is Transforming the World* (New Haven, CT: Yale University Press, 2007); David M. Lampton, *The Three Faces of Chinese Power: Might, Money, and Minds* (Berkeley: University of California Press, 2008).

[21]Bonnie S. Glaser and Melissa E. Murphy, "Soft Power With Chinese Characteristics: The Ongoing Debate," in Carola McGiffert, ed., *Chinese Soft Power and Its Implications for the United States: Competition and Cooperation in the Developing World* (Washington, DC: Center for Strategic and International Studies, 2009), 10–26, accessed at http://csis.org/files/media/csis/pubs/090305_mcgiffert_chinesesoftpower_web.pdf, 9 December 2010; Joel Wuthnow, "The Concept of Soft Power in China's Strategic Discourse," *Issues & Studies* 44 (June 2008): 1–28.

Seventeenth Party Congress in 2007: "In the present era, culture has become a … factor of growing significance in the competition in overall national strength.… We must … enhance culture as part of the soft power of our country."[22] The Central Committee reinforced the point in 2011 with a lengthy, formal decision on "deepening reform of the cultural system."[23]

The Chinese Foreign Ministry funded "China Year" exhibitions and activities in various countries. China sent cultural artifacts on loan to museums around the world. In 2005, Beijing permitted selected treasures from the Forbidden City to be displayed in London. Some of the famous terra cotta warriors normally displayed near the tomb of Emperor Qin Shihuang visited the British Museum and other locales in 2007–2010. Starting in 2004, the Ministry of Education began establishing Confucius Institutes in collaboration with foreign universities and other institutions to teach Chinese language and culture, partly with the help of teachers sent from China on temporary assignment. Reviled in Mao's China as backward and feudal, Confucius was now seen to personify Chinese values of harmony, community, and deference. Within a few years, there were some 300 such institutes in 60 countries on five continents, including more than two dozen in the United States, mostly at universities.

Chinese media moved into foreign markets under the combined leadership of the State Council Information Office and the Foreign Ministry's new Office of Public Diplomacy. Long-established publications such as *China Daily*, *Beijing Review*, and *China Pictorial*, as well as similar publications in other foreign languages, became glossy and professional. China Central Television, Xinhua TV, and China Radio International broadcast to the world in many languages. The official Xinhua News Agency established an office in New York City's Times Square to compete with the traditional wire services to supply news to global media. The quality of Chinese journalism was upgraded as media workers were increasingly trained at professional journalism programs in Chinese universities. Under the rubric of e-government, many agencies at the central and provincial levels and even some at lower levels established

[22]Hu Jintao, *Hold High the Great Banner of Socialism with Chinese Characteristics and Strive for New Victories in Building a Moderately Prosperous Society in All Respects: Report to the Seventeenth National Congress of the Communist Party of China* (15 October 2007), accessed at http://news.xinhuanet.com/english/2007-10/24/content_6938749_6.htm, 10 December 2010.

[23]"Zhonggong zhongyang guanyu shenhua wenhua tizhi gaige tuidong shehuizhuyi wenhua dafazhan dafanrong ruogan zhongda wenti de jueding" (Decision of the CCP Central Committee on Some Important Questions Concerning Deepening the Reform of the Cultural System and Promoting the Great Development and Great Flourishing of Socialist Culture), 18 October 2011, accessed at http://economy.caijing.com.cn/2011-10-26/110933747.html, 22 January 2012; an official English translation was not available at the time this document was consulted.

English-language Web sites alongside their Chinese-language sites. All Chinese media were still government or Party owned and had to follow directives from the CCP's propaganda department, but their look and content were modernized, and they were increasingly accepted worldwide as reliable sources of information.[24]

China's universities sought international standing and connections. In 2003, Shanghai Jiaotong University began ranking 1,200 universities worldwide on an annual basis. The rankings gained widespread attention and spotlighted China's massive investment in its top schools. In the first year of rankings, the best Chinese universities (Peking and Tsinghua) stood tied with four dozen others around the world in ranks 201–250. By the time the 2010 rankings were announced, these two schools had risen to the 151–200 level, and five other Chinese institutions had joined the (expanded) tier of 201–300. As conditions in academia improved, foreign-trained Chinese PhDs returned in large numbers to teach. Chinese institutions welcomed more than 100,000 foreign students a year to study the Chinese language or to take academic degrees, the majority from Asia and Africa. Foreign schools set up joint programs on Chinese campuses. The China Scholarship Council, under the Ministry of Education, began to send a couple of thousand PhD students abroad each year to study for one or two semesters before returning home to teach, thus increasing the cosmopolitan character of Chinese academia.

But global engagement also made China more vulnerable to pressure from other countries' soft power. The public's enhanced exposure to foreign ideas of freedom, democracy, and rule of law undermined the Chinese Communist Party's (CCP) ideological authority. Even as human rights conditions in China improved, so did the flow of information to the outside world about abuses. As a result, Chinese diplomats were drawn into a long battle to confront and deflect international pressure on human rights issues.

COMPLIANCE AND INFLUENCE IN INTERNATIONAL REGIMES

China's entry into the world system caused it to become an active member of virtually all the international regimes in existence—a massive change in posture from the Mao period, when the PRC was a member of almost no international organizations except those that formed part of the socialist

[24]Anne-Marie Brady, *Marketing Dictatorship: Propaganda and Thought Work in Contemporary China* (Lanham, MD: Rowman and Littlefield, 2007).

camp.[25] China subjected itself to the strictures of these regimes but also gained a voice in their future evolution.

Until 1971, the China seat in the UN was held by the rival Republic of China regime on Taiwan headed by Chiang Kai-shek instead of by the PRC. After the PRC regained that seat, it began to join other international organizations connected to the UN, such as the World Health Organization (WHO) and the Food and Agriculture Organization. It started to take an active role in UN bodies related to human rights. It regained the China seat in bodies such as the World Bank, the IMF, the WTO, the Asian Development Bank, the International Olympic Committee, and many others.

Once the PRC joined an international regime, it complied with its rules about as much as any other member. Even when it came to the international human rights regime, China attended the necessary meetings and filed the necessary reports on time, even if its actions at home contravened what international nongovernmental organizations (NGOs) claimed was the covenants' real intent.[26]

China's compliance often involved disputes with other members over the meaning of the rules, as when China, using the WTO dispute resolution mechanism, sued the United States over the meaning of the term *dumping*, or when China differed with the United States over the legitimate ambit of authority for the UN Security Council to intervene in the internal affairs of states such as Serbia or Iraq in pursuit of what the UN Charter defines as "international peace and security."

One of the most dramatic shifts came in China's participation in the global nonproliferation regime. Under Mao, China rejected all international limits on proliferation of missiles, nuclear weapons, and other weapons of mass destruction, arguing that such restrictions aimed only to consolidate the two superpowers' hegemony. Starting in the mid-1980s and accelerating during the 1990s, China acceded to a host of treaties—including the Biological Weapons Convention (1984), the Nuclear Non-Proliferation Treaty (1992), the Chemical Weapons Convention (1993), and the Comprehensive Test Ban Treaty (1996)—and it joined a long list of additional agreements, institutions, and committees. Through its diplomatic activity, China tried to prevent or roll back the nuclear weapons

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[25]Elizabeth Economy and Michel Oksenberg, eds., *China Joins the World: Progress and Prospects* (New York: Council on Foreign Relations, 1999).

[26]Rosemary Foot, *Rights Beyond Borders: The Global Community and the Struggle Over Human Rights in China* (Oxford: Oxford University Press, 2000); Ann Kent, *China, the United Nations, and Human Rights* (Philadelphia: University of Pennsylvania Press, 1999).

programs of North Korea and Iran. It announced its support for the idea of nuclear-free zones and for treaties that had been proposed to ban the circulation of fissile materials, to ban the first use of nuclear weapons, to ban the development of antiballistic missiles, and to ban an arms race in outer space. Although the motives for joining different parts of the arms control and nonproliferation regime varied, in general the shift reflected Beijing's judgment that China's security was better served by political stability than by instability in the world regions where it had growing economic interests, like the Middle East and, of course, Asia.[27]

China was not blindly compliant, and as its power increased—and its diplomats' sophistication about each regime's rules grew—it sought to become not only a rule follower, but a rule shaper. For example, as a WTO member, China gained an influential voice in shaping changes in the global trade regime. In the Doha Round of trade talks from 2001 to 2008, China and other large developing countries clashed with the United States and Western Europe over measures to safeguard poor third-world farmers against possible surges in imports of agricultural commodities from rich countries. This conflict led to the collapse of this round of trade liberalization talks. Even though the WTO project of setting universal rules for world trade through multilateral negotiations was set back by this collapse—some said that the project could go no further in the foreseeable future—China continued to pursue ways to open up trade further through agreements with single partners (for example, Chile, Australia, and Thailand) and groups of partners (for example, Association of Southeast Asian Nations [ASEAN], whose free-trade agreement with China came into effect in 2010). Such agreements had little measurable impact on trade volumes, but they sent a message about multipolarity and third-world cooperation that was consistent with overall Chinese diplomatic strategy. In international climate talks, China joined with other developing countries in arguing that the advanced countries should bear the main burden of reducing greenhouse gas emissions and should help pay for developing countries' policy adjustments. China's behavior as a rule-shaper was no different from that of other powers, all of whom use their seats at various tables to pursue their own interests.[28]

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[27]Other factors included American lobbying and China's "social learning" from other states. Evan S. Medeiros, *Reluctant Restraint: The Evolution of China's Nonproliferation Policies and Practices, 1980–2004* (Stanford, CA: Stanford University Press, 2007); Alastair Iain Johnston, *Social States: China in International Relations, 1980–2000* (Princeton, NJ: Princeton University Press, 2008).

[28]Ann Kent, *Beyond Compliance: China, International Organizations, and Global Security* (Stanford, CA: Stanford University Press, 2007); Rosemary Foot and Andrew Walter, *China, the United States, and Global Order* (New York: Cambridge University Press, 2011).

For China, as for other states, participation in international regimes has been a mixed blessing. It has involved a yielding of autonomy to the shared community of states, to independent international bureaucrats, and even to an ill-defined international public opinion influenced by NGOs and other private actors. Yet to fail to participate would be to forego many of the benefits that globalization offers.

SHARED VULNERABILITY IN THE GLOBAL ECONOMY

Alongside gains to China's power, the deep immersion in globalization has also posed a new set of challenges to China's security, as it has to all countries that are deeply engaged with it: the risk that countries will harm each other, intentionally or unintentionally, in the course of trying to manage their own economies. By the time China joined the WTO, the globalized economy was larger and more-interdependent than anyone—in China and probably elsewhere—had ever foreseen it would become. International trade as a percentage of world GDP had gone from 38.5 percent in 1980 to 54 percent in 2005; international investment as a percentage of world GDP went from 0.5 percent to 2.3 percent. Global flows of this magnitude created historically novel pressures on job markets, commodity prices, and foreign exchange markets, among other domains. In politics, they generated demands for protectionism and, with respect to China in particular, the fear of a "China threat" to the economic welfare of other economies. While producing a new level of mutual vulnerability, intensified globalization made it harder than ever to figure out how to apportion responsibility for solving systemic problems. China faced these challenges with distinctive strengths rooted in its economic and political system, but also with specific weaknesses arising from its position in the world economy.

First, globalization linked job markets across borders. Even though workers could not travel freely to find jobs, many types of jobs could be transferred more easily than before to places where they could be done at good quality for low cost. From 1985 through 2004, Chinese township and village enterprises created an estimated 3.5 million new manufacturing jobs per year, filling them mostly with workers who were no longer needed for farm labor as the agricultural economy became more efficient and partly with the 20 million or more new workers entering the job market each year.[29] These workers started out in the 1980s producing clothing, toys,

[29]The number of jobs created by township and village enterprises is taken from Naughton, *The Chinese Economy*, 286, fig. 12.2; the number of new entrants into the workforce is calculated using Naughton, *The Chinese Economy*, 175, table 7.3.

shoes, bicycles, lamps, and power tools. They moved up the technological ladder in the 1990s to produce computers, household appliances, specialty steel, automobiles, and ships. Chinese manufacturers then set their sights on higher-tech global markets, including airplanes, electric and luxury cars, electronics, pharmaceuticals, and environmental technologies.

The rise in Chinese jobs manufacturing for export did not automatically mean a decline in jobs elsewhere. For one thing, as the global economy grew, manufacturing was increasing not only in China but in other countries as well. Second, the rise of living standards in China generated new jobs in China's trade partners in agriculture (to supply China with meat, soy beans, apples, and so on), manufacturing (to supply China with parts for assembly), high-tech industry (to sell China airplanes, power stations, precision machine tools, and medical instruments, among other products), intellectual property (movies, music, software, and so on), and services (including legal and financial services). Because of this dynamic, U.S. exports to China increased every year after 2001 even as its trade deficit with China also increased. Third, job markets were changing in other countries through their own internal processes of development independent of whatever was happening in China. In wealthy countries, advances in technology caused productivity to increase, so fewer workers were needed to produce more goods, and workers tended to shift from manufacturing to the service sector. In developing countries, job markets also changed constantly as economies changed.

Yet certain jobs did migrate to China. Most of them had been lost by the West long ago when wage increases made it uneconomical to manufacture low-price products. Such jobs were moving from other Asian economies or countries such as Mexico to take advantage of China's low wages and increasingly reliable quality, creating pressure on other developing economies to find new competitive advantages against not only China, but other rivals. Direct loss of jobs from the advanced countries to China were statistically small, yet they were politically visible.

Despite these complexities, China's size and rate of growth made it the natural focus of blame for job losses in the West. There were no "made in India" labels on software or "made in Brazil" labels on aircraft for consumers to see, but they saw "made in China" labels on shoes, radios, toys, clothing, and products that in many cases were not really made but only assembled in China. In the United States, Europe, and Japan, labor and industry groups demanded more antidumping investigations directed at China than at any other country. Labor rights groups exposed violations in Chinese factories producing for export. The Chinese government tried to manage the political backlash by sourcing imports in a wide range of electoral districts all across the United States and Europe and by arguing that its low-priced, good-quality goods enhanced living standards in the West. In the developing world, China sought to position itself as an economic good neighbor. But none of this stemmed the hostility to globalization in general, and to China in particular, produced by the worldwide acceleration of job shifts.

Second, the rise of globalization meant increased mutual vulnerability in commodity markets. By 2010, China was one of the world's top consumers—and in many cases one of the top importers—of many strategic commodities, including oil, food grains, wool, cotton, rubber, copper, lead, zinc, tin, nickel, aluminia, and rare earths.[30] As global demand surged with global growth, supply interruptions or demand surges produced bumps in the market, when prices rose and supplies proved harder to get. To avoid short-term inflationary effects, the government subsidized the domestic prices of gasoline, electricity, transportation, and fertilizers, among other items. Not only did the subsidies drain the government's coffers, but they promoted wasteful use of commodities, leaving a legacy of financial and environmental damage.

For the longer term, Chinese policymakers tried to guard against commodity shortages in several ways. Under the rubric of "grain security," they tried to keep grain imports at 5 percent of consumption by promulgating policies to preserve arable land, raise per-hectare productivity, and use tax relief and subsidies to encourage peasant farmers to produce food grains alongside the more-profitable specialty crops. Under the heading of "energy security," they promoted more efficient use of energy; invested in domestic oil and coal production, hydropower, nuclear, solar, and wind energy; and sought to lock in "equity oil" abroad so that they could count on supplies even in times of global shortage. They purchased shares in copper, iron, and cobalt mines abroad. They placed restrictions on the export of rare earths to preserve supplies for domestic production of electronic products, batteries, and solar panels.

In the face of rapid growth, however, such policies could only slow, not stop, the erosion of commodity security. Expanding factories, roads, airports, and housing chewed up arable land. Water was too scarce to provide the intensive irrigation that green-revolution strains of rice and wheat needed to supply higher outputs per acre. The population was not only growing in size, but changing its diet. As people used their new wealth to buy more eggs, meat, farmed fish, and beer, it took more grain to meet each person's needs. New factories, cars, and airplanes required more

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[30] David Hale, "China's Growing Appetites," *The National Interest* (Summer 2004): 137–147.

hydrocarbon energy than Chinese coal mines and oilfields plus Chinese-owned overseas sources could supply.

Dramatic increases in Chinese demand were often seen elsewhere in alarmist terms as the main factor disrupting world market stability. The actual effects varied by commodity. In petroleum, for example, greater Chinese demand contributed to rising prices for crude oil, but, at least during the period 1995–2004, global production also increased, which softened the effect on prices. In 2004, China accounted for only 8 percent of world consumption, whereas the United States guzzled 25 percent of the world's petroleum output. By contrast, the price of a product such as wood pulp (the key input for paper) remained basically constant despite growing Chinese demand during the same 10-year period. In the case of ferrous scrap metal (important in the making of steel), dramatic price increases occurred during the same period, pushed to some extent by China, but also by rising demand in other steel-producing countries such as South Korea and Turkey.

People worried that China's demographic size and the speed of its economic growth (along with the rise of India and some other countries), beyond their impact on prices, had finally brought the earth close to the long-discussed limits of its carrying capacity.[31] Ideas such as a global "limit to growth" and "peak oil" (the danger of oil supplies running out) threatened Chinese security by giving rise to pressure on Beijing to rein in the rising living standards that were crucial to the regime's domestic stability.

A third area of interdependent vulnerability in the global economy involved the management of currency and foreign exchange. For domestic firms to buy and sell from foreign firms, they had to use dollars, euros, yen, or a small number of other international reserve currencies. As China's trade went into a global surplus around 2005, Chinese accounts accumulated large quantities of these currencies. Because most global trade is conducted in dollars, most of this surplus came in the form of dollars. (Only a small fraction of China's foreign trade has so far been conducted on a "currency swap" basis with the use of the Chinese yuan and another nonreserve currency such as the Brazilian real.) In the face of this situation, the government had to make two policy decisions: how to treat the exchange rate between Chinese and foreign currencies and how to deal with the foreign exchange reserve generated by the trade surplus.

[31] Lester R. Brown, *Who Will Feed China? Wake-Up Call for a Small Planet* (New York: Norton, 1995).

The government chose to keep control over both the exchange rate and the management of foreign exchange reserves. The People's Bank of China set the exchange rates between the Chinese yuan and the global reserve currencies, and the State Administration of Foreign Exchange managed the reserves. The chief reason to sustain government control of these functions was to prevent changes in the value of foreign currencies from causing inflation in the domestic economy and hence affecting Chinese citizens' welfare and political loyalty. A second reason was to maintain exchange rates at levels favorable to the promotion of Chinese exports. A third was to manage foreign exchange reserves in such a way as to ease political relations with influential officials in Washington and other foreign capitals—for example, by purchasing U.S. Treasury bonds to help the U.S. government manage its fiscal deficits.

But such policies were rife with pitfalls both economic and political. On the economic side, a low yuan-to-dollar (or yen or euro) exchange rate promoted exports at the cost of shifting benefits from Chinese to Western consumers. In effect, by virtue of government-controlled exchange rates, Chinese workers accepted lower wages to subsidize higher living standards for Western consumers. Artificially low yuan values also helped create overinvestment, waste, inflows of speculative capital, stock market and real estate bubbles, and inflationary pressures—all of which required government responses to try to manage and smooth them out.

Likewise, conservative management of foreign exchange reserves saddled the Chinese economy with low (sometimes even negative) returns on huge investments. In 2011, China held the equivalent of $3.2 trillion in foreign exchange reserves—more than any other country. Although the makeup of these reserves was a secret, most experts estimated that about 70 percent of the money was held in dollar-denominated assets during the 2000s, even though the value of the dollar was declining in relationship to other reserve currencies. In 2007, China set up a sovereign wealth fund, the China Investment Corporation, to invest a fraction of the reserves more aggressively for better returns, but the corporation's initial investments performed badly. The total amount of the reserves was in any case too large for a large share of it to be managed aggressively. Nor could China convert large amounts of its dollars to other currencies without driving down the value of its dollar stake even further while also harming the economic health of one of its chief markets and raising the prices of Chinese products in that market. Through its holdings of U.S. dollars, therefore, China's economic health was to some extent held hostage to the wisdom of financial managers in Washington—a wisdom in which China had little faith after the economic crisis that started in the United States in 2008.

Exchange rate controls and foreign exchange reserve management became added counts in the "China threat" discourse centered in but not limited to Washington. Partly in response to pressure from Washington and partly in order to move toward its own long-term goal of making the renminbi an international exchange currency, Beijing in 2005 launched a "managed float" of exchange rates. The yuan rose in value from 8.27 to the dollar in 2005 to 6.36 in 2011, an increase of 23 percent. But the revaluation had no discernible effect on the U.S.–China trade balance, and the slow, irregular pace of the increase failed to mollify critics, who intermittently threatened trade sanctions if China did not move faster toward a market-determined exchange rate.

MUTUAL VULNERABILITY IN OTHER GLOBAL SYSTEMS

The logic of mutual vulnerability extended beyond the economy to encompass other interconnected spheres of life—most importantly, the environment, public health, and new information technology. Here, too, the new logic applied: even though countries are more likely to hurt one another inadvertently than on purpose, such harms could be serious, and they are increasingly likely because global systems are too complex to control.

Mutual vulnerability in the natural environment is one example of this logic. China is one of the most polluted countries in the world. To a large extent, the pollution is caused by China's production for consumers abroad. There is also much pollution from dumping of electronic waste that has come back to China after outliving its usefulness in the West. In this way, participation in the global economy imposes heavy economic and health costs on the Chinese people.[32] In turn, some of China's behaviors hurt the environment for people abroad. Poisons dumped by Chinese factories into the Songhua River have more than once reached downstream populations in the Russian Far East. River and ocean dumping have polluted the waters off the Chinese coast and pushed Chinese fisherman farther into the surrounding seas to compete with boats from other countries. Because of prevailing winds, emissions from Chinese factories have reached Korea and Japan as acid rain and "yellow dust." Soot as far away as Los Angeles has occasionally been chemically traced to Chinese factories. If a nuclear accident on the scale of Japan's 2011 Fukushima reactor disaster were to occur somewhere on the Chinese coast, it might deliver radiation to more

[32]Jonathan Watts, *When a Billion Chinese Jump: How China Will Save Mankind—or Destroy It* (New York: Scribner, 2010).

people in Japan, Korea, and Taiwan—depending on which Chinese reactor was involved—than in China itself. Farther away, demand created by China's economic growth contributes indirectly to forest depletion, water pollution, and habitat destruction in Southeast Asia, Africa, and Latin America.

It is in China's long-term interest to help solve such environmental problems. They often arise from inefficiencies, the improvement of which will bring benefits to all. As jobs in polluting industries are lost, new jobs can be created in remediation and green industry. But that kind of transition is painful and expensive and can hurt vocal constituencies. As in other countries, in China, the enforcement of environmental regulations lags behind policy commitments, and there is always the question of who bears the cost. Whereas foreign critics claim that China uses backward environmental standards to subsidize exports and compete for jobs unfairly, the Chinese criticize the use of environmental protection standards by developed countries to erect barriers to Chinese imports.

The grand example of mutual vulnerability in the environment is climate change, because the movements of the earth's atmosphere mix everyone's pollution together and bring its baneful effects to bear indiscriminately. Burning 2.6 tons of coal per person per year as of 2009, China has become the number one contributor to the production of carbon dioxide and other greenhouse gases. But coal remains the only way to meet a large fraction of China's soaring energy needs. A wholesale switch to renewable sources is not an option. China is developing nuclear power, but nuclear plants are expensive and slow, require sophisticated safety equipment, and pose environmental risks of their own. Major hydropower projects such as the Three Gorges Dam entail habitat damage and population displacements and have proven internationally controversial. Any increase in oil and gas use makes China more dependent on international sources of supply, and these fuels carry their own environmental problems, which will worsen as Beijing implements its commitment to develop the domestic automobile industry to supply China's emerging middle class with private cars.

Beijing has shown a willingness to recognize its shared interest in the global commons and to cooperate with evolving world standards. It created the National Environmental Protection Administration (upgraded to a ministry in 2008), as well as local environmental protection agencies, and signed a number of international environmental agreements. The government is phasing out the household use of charcoal briquettes for cooking and heating and requires state-owned factories to burn coal more efficiently and install emissions-scrubbing equipment. But China has drawn the line at slowing its pace of development to ameliorate pollution problems that the Chinese argue were created by the developed world. It took the position at the 2009 Copenhagen climate negotiations that China would not take extra measures to slow emissions unless the developed countries drastically slowed their own emissions and gave major aid to China and other developing countries to help cover the cost of emissions cuts there.[33]

China and other countries are also mutually vulnerable in the area of public health. HIV/AIDS came into China from outside. Now there are three epidemics, two of which are linked to cross-border transmission—intravenous drug use along the Burma border and sex work along the east coast (the third epidemic is the blood transfusion epidemic in Henan, which is gradually diminishing as the blood purchase stations are banned and the victims die). No disease that originated in China has so far spread to the rest of the world in a major way. But the spread of severe acute respiratory syndrome (2002) and avian flu (2003) from China to neighboring countries put the world on notice that China might produce disease vectors that would travel quickly under modern conditions to the rest of the world. As a result, international health organizations such as the WHO began to pressure the Chinese authorities to share information more quickly and accurately than they had done in the past, thus leading to another loss—however beneficial in the long run—to China's accustomed autonomy.

A third example of mutual vulnerability lies in the Internet and other forms of new information technology. The Internet took off in China around the mid-1990s and reached some 500 million users in its first decade. Between 2000 and 2009, cell phone subscriptions increased from 7 per 100 persons to 56, with escalating use of texting and the Chinese equivalent of Twitter. The government promoted the use of information technology as a focus of economic growth but also invested major resources in a multilayered control system, popularly known as the Great Firewall, to prevent information from destabilizing domestic politics. In 2009, the government shut down the Internet in Xinjiang for six months to prevent the spread of antigovernment ideas among the restive population. In 2011, the authorities worked hard to control the spread of information about unrest in the Middle East and the use of the Internet and cell phones to call for a peaceful "Jasmine revolution." The Internet also served as a channel for threats projected outward from China to other users. For example, the Pentagon, Google, and numerous other institutions and individual users outside China reported hacking and phishing attempts and virus attacks

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[33]Foot and Walter, *China, the United States, and Global Order*, chap. 5.

emanating from China. It was unclear when the hackers were private persons and when they were Chinese government institutions.

THE CHINA THREAT UNDER CONDITIONS OF GLOBALIZATION

If—a big if—China's economic growth continues for another decade or two at the rate it has sustained in the past three decades, the country will possess the resources to build up its military further and acquire bases overseas, and it may feel the need to use force to protect its expanding interests. Technological diffusion might erode the U.S. lead in military and information technology, so that even if the United States continues to modernize its military, China might be able to close the gap.[34] The renminbi might replace the dollar as the largest international reserve currency. Chinese culture and values might achieve global influence along with Chinese products. If the United States were to resist these trends, the two countries might go to war.[35]

But such a vision of China's rise as an unalloyed threat to Western interests is based on a one-sided understanding of China's place in the global system. Although immersion in globalization has indeed increased China's economic, military, and soft power, it has also rendered China more interdependent and vulnerable. Both trends will intensify as China's economy grows. Although economic growth has produced frictions in China's relations with the United States and its allies, common interests have prevented these frictions from developing into direct economic, political, or military conflicts in the period since China embarked on its immersion in globalization.

The richer China becomes, the greater will be its stake in the security of the sea lanes, the stability of the world trade and financial regimes, nonproliferation, the control of global climate change, and cooperation in public health. If and when it becomes the world's largest economy, its prosperity will continue to be tied up with that of the United States, Europe, and Japan. Of course the reverse is also true: Western prosperity and security will be tied to the welfare of China. Barring a collapse of

[34] But for an argument that this is unlikely, see Michael Beckley, "China's Century? Why America's Edge Will Endure," *International Security* 36 (Winter 2011/12): 41–78.

[35] Aaron L. Friedberg, *A Contest for Supremacy: China, America, and the Struggle for Mastery in Asia* (New York: Norton, 2011); Martin Jacques, *When China Rules the World: The Rise of the Middle Kingdom and the End of the Western World* (London: Allen Lane, 2009); John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: Norton, 2001); Arvind Subramanian, *Eclipse: Living in the Shadow of China's Economic Dominance* (Washington, DC: Peterson Institute for International Economics, 2011).

some unpredictable kind in the international system as a whole, China and its rivals will continue to find themselves hostage to each other's welfare. Globalization poses new kinds of security risks not only to China but to all participants in the global system. But there are too many benefits in the system for any of its members to opt out.*

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