



China's Economic Conditions

Wayne M. Morrison

Specialist in Asian Trade and Finance

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Summary

Prior to the initiation of economic reforms and trade liberalization 32 years ago, China maintained policies that kept the economy very poor, stagnant, centrally controlled, vastly inefficient, and relatively isolated from the global economy. Since opening up to foreign trade and investment in 1979, China has been one of the world's fastest-growing economies and has emerged as a major economic and trade power. China's rapid economic growth has sharply improved Chinese living standards and helped raise hundreds of millions of people out of extreme poverty. In 2010, China was the world's second largest economy, largest merchandise exporter, second largest merchandise importer, second largest recipient of foreign direct investment (FDI), and largest holder of foreign exchange reserves.

The global economic crisis that began in 2008 significantly affected China's economy, especially its external sector. China's trade (both exports and imports) and inflows of FDI diminished sharply, and millions of workers reportedly lost their jobs. The Chinese government responded by implementing a \$586 billion economic stimulus package (largely aimed at infrastructure projects), loosening monetary policies to increase bank lending, and providing various incentives to boost domestic consumption. Such policies enabled China to effectively weather the effects of the sharp global fall in demand for Chinese products. While several of the world's leading economies, including the United States, experienced negative or stagnant gross domestic product (GDP) growth in 2008 and 2009, China achieved real GDP growth rates of 9.6% and 9.2%, respectively. In 2010, China's exports recovered to pre-crisis levels, and real GDP grew 10.3%. The International Monetary Fund (IMF) projects that China's real GDP will grow by 9.6% in 2011 and increase at an average rate of 9.5% over the next five years.

Some economic forecasters project that China will overtake the United States as the world's largest economy within a few years, although U.S. per capita GDP levels are expected to remain much larger than that of China for many years to come. Many economists contend that the ability of China to maintain a rapidly growing economy in the long run will depend largely on the ability of the Chinese government to implement comprehensive economic reforms that more quickly hasten China's transition to a free market economy, and to rebalance the Chinese economy by making consumer demand, rather than exporting, the main engine of China's economic growth. China faces numerous other challenges as well that could affect its future economic growth (as well as internal political stability), such as widespread pollution, growing income disparities, an undeveloped social safety net, poorly enforced economic regulations, and extensive involvement of the state in several economic sectors.

China's economic rise has significant implications for the United States and hence is of major interest to Congress. On the one hand, China is a large (and potentially huge) export market for the United States. Many U.S. firms use China as the final point of assembly in their global supply chain networks. China's large holdings of U.S. Treasury securities help the federal government finance its budget deficits and keep U.S. interest rates low. However, some analysts contend that China maintains a number of distortive economic policies (such as an undervalued currency and protectionist industrial policies) that undermine U.S. economic interests. They warn that efforts by the Chinese government to promote the development of indigenous innovation and technology could mean that Chinese firms will increasingly pose a "competitive challenge" to many leading U.S. industries. This report surveys the rise of China's economy, describes major economic challenges facing China, and discusses the implications of China's economic development for the United States.

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The rapid rise of China as a major economic power within a time span of about 30 years is often described by analysts as one of the greatest economic success stories in modern times. From 1979 (when economic reforms began) to 2010, China's real gross domestic product (GDP) grew at an average annual rate of nearly 10%. From 1980 to 2010, China's economy grew nearly 18-fold in real terms, real per capita GDP grew more than 13-fold, and hundreds of millions of people were raised out of extreme poverty. China is now the world's second largest economy and some analysts predict it could become the largest within a few years. Yet, on a per capita basis, China remains a relatively poor country.

China's economic rise has led to a substantial increase in U.S.-China economic ties. According to U.S. trade data, total trade between the two countries surged from \$5 billion in 1980 to \$457 billion in 2010. China is currently the United States' second largest trading partner, its third largest export market, and its largest source of imports. Many U.S. companies have extensive operations in China in order to sell their products in the booming Chinese market and to take advantage of lower-cost labor for export-oriented manufacturing.¹ These operations have helped some U.S. firms to remain internationally competitive and have supplied U.S. consumers with a variety of low-cost goods. China's large-scale purchases of U.S. Treasury securities (which totaled near \$1.2 trillion at the end of 2010) have enabled the federal government to fund its budget deficits, which helps to keep U.S. interest rates relatively low.

However, the emergence of China as a major economic superpower has raised concern among many U.S. policymakers. Some express concern over the large annual U.S. trade deficits with China (which totaled \$273 billion in 2010) and is viewed by many Members of Congress as an indicator that U.S.-Chinese commercial relations are imbalanced or unfair. Others claim that China uses unfair trade practices (such as an undervalued currency and subsidies given to domestic producers) to flood U.S. markets with low-cost goods, and that such practices threaten American jobs, wages, and living standards. Other concerns relating to China's economic growth include its growing demand for energy and raw materials, its status as the world's largest emitter of greenhouse gasses, its growing use of industrial policies to promote domestic industries at the expense of foreign firms, and its failure to take effective action against widespread piracy of U.S. intellectual property in China.

The Chinese government views a growing economy as vital to maintaining social stability. However, China faces a number of major economic challenges which could undermine future growth, including distortive economic policies that have produced an over-reliance on exports for economic growth (rather than on consumer demand), government support for state-owned firms, a weak banking system, widening income gaps, growing pollution, and the relative lack of the rule of law in China.

This report provides background on China's economic rise and current economic structure and the challenges China faces to keep its economy growing strong, and describes Chinese economic policies that are of concern to U.S. policymakers.

¹ Some companies use China as part of their global supply chain for manufactured parts, which are then exported and assembled elsewhere. Other firms have shifted the production of finished products from other countries (mainly in Asia) to China; they import parts and materials into China for final assembly.

Overview of China's Economic Development

China's Economy Prior to Reforms

Prior to 1979, China, under the leadership of Chairman Mao Zedong, maintained a centrally planned, or command, economy. A large share of the country's economic output was directed and controlled by the state, which set production goals, controlled prices, and allocated resources throughout most of the economy. During the 1950s, all of China's individual household farms were collectivized into large communes. To support rapid industrialization, the central government undertook large-scale investments in physical and human capital during the 1960s and 1970s. As a result, by 1978 nearly three-fourths of industrial production was produced by centrally controlled, state-owned enterprises (SOEs), according to centrally planned output targets. Private enterprises and foreign-invested firms were generally barred. A central goal of the Chinese government was to make China's economy relatively self-sufficient. Foreign trade was generally limited to obtaining only those goods that could not be made or obtained in China.

Government policies kept the Chinese economy relatively stagnant and inefficient, mainly because most aspects of the economy were managed and run by the central government (and thus there were few profit incentives for firms, workers, and farmers), competition was virtually nonexistent, foreign trade and investment flows were mainly limited to Soviet bloc countries, and price and production controls caused widespread distortions in the economy. Chinese living standards were substantially lower than those of many other developing countries. The Chinese government in 1978 (shortly after the death of Chairman Mao in 1976) decided to break with its Soviet-style economic policies by gradually reforming the economy according to free market principles and opening up trade and investment with the West, in the hope that this would significantly increase economic growth and raise living standards. As Chinese leader Deng Xiaoping, the architect of China's economic reforms, put it: "Black cat, white cat, what does it matter what color the cat is as long as it catches mice?"

The Introduction of Economic Reforms

Beginning in 1979, China launched several economic reforms. The central government initiated price and ownership incentives for farmers, which enabled them to sell a portion of their crops on the free market. In addition, the government established four special economic zones along the coast for the purpose of attracting foreign investment, boosting exports, and importing high technology products into China. Additional reforms, which followed in stages, sought to decentralize economic policymaking in several sectors, especially trade. Economic control of various enterprises was given to provincial and local governments, which were generally allowed to operate and compete on free market principles, rather than under the direction and guidance of state planning. In addition, citizens were encouraged to start their own businesses. Additional coastal regions and cities were designated as open cities and development zones, which allowed them to experiment with free market reforms and to offer tax and trade incentives to attract foreign investment. In addition, state price controls on a wide range of products were gradually

eliminated. Trade liberalization was also a major key to China's economic success. Removing trade barriers encouraged greater competition and boosted foreign direct investment (FDI) flows.²

China's Economic Growth Since Reforms: 1979-2010

Since the introduction of economic reforms, China's economy has grown substantially faster than during the pre-reform period (see **Table 1**). From 1960 to 1978, real annual GDP growth was estimated at 5.3% (a figure many analysts claim is overestimated, based on several economic disasters that befell the country during this time because of disruptive economic and political policies, such as the Great Leap Forward from 1958-1960 and the Cultural Revolution from 1966-1976).³ During the reform period (1979-present), China's average annual real GDP grew by nearly 10%. This essentially has meant that China has been able to double in real terms the size of its economy in real terms every eight years. China's real GDP growth fell from 13.0% in 2007 to 9.6% in 2008 to 9.2% in 2009, largely because of the effects of the global economic slowdown (discussed later in this report). However, the central government was able implement a large economic stimulus package and an expansive monetary policy to achieve a real GDP rate of 10.3% in 2010.

² For example, China's accession to the World Trade Organization in December 2001, which required it to reduce a wide range of trade and investment barriers, helped to accelerate GDP growth and led to a sharp increase in FDI flows to China.

³ There were several years of significant GDP decline, including 1961, when it fell by 30% over the previous year.

Table 1. China's Average Annual Real GDP Growth: 1960-2010 and 2011 Estimate

Time Period	Average Annual Growth (%)
1960-1978 (pre-reform)	5.3
1979-2010 (post-reform)	9.8
1980	7.9
1985	12.8
1990	3.8
1991	9.3
1992	14.2
1993	14.0
1994	13.1
1995	10.9
1996	10.0
1997	9.3
1998	7.8
1999	7.6
2000	8.4
2001	8.3
2002	9.1
2003	10.0
2004	10.1
2005	9.9
2006	11.1
2007	14.2
2008	9.6
2009	9.2
2010	10.3
2011 IMF Projection	9.6

Source: Official Chinese government data, the Economist Intelligence Unit, and the IMF.

Causes of China's Economic Growth

Economists generally attribute much of China's rapid economic growth to two main factors: large-scale capital investment (financed by large domestic savings and foreign investment) and rapid productivity growth. These two factors appear to have gone together hand in hand. Economic reforms led to higher efficiency in the economy, which boosted output and increased resources for additional investment in the economy.

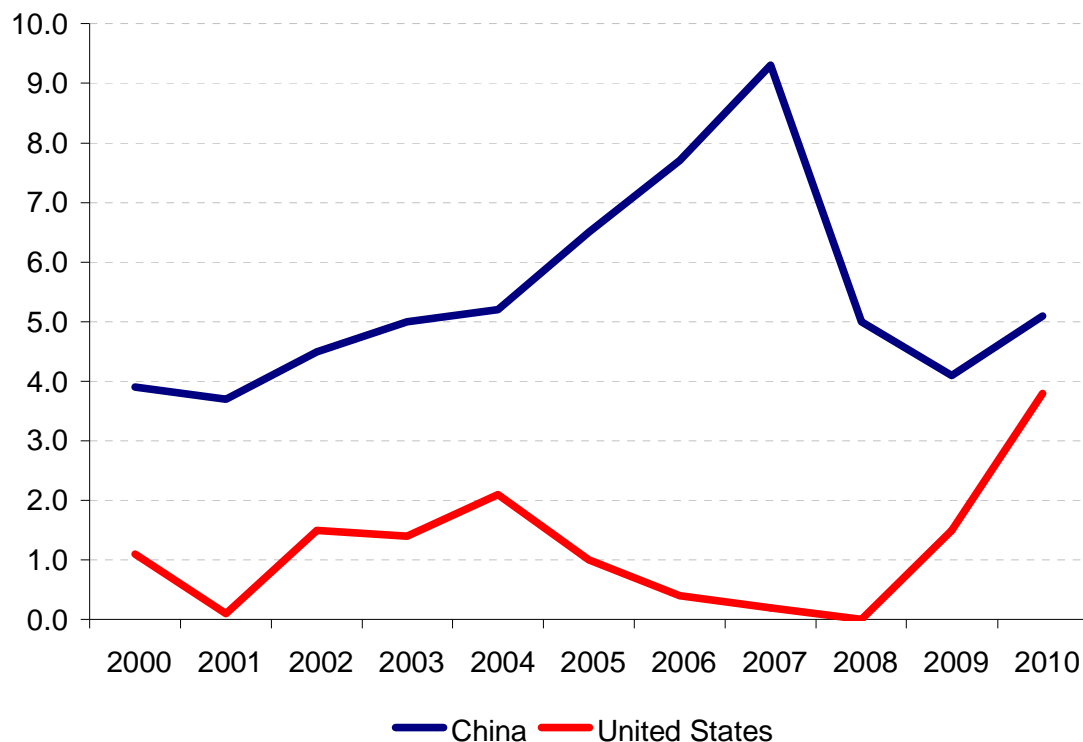
China has historically maintained a high rate of savings. When reforms were initiated in 1979, domestic savings as a percentage of GDP stood at 32%. However, most Chinese savings during this period were generated by the profits of SOEs, which were used by the central government for domestic investment. Economic reforms, which included the decentralization of economic production, led to substantial growth in Chinese household savings as well as corporate savings. As a result, China's gross savings as a percentage of GDP has steadily risen, reaching 53.9% in 2010 (compared to a U.S. rate of 9.3%), and is among the highest savings rates in the world.⁴ The large level of savings has enabled China to boost domestic investment. In fact, its gross domestic savings levels far exceed its domestic investment levels, meaning that China is a large net global lender.

Several economists have concluded that productivity gains (i.e., increases in efficiency) have been another major factor in China's rapid economic growth. The improvements to productivity were caused largely by a reallocation of resources to more productive uses, especially in sectors that were formerly heavily controlled by the central government, such as agriculture, trade, and services. For example, agricultural reforms boosted production, freeing workers to pursue employment in the more productive manufacturing sector. China's decentralization of the economy led to the rise of non-state enterprises (such as private firms), which tended to pursue more productive activities than the centrally controlled SOEs and were more market-oriented, and hence, more efficient. Additionally, a greater share of the economy (mainly the export sector) was exposed to competitive forces. Local and provincial governments were allowed to establish and operate various enterprises on market principles, without interference from the central government. In addition, foreign direct investment (FDI) in China brought with it new technology and processes that boosted efficiency. As indicated in **Figure 1**, China has achieved high rates of total factor productivity (TFP) growth relative to the United States. TFP represents an estimate of the part of economic output growth not accounted for by the growth in inputs (such as labor and capital), and is often attributed to the effects of technological change and efficiency gains. China experiences faster TFP growth than most developed countries such as the United States because of its ability to access and utilize existing foreign technology and know-how. High TFP growth rates have been a major factor behind China's rapid economic growth rate. However, as China's technological development begins to approach that of major developed countries, its level of productivity gains, and thus, real GDP growth, could slow significantly from its historic 10% average, unless China becomes a major center for new technology and innovation.⁵

⁴ Source: EIU Database.

⁵ Economic theory holds that over the long run, capital inputs provided to a set labor force produces diminishing returns. Thus, the main way to boost long-term economic growth is to boost productivity.

Figure I. Comparison of Annual Changes in Total Factor Productivity in China and the United States: 2000-2010
(percent)



Source: Estimated by the Economist Intelligence Unit.

Notes: Total factor productivity represents the part of economic output growth not accounted for by the growth in inputs, such as labor and capital, and is often used to estimate the effects of technological change.

China's Incomplete Transition to a Market Economy

Despite these widespread economic reforms, Chinese officials contend that China is a “socialist-market economy,” a term that appears to indicate that the government accepts and allows the use of free market forces in a number of areas to help grow the economy, but where the government still plays a major role in the country’s economic development. For example, the banking sector in China is largely state-controlled. In addition, although the number of SOEs has declined sharply, they continue to dominate a number of sectors (such as petroleum and mining, telecommunications, utilities, transportation, and various industrial sectors); are shielded from competition; are generally the only companies that are allowed to invest overseas; and dominate the listings on China’s two stock indexes.⁶ One study found that SOE’s constituted 50% of the 500 largest manufacturing companies in China and 61% of the top 500 service sector enterprises.⁷

⁶ The nature of the SOE’s operations is becoming increasingly complex because the number of SOEs directly owned and operated by the central and local governments has shrunk considerably. Instead, a significant number of SOEs are largely owned by the government but are generally allowed to be run like a private company.

⁷ Xiao Geng, Xiuke Yang, and Anna Janus, *State-owned Enterprises in China, Reform Dynamics and Impacts*, 2009, p.155.

It is estimated that there were 154,000 SOEs as of 2008, and while these accounted for only 3.1% of all enterprises in China, they held 30% of the value of corporate assets in the manufacturing and services sectors.⁸ According to Fortune's rankings of the top 500 global companies in 2010 (based on revenues), three of the top 10 global firms were Chinese SOEs, including Sinopec (petroleum), State Grid (utilities), and China National Petroleum.⁹

Measuring the Size of China's Economy

The rapid growth of the Chinese economy has led many analysts to speculate if and when China will overtake the United States as the "world's largest economic power." The "actual" size of China's economy has been a subject of extensive debate among economists. Measured in U.S. dollars using nominal exchange rates, China's GDP in 2010 was estimated by the Economist Intelligence Unit (EIU) at \$5.8 trillion, slightly higher than that of Japan's and about 40% the size of the U.S. economy.¹⁰ China's per capita GDP on a nominal basis, was less than one-tenth the size of that of Japan and the United States (see **Table 2**).

Many economists contend that using nominal exchange rates to convert Chinese data (or that of other countries) into U.S. dollars fails to reflect the true size of China's economy and living standards relative to the United States. Nominal exchange rates simply reflect the prices of foreign currencies vis-à-vis the U.S. dollar and such measurements exclude differences in the prices for goods and services across countries. To illustrate, one U.S. dollar exchanged for local currency in China would buy more goods and services there than it would in the United States. This is because prices for goods and services in China are generally lower than they are in the United States. Conversely, prices for goods and services in Japan are generally higher than they are in the United States (and China). Thus, one dollar exchanged for local Japanese currency would buy fewer goods and services there than it would in the United States. Economists attempt to develop estimates of exchange rates based on their actual purchasing power relative to the dollar in order to make more accurate comparisons of economic data across countries, usually referred to as a purchasing power parity (PPP) basis. The PPP exchange rate increases the (estimated) measurement of China's economy and its per capita GDP by about 75% over the data in nominal dollars, to \$10.2 trillion and \$7,770, respectively. On a PPP basis, China's economy in 2010 was 69.6% the size of the U.S. economy and its per capita GDP was 16.4% that of the United States.¹¹ Assuming that China will continue to experience rapid economic growth in the years ahead, it could overtake the United States to become the world's largest economy on PPP basis within a few years. For example, EIU projects that China will become the world's largest economy on a PPP basis in 2017, and that by 2030, it will be more than one-third larger than the U.S. economy. However, even by the year 2030, China's per capita GDP on a PPP basis is projected by EIU to be about 35% that of the United States, indicating that it will likely take many years before Chinese living standards approach those of the United States.

⁸ Gao Shu., *State-Owned Enterprises in China: How Big Are They?* The World Bank, January 19, 2010.

⁹ Fortune Magazine, Global 500, 2010.

¹⁰ On a nominal dollar basis, China overtook Japan in 2010 to become the world's second largest economy (after the United States).

¹¹ Per capita data represent country averages and do not reflect the growing level of income disparity in China, especially between rural areas and cities along the coast.

Table 2. Comparisons of Chinese, Japanese, and U.S. GDP and Per Capita GDP in Nominal U.S. Dollars and PPP: 2010

	China	Japan	United States
Nominal GDP (\$ billions)	5,824	5,461	14,660
GDP in PPP (\$ billions)	10,203	4,299	14,660
Nominal Per Capita GDP (\$)	4,440	43,060	47,260
Per Capita GDP in PPP (\$)	7,770	33,900	47,260

Source: Economist Intelligence Unit estimates.

Foreign Direct Investment in China

China's trade and investment reforms and incentives led to a surge in FDI beginning in the early 1990s. Such flows have been a major source of China's productivity gains and related rapid economic growth. The Chinese government estimates that as of 2007 there were 286,200 approved foreign-invested companies in China, and that such firms employed more than 42 million people and accounted for 31.5% of gross industrial output value.¹² According to the Chinese government, annual utilized FDI in China grew from \$2 billion in 1985 to \$92 billion in 2008, declined to \$90 billion in 2009, and rose to \$106 billion in 2010. The cumulative level of FDI in China at the end of 2010 is estimated at \$1.08 trillion, making China one of the world's largest destinations of FDI.¹³ According to the United Nations Conference on Trade and Development, China was the world's second largest destination for FDI in 2009, after the United States. In terms of cumulative FDI in China for 1979-2010, the Chinese government reports that 42.9% came from Hong Kong, 9.4% from the British Virgin Islands, 6.8% from Japan, and 6.2% from the United States (see **Table 3**).¹⁴ In terms of annual data, Hong Kong was reported as the largest source of FDI flows to China in the year 2010 (63.9% of total), while the United States ranked 5th. Annual U.S. FDI flows to China peaked at \$5.4 billion in 2002 (10.2% of total); in 2010, they were \$4.1 billion (3.9% of total) (see **Figure 3**).¹⁵

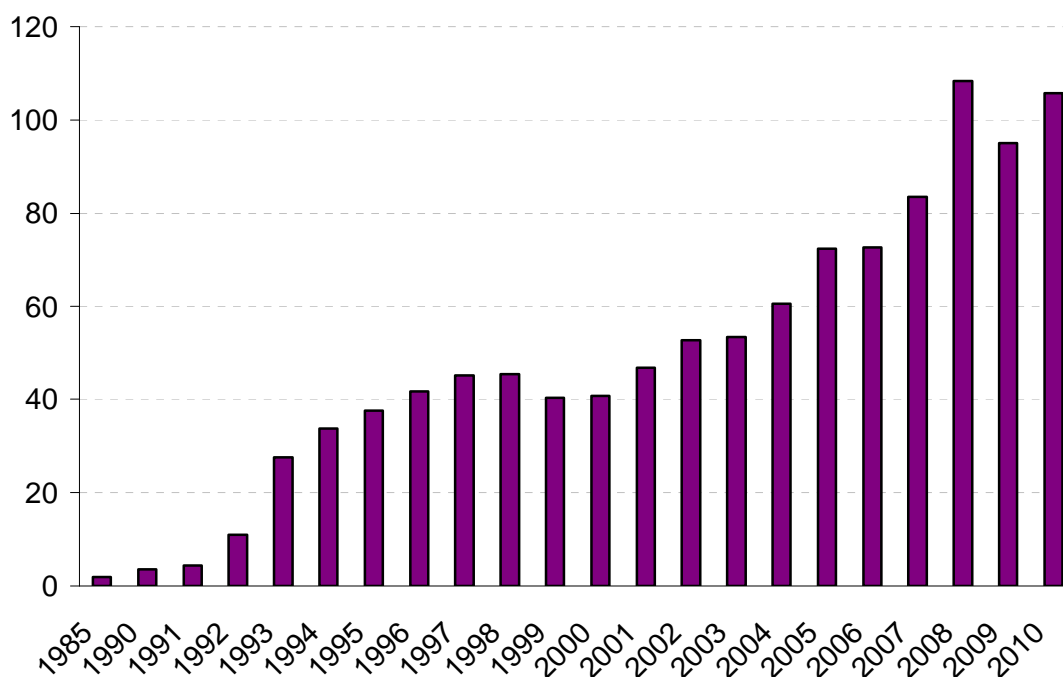
¹² Gross industrial output value is the total volume of final industrial products produced and industrial services provided during a given period. Source: China 2008 Statistical Yearbook.

¹³ Chinese cumulative FDI data reflect the sum of actual FDI China reported on a yearly basis and do not necessarily reflect the current value of FDI in China as of 2009.

¹⁴ Much of the FDI originating from the British Virgin Islands and Hong Kong may originate from other foreign investors. For example, Taiwanese businesses are believed to invest in China through other countries or territories (such as Hong Kong) in order to circumvent government restrictions. In addition, some Chinese investors might be using these locations to shift funds overseas in order to re-invest in China to take advantage of preferential investment policies (this practice is often referred to as "round-tipping"). Thus, the actual level of FDI in China may be overstated.

¹⁵ U.S. data on bilateral FDI flows with China differ significantly with Chinese data. For additional info on bilateral FDI flows based on U.S. data, see CRS Report RL33536, *China-U.S. Trade Issues*, by Wayne M. Morrison, p. 16.

Figure 2. Annual FDI Flows to China: 1985-2010
(\$ Billions)



Source: United Nations Conference on Trade and Investment and Invest and Chinese Ministry of Commerce.

Table 3. Major Sources of Non-Finance FDI in China: 1979-2010
(\$ billions and % of total)

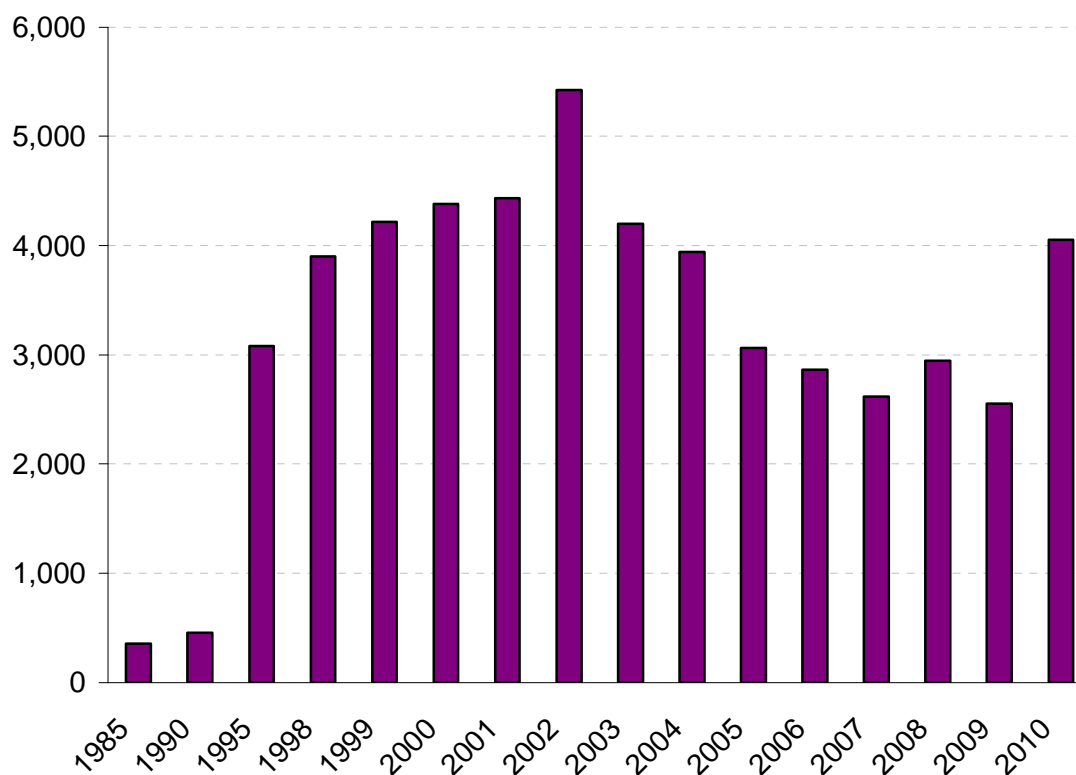
Country	Estimated Cumulative Utilized FDI: 1979-2010		Utilized FDI in 2010	
	Amount	% of Total	Amount	% of Total
Total	1,078.8	100.0	105.7	100.0
Hong Kong	463.2	42.9	67.5	63.9
British Virgin Islands*	101.4*	9.4*	NA*	NA*
Japan	73.7	6.8	4.2	4.0
United States	66.4	6.2	4.1	3.9
Taiwan	56.3	5.2	6.7	6.3
South Korea	47.3	4.4	2.7	2.6
Singapore	47.1	4.4	5.7	5.4

Source: Chinese Ministry of Commerce.

Notes: Ranked by cumulative top seven investors through 2010. Excludes FDI in the financial sector.

*Beginning in 2010, China attempted to identify the actual source of FDI flows through the British Virgin Islands, and, subsequently, it did not report FDI data for the British Virgin Islands; thus the cumulative data in the table is through 2009.

Figure 3. Annual U.S. FDI Flows to China: 1985-2010
(\$ Millions)



Source: Chinese Ministry of Commerce and Chinese Yearbook, various years.

Note: Chinese and U.S. data on bilateral FDI flows differ sharply because of different methodologies used.

China's Trade Patterns

Economic reforms and trade and investment liberalization have helped transform China into a major trading power. Chinese merchandise exports rose from \$14 billion in 1979 to \$1.6 trillion in 2010, while merchandise imports over this period grew from \$16 billion to \$1.4 trillion (see **Table 4** and **Figure 4**). From 2005 to 2010, China's trade (both exports and imports) more than doubled. Although Chinese exports and imports dropped sharply in 2009 (over 2008 levels) because of the global economic slowdown, they recovered in 2010 and both exceeded pre-crisis levels. During the first five months of 2011, China's exports and imports grew by 25.5% and 29.5%, respectively, on a year-on-year basis. China's trade surplus grew sharply from 2003 to 2008, but fell sharply in 2009 and dropped slightly in 2010. China overtook Germany in 2010 to become the world's largest merchandise exporter; it was also the world's second largest merchandise importer (see **Figure 5** and **Figure 6**). As indicated in **Figure 8**, China's share of

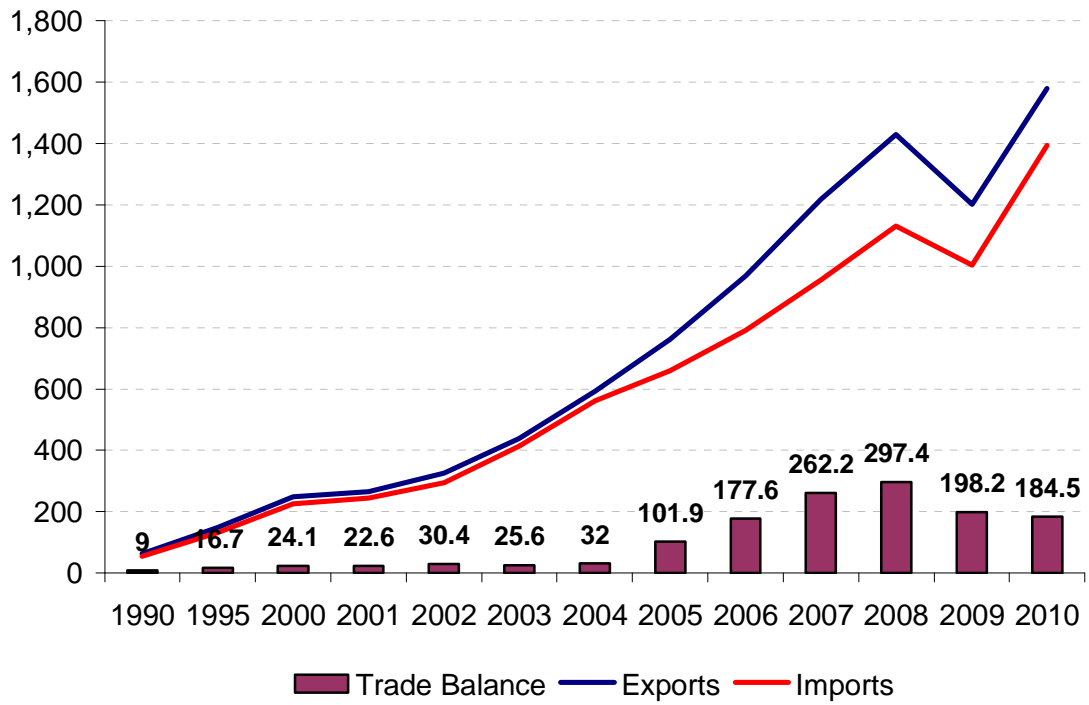
global exports increased from 3.3% in 2000 to 10.1% in 2010. Merchandise trade surpluses, large-scale foreign investment, and large purchases of foreign currencies to maintain its exchange rate with the dollar and other currencies have enabled China to accumulate the world's largest foreign exchange reserves at \$3.0 trillion at the end of March 2011, making it by far the world's largest holder of such reserves.

Table 4. China's Merchandise World Trade: 1979-2010
(\$ billions)

Year	Exports	Imports	Trade Balance
1979	13.7	15.7	-2.0
1980	18.1	19.5	-1.4
1985	27.3	42.5	-15.3
1990	62.9	53.9	9.0
1995	148.8	132.1	16.7
2000	249.2	225.1	24.1
2001	266.2	243.6	22.6
2002	325.6	295.2	30.4
2003	438.4	412.8	25.6
2004	593.4	561.4	32.0
2005	762.0	660.1	101.9
2006	969.1	791.5	177.6
2007	1,218.0	955.8	262.2
2008	1,428.9	1,131.5	297.4
2009	1,202.0	1,003.9	198.2
2010	1,578.4	1,393.9	184.5

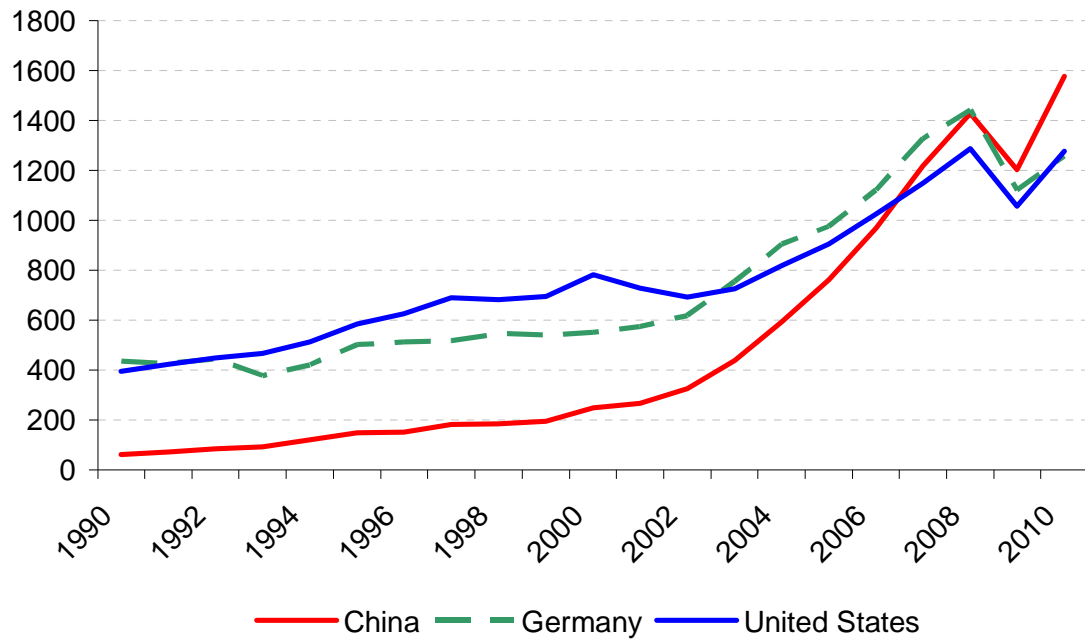
Source: *Global Trade Atlas*.

Figure 4. China's Merchandise Trade: 1990-2010
(\$ billions)



Source: Economist Intelligence Unit.

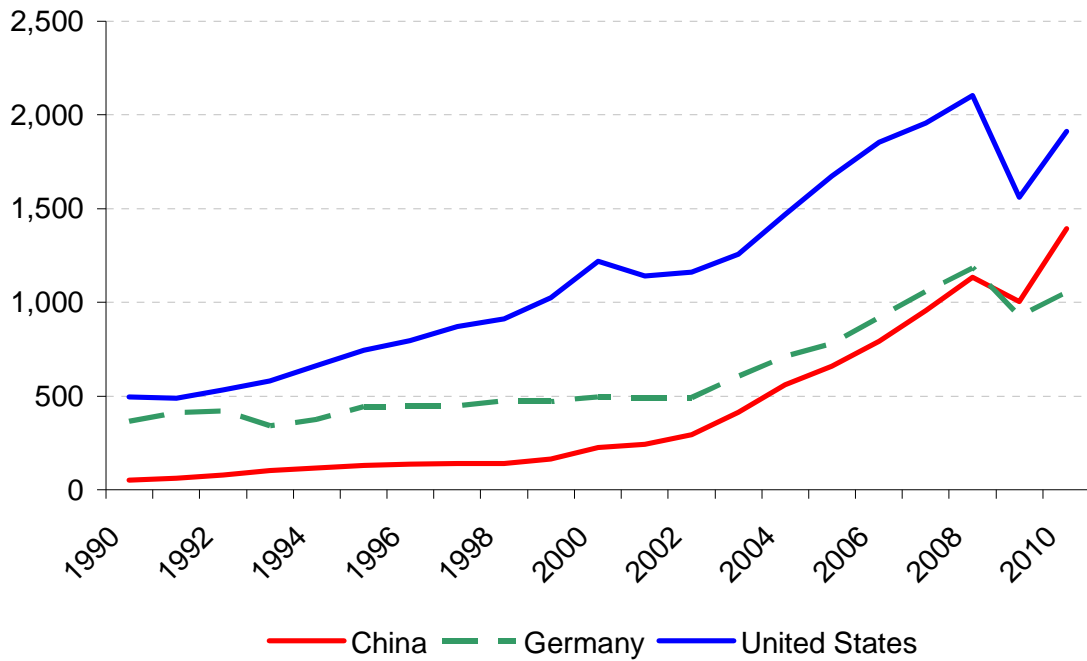
Figure 5. Merchandise Exports by China, Germany and the United States: 1990-2010
(\$ billions)



Source: Economist Intelligence Unit.

Notes: Top three global merchandise exporters in 2010.

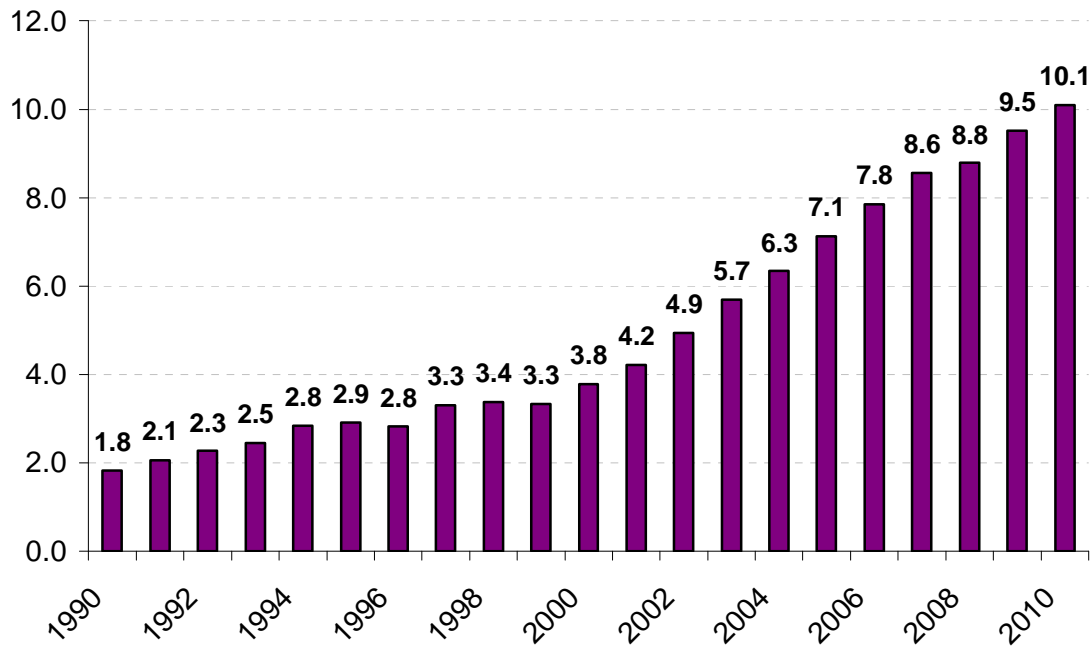
Figure 6. Merchandise Imports by China, Germany, and the United States: 1990-2010
 \$ Billions



Source: Economist Intelligence Unit.

Notes: Top three global merchandise importers in 2010. Imports are on a C.I.F. basis.

Figure 7. China's Global Share of Merchandise Exports: 1990-2010
(\$ billions)



Source: Economist Intelligence Unit.

China's Major Trading Partners

China's trade data often differ significantly from those of its major trading partners, including the United States. This is largely due to the large share of China's trade (both exports and imports) that pass through Hong Kong (which reverted back to Chinese rule in July 1997 but is treated as a separate customs area by most countries, including China and the United States). China treats a large share of its exports through Hong Kong as Chinese exports to Hong Kong for statistical purposes, while many countries that import Chinese products through Hong Kong generally attribute their origin to China for statistical purposes.

Table 5 lists Chinese trade data on its major trading partners in 2010, which included the 27 countries that make up the European Union (EU27), the United States, Japan, and the 10 nations that constitute the Association of Southeast Asian Nations (ASEAN).¹⁶ China's largest export markets were the EU27, the United States, Japan, and South Korea while its top sources for imports were Japan, the EU27, ASEAN, and the United States. China maintained substantial trade surpluses with the United States, the EU27, and Hong Kong, but reported deficits with Japan, Taiwan, Hong Kong, and ASEAN. China reported that it had a \$182 billion trade surplus with the United States, but U.S. data show that it had a \$273 billion deficit with China. These trade imbalance data disparities occur with many of China's other major trading partners as well. This

¹⁶ ASEAN members include Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar (Burma), the Philippines, Singapore, Thailand, and Vietnam.

is largely because a significant share of China's global exports are first sent to Hong Kong and then are reexported. China's trade data treats much of these as exports to Hong Kong. China's trading partners, on the other hand, treat imports from Hong Kong that were originally produced in China as imports from China in their trade data.

Chinese data indicates that about 18% of its exports went to the United States in 2010. However, many analysts contend that the United States is a much more significant market for China than its trade data indicate (largely because entrepôt trade through Hong Kong), and they attempt to show this by taking U.S. data on its imports from China (\$370 billion in 2010) and dividing it by China's official data on its total global exports (\$1,578 billion), which yields about 23% (i.e., the percent of Chinese exports that go to the United States). This is down from a peak of 40% in 2000.¹⁷

A significant level of Chinese exports is from foreign-funded enterprises (FfEs) in China. According to Chinese data, FfEs were responsible for 55% of Chinese exports in 2010 compared with 41% in 1996. A large share of these FfEs are owned by Hong Kong and Taiwan investors, many of whom have shifted their labor-intensive, export-oriented, firms to China to take advantage of low-cost labor. Many of the products made by such firms are exported to the United States.

Table 5. China's Major Trading Partners: 2010
(\$ billions)

Country	Total Trade	Chinese Exports	Chinese Imports	China's Trade Balance
European Union	497.7	311.2	168.5	142.7
United States	385.3	283.3	102.0	181.3
Japan	297.8	121.1	176.7	-55.6
ASEAN	292.8	138.2	154.6	-16.4
Hong Kong	230.6	218.3	12.3	206.0
South Korea	206.8	68.8	138.0	-69.2
Taiwan	106.2	29.6	115.6	-86.0
Total Chinese Trade	2,973.7	1,577.9	1,394.8	183.1

Source: Global Trade Atlas and World Trade Atlas using official Chinese data.

Note: Rankings according to total trade in 2010.

Major Chinese Trade Commodities

China's abundance of low-cost labor has made it internationally competitive in many low-cost, labor-intensive manufactures. The average hourly labor cost for manufacturing in China in 2010 (at \$2) was 5.9% the cost in the United States (at \$34).¹⁸ As a result, manufactured products

¹⁷ Such calculations represent a very rough estimate and should be interpreted with caution.

¹⁸ In addition, the overall average monthly wage in China, at \$449 (nominal U.S. dollars) in 2010, was about one-tenth of U.S. levels (although the disparity would lessen if purchasing power data were used. Source: Economist Intelligence (continued...))

constitute a significant share of China's trade. A substantial amount of China's imports is comprised of parts and components that are assembled into finished products, such as consumer electronic products and computers, and then exported. Often, the value-added to such products in China by Chinese workers is relatively small compared to the total value of the product when it is shipped abroad.

China's top 10 exports and imports in 2010 are listed in **Table 6** and **Table 7**, respectively, using the harmonized tariff system (HTS) on a two-digit level. Major exports included electrical machinery (such as computers and parts), machinery, knit apparel, and woven apparel, while major imports included electrical machinery, mineral fuel, and machinery.

Table 6. Major Chinese Exports: 2010

HS Code	Description	\$billions	Percent of Total	2010/2009 % Change
	World	1,578.4	100.0	31.3
85	Electrical machinery (such as computers and parts)	388.9	24.6	29.1
84	Machinery	310.0	19.6	31.4
61	Knit apparel	66.7	4.2	24.1
62	Woven apparel	54.4	3.4	16.3
90	Optical, photographic, cinematographic, measuring checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	52.2	3.3	34.0
94	Furniture and bedding	50.6	3.2	29.9
89	Ships and boats	40.3	2.6	42.3
73	Iron and steel products	39.2	2.5	15.9
87	Vehicles, except railway (mainly auto parts, motorcycles, trucks, and bicycles)	38.4	2.4	37.4
64	Footwear	35.6	2.3	27.2

Source: *World Trade Atlas*, using official Chinese statistics.

Notes: Top 10 exports in 2010, 2-digit level, harmonized tariff system.

(...continued)

Unit data tool.

Table 7. Major Chinese Imports: 2010

HS Code	Description	\$ billions	Percent of Total	2010/2009 % change
	World	1,393.9	100.0	38.9
85	Electrical machinery	314.4	22.6	29.0
27	Mineral fuel, oil etc.	188.4	13.5	53.0
84	Machinery	172.4	12.4	39.2
26	Ores, slag, and ash	108.0	7.6	56.9
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	89.7	6.4	34.0
39	Plastic	63.7	4.6	31.3
87	Vehicles, not railway (mainly autos and parts)	49.4	3.6	74.5
29	Organic chemicals	48.3	3.5	33.5
74	Copper and articles thereof	46.0	3.3	56.4
12	Misc. grain, seed, and fruit (mainly soybeans)	27.1	1.9	28.8
72	Iron and Steel	25.3	1.8	-9.0

Source: *World Trade Atlas*, using official Chinese statistics.

Notes: Top 10 imports in 2010, two-digit level, harmonized tariff schedule.

China's Growing Appetite for Energy

China's rapid economic growth has fueled a growing demand for energy, such as petroleum and coal, and that demand is becoming an increasingly important factor in determining global energy prices. According to the International Energy Agency (IEA), China overtook the United States in 2009 as the world's largest energy user (in comparison, China's energy use was only half that of that of the United States in 2000). According to IEA projections, China's demand for energy will rise by 70% from 2008 (the baseline projection) to 2035, account for 36% of the projected increase in global demand for energy during this period, and, as a share of global energy demand, grow from 17% to 22%.

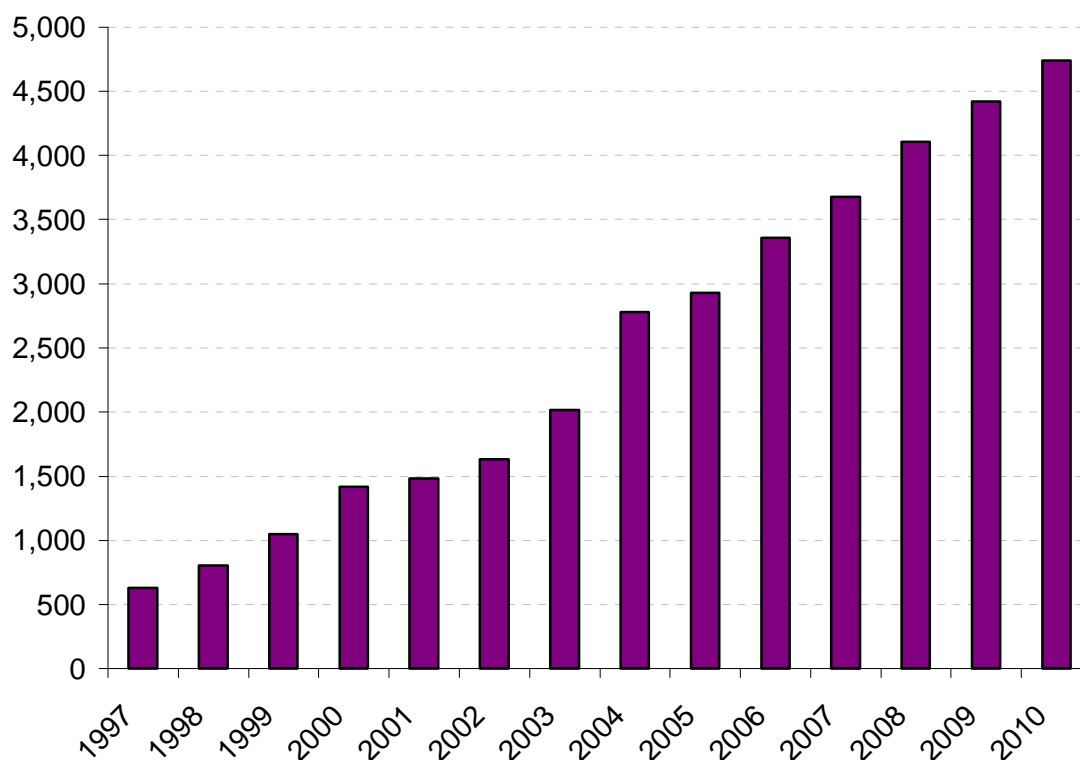
China is the world's second largest consumer of oil products (after the United States) at 8.8 million barrels per day (bpd) in 2010 (compared to 3.9 million in 1997), and that level is projected to nearly double to 16.9 million bpd by 2035.¹⁹ China became a net oil importer (i.e., imports minus exports) in 1993. Net oil imports grew from 632 thousand bpd in 1997 to about 4.7 million bpd in 2010 (see **Figure 8**), making it the world's second largest net oil importer after the United States.²⁰ The China's net oil imports are projected to rise to 13.1 million bpd by 2030, a level that would be comparable to the EU in that year.²¹

¹⁹ U.S. Energy Information Administration, *Forecasts and Analysis*, at <http://www.eia.doe.gov/oiaf/forecasting.html>.

²⁰ China overtook Japan as the second largest net oil importer in 2009.

²¹ International Energy Agency, *2007 World Energy Outlook*, p. 168. Estimates are based on Reference Scenario projections, which assume no new government policies and measures or technological breakthroughs.

Figure 8. China's Net Oil Imports: 1997-2010
(Thousands BPD)



Source: U.S. Energy Administration, China Energy Newswire, and British Petroleum June 2010 Statistical Review of World Energy. Data for 2010 from China Daily, February 8, 2011.

China's Regional and Bilateral Free Trade Agreements

The Chinese government has maintained an active policy of boosting trade and investment ties around the world, especially with countries in Asia. To that end, China has entered into a number of regional and bilateral trade agreements, or is in the process of doing so. China currently has free trade agreements (FTAs) with ASEAN, Pakistan, Chile, Hong Kong, Macau, New Zealand, Singapore, Pakistan, Peru, and Costa Rica. China's trade with these countries in 2010 together totaled \$574.5 billion, or 19.3% of China's global trade. China is also in the process of negotiating FTAs with the Cooperation Council for the Arab States of the Gulf (which includes Saudi Arabia, Kuwait, the United Arab Emirates, Qatar, and Bahrain), Australia, Iceland, Norway, and the Southern African Customs Union (which includes Botswana, Lesotho, Namibia, and Swaziland). China is also considering reaching FTAs with India, South Korea, Japan, and Switzerland.²²

²² Chinese Ministry of Commerce, *China FTA Network*, available at http://fta.mofcom.gov.cn/english/fta_qianshu.shtml.

China's Growing Overseas Direct Investment

A key aspect of China's economic growth strategy has been to attract foreign investment into China. However, in 2000, China's leaders initiated a new "go global" strategy, which sought to encourage firms (especially SOEs) to invest overseas. The Chinese government generally refers to these activities as overseas direct investment (ODI). One key factor driving this investment is China's massive accumulation of foreign exchange reserves, which has led government officials to seek more profitable ways of investing these holdings. Traditionally much of those holdings have been put into relatively safe, low yield assets, such as U.S. Treasury securities. On September 29, 2007, the Chinese government officially launched the China Investment Corporation (under the direction of the State Council) in an effort to better manage its foreign exchange reserves. It was originally funded at \$200 billion, making it one of the world's largest sovereign wealth funds.²³ Some analysts believe that China will increasingly use its reserves to purchase foreign firms, or shares of foreign firms, that are perceived to be profitable in order to diversify its use of foreign exchange holdings.

As a developing country, China has traditionally sought to attract FDI into the country in order to, through joint ventures, gain access to foreign technology and management skills to help domestic firms become more efficient and internationally competitive. Now the Chinese government is attempting to promote the development of internationally recognized Chinese brands. One strategy has been to purchase (or attempt to purchase) existing companies and their internationally recognized brand names (as well as to obtain technology and management skills). For example, in April 2005 Lenovo Group Limited, a Chinese computer company, purchased IBM Corporation's personal computer division for \$1.75 billion.²⁴

Acquisition of energy and raw materials has also been a major priority of China's overseas investment strategy, largely because the Chinese government wants to ensure that its industries have access to materials necessary for China to maintain rapid economic growth. As a result, Chinese state-owned firms have sought to either purchase or invest in foreign energy and raw material companies, infrastructure projects (such as oil and gas pipelines, oil refineries, and mines), and joint ventures. For example, in June 2005, the China National Offshore Oil Corporation (CNOOC), through its Hong Kong subsidiary (CNOOC Ltd.), made a bid to buy a U.S. energy company, UNOCAL, for \$18.5 billion, although CNOOC later withdrew its bid due to opposition by several congressional Members.

China's ODI flows have increased rapidly in recent years, rising from \$2.9 billion in 2003 to \$56.5 billion in 2009.²⁵ Cumulative Chinese ODI through 2009 was \$245.8 billion. China's SOEs reportedly account for about two-thirds of China's ODI.²⁶ China's stocks of ODI in the United States were reported at \$3.3 billion.²⁷ Broken down by country and territory, China's ODI data are somewhat misleading because the top three destinations of the stock of Chinese ODI outflows (through 2009) were Hong Kong (66.9% of total), the British Virgin Islands (6.1%), and the Cayman Islands (5.5%). It is very likely that these were not the final destination for most of these

²³ See, CRS Report RL34337, *China's Sovereign Wealth Fund*, by Michael F. Martin.

²⁴ The Chinese government is believed to be Lenovo's largest shareholder.

²⁵ In 2009, China was estimated to be the world's fifth largest source of FDI outflows.

²⁶ *China Daily*, September 19, 2009.

²⁷ Chinese Ministry of Commerce, 2009 *Statistical Bulletin of China's Outward Foreign Direct Investment*, 2010.

investment funds. Some analysts contend that a large share of ODI going to Hong Kong and Caribbean islands represents “round-tipping,” that is, Chinese capital that is sent overseas, but re-invested elsewhere (some of which may come back to China in the form of “foreign investment”) to take advantage of favorable treatment afforded to foreign investment. Some of that capital could be also going into tax havens.

Major Long-Term Challenges Facing the Chinese Economy

China's economy has shown remarkable growth over the past several years, and many economists project that it will enjoy fairly healthy growth in the near future. However, economists caution that these projections are likely to occur only if China continues to make major reforms to its economy. Failure to implement such reforms could endanger future growth.

- **Uneven economic growth.** The global economic crisis has demonstrated to the Chinese government the dangers of relying too heavily on foreign trade and investment for economic growth. That dependency made China's economy particularly vulnerable to the effects of the global economic downturn (discussed in more detail below).
- **An inflexible currency policy.** China does not allow its currency to float and therefore must make large-scale purchases of dollars to keep the exchange rate within certain target levels. Although the renminbi (RMB) has appreciated somewhat since reforms were introduced in July 2005, analysts contend that it remains highly undervalued against the dollar.²⁸ Economists warn that China's currency policy has made the economy overly dependent on exports and fixed investment for growth and has promoted easy credit policies by the banks. These policies may undermine long-term economic stability by causing overproduction in various sectors, increasing the level of non-performing loans held by the banks and boosting inflationary pressures.²⁹
- **Government support of inefficient industries.** SOEs, which, despite reforms, account for a significant amount of Chinese industrial production, put a heavy strain on China's economy. By some estimates, over half lose money and must be supported by subsidies, mainly through state banks. Government support of unprofitable SOEs diverts resources away from potentially more efficient and profitable enterprises. In addition, the poor financial condition of many SOEs makes it difficult for the government to reduce trade barriers out of fear that doing so would lead to widespread bankruptcies among many SOEs and unemployment.

²⁸ The renminbi appreciated by about 18% against the dollar from July 2005 to July 2008. From July 2008 to mid-June 2010, the Chinese government halted any further appreciation because the effects of the global economic slowdown. However on June 19, 2010, the government has allowed the RMB to appreciate. Since then (through June 24, 2011), the RMB has risen by about 5.5% against the dollar. See CRS Report RS21625, *China's Currency: An Analysis of the Economic Issues*, by Wayne M. Morrison and Marc Labonte.

²⁹ For further information on the economic consequences of China's currency policy, see CRS Report RL32165, *China's Currency: Economic Issues and Options for U.S. Trade Policy*, by Wayne M. Morrison and Marc Labonte.

- **A distortive banking system.** China's banking system is largely controlled by the central government, which attempts to ensure that capital (credit) flows to industries deemed by the government to be essential to China's economic development, especially SOEs.³⁰ It is believed that oftentimes, SOEs do not repay their loans. In addition, the government sets interest rates for depositors at a very low rate, often below the rate of inflation, which decreases household income. On the other hand, low Chinese interest rates greatly benefit Chinese industries. Some economists claim that this system constitutes a transfer of wealth from Chinese households to Chinese companies, which, it is claimed suppresses Chinese consumer demand and encourages over-production in various Chinese industries. Such policies are believed to have contributed to widespread economic distortions in China.
- **Public unrest.** For China's Communist Party leadership, a growing economy is its main source of political legitimacy. However, every year numerous protests occur in China over a number of issues, including pollution, government corruption, and land seizures. A number of protests in China have stemmed in part from frustrations among many Chinese (especially peasants) that they are not benefitting from China's economic reforms and rapid growth, and perceptions that those who are getting rich are doing so because they have connections with government officials. A 2005 United Nations report stated that the income gap between the urban and rural areas was among the highest in the world and warned that this gap threatens social stability. The report urged China to take greater steps to improve conditions for the rural poor, and bolster education, health care, and the social safety net.³¹ It is estimated that 300 million people in China (mainly in rural areas) lack health insurance, and many that do have basic insurance must pay a significant amount of medical expenses out of their own pocket.³²
- **The lack of the rule of law** in China has led to widespread government corruption, financial speculation, and misallocation of investment funds. In many cases, government "connections," not market forces, are the main determinant of successful firms in China. Many U.S. firms find it difficult to do business in China because rules and regulations are generally not consistent or transparent, contracts are not easily enforced, and intellectual property rights are not protected (due to the lack of an independent judicial system). The relative lack of the rule of law and widespread government corruption in China limit competition and undermine the efficient allocation of goods and services in the economy.
- **Poor government regulatory environment.** China maintains a weak and relatively decentralized government structure to regulate economic activity in China. Laws and regulations often go unenforced or are ignored by local government officials. As a result, many firms cut corners in order to maximize profits. This has led to a proliferation of unsafe food and consumer products being sold in China or exported abroad. Lack of government enforcement of food

³⁰ Many private companies in China often find it difficult to borrow from state-owned banks.

³¹ *China's Human Development Report 2005*.

³² Washington Post, October 29, 2009.

safety laws led to a massive recall of melamine-tainted infant milk formula that reportedly killed at least four children and sickened 53,000 others in 2008.

- **Growing pollution.** The level of pollution in China continues to worsen, posing serious health risks to the population. The Chinese government often disregards its own environmental laws in order to promote rapid economic growth. According to the World Bank, 20 out of 30 of the world's most polluted cities are in China, with significant costs to the economy (such as health problems, crop failures and water shortages). According to one government estimate, environmental damage costs the country \$226 billion, or 10% of the country's GDP, each year. The Chinese government estimates that there are over 300 million people living in rural areas that drink unsafe water (caused by chemicals and other contaminants). Toxic spills in 2005 and 2006 threatened the water supply of millions of people. China is the largest producer and consumer of coal, which accounts for about 70% of China's energy use. In October 2009, China's media reported that thousands of children living near smelters had been found to have excessive amounts of lead in their blood. Although growing environmental degradation has been recognized as a serious problem by China's central government, it has found it difficult to induce local governments to comply with environmental laws, especially when such officials feel doing so will come at the expense of economic growth. According to a study by ExxonMobil, China's energy demand for power generation will more than double by 2030, surpassing U.S. demand by more than one third. In addition, by 2030, China's CO₂ emissions are expected to be comparable to those in the United States and EU combined.³³

The Chinese government is attempting to address several of these areas. In October 2006, the Chinese government formally outlined its goal of building a "harmonious socialist society" by taking steps (by 2020) to lessen income inequality, improve the rule of law, enhance environmental protection, reduce corruption, and improve the country's social safety net (such as expanding health care and pension coverage to rural areas). In March 2007, the Chinese National People's Congress (NPC) passed a law to strengthen property laws to help prevent local governments from unfairly seizing land from farmers, and in June 2007, it passed a new labor contract law to enhance labor rights. In addition, the government has scrambled to improve health and safety laws and regulations. The government has also pledged to boost energy efficiency, crack down on polluting industries, and to promote the development of and use of green technology (such as solar power, wind power, biomass). For example, it has set a target of deriving 20% of energy from renewable sources by 2020. In April 2009, the government pledged to implement a three-year, \$124.4 billion plan to begin the establishment of universal health care plan, expected to be in place by 2020. The Chinese government's 12th Five Year Plan (2011-2015) states that rebalancing the economy, promoting consumer demand, boosting rural incomes, addressing income disparity (such as boosting wages), promoting the development of the services sector, and expanding social welfare programs (such as education, social security, and health care) will be major priorities.

³³ ExxonMobil, *The Outlook for Energy, A View to 2030*, p. 4.

Challenges to U.S. Policy of China's Economic Rise

China's rapid economic growth and emergence as major economic power have given China's leadership increased confidence in its economic model. The key challenges for the United States are to convince China that: (1) it has a stake in maintaining the international trading system, which is largely responsible for its economic rise, and to take a more active leadership role in maintaining that system; and (2) that further economic and trade reforms are the surest way for China to grow and modernize its economy. For example, by boosting domestic spending and allowing its currency to appreciate, China would import more, which would help speed economic recovery in other countries, promote more stable and balanced economic growth in China, and lessen trade protectionist pressures around the world. Lowering trade barriers on imports would boost competition in China, lower costs for consumers, and increase economic efficiency.

Opinions differ as to the most effective way of dealing with China on major economic issues. Some support a policy of engagement with China using various forums, such as the U.S.-China Strategic and Economic Dialogue (which holds discussions on major issues at the highest government level). Others support a somewhat mixed policy of using engagement when possible, coupled with a more aggressive use of the World Trade Organization dispute settlement procedures to address China's unfair trade policies. Still others, who see China as a growing threat to the U.S. economy and the global trading system, advocate a policy of trying to contain China's economic power and using punitive measures when needed to force China to "play by the rules."

China's growing economic power has made it a critical and influential player on the global stage on a number of issues important to U.S. interests, such as global economic cooperation, climate change, nuclear proliferation, and North Korean aggression.³⁴ China is in a position to help advance U.S. interests or to frustrate them. China's rising economy has also enabled it to boost its military capabilities, raising the prospects that China could use that power to project its interests globally, which could bring it into conflict with the United States and its allies.

U.S. policymakers face a number of complex challenges on how to deal with these issues. Can the U.S. compel better behavior from China via quiet diplomacy or public confrontation? Has U.S. leverage over Beijing lessened in the wake of China's economic rise, and has China's leverage over Washington increased? How can the United States promote political reform in China and greater respect for human rights? What should our ultimate goals be for the U.S.-China relationship?

³⁴ For additional information on these issues, see CRS Report R41108, *U.S.-China Relations: Policy Issues*, by Susan V. Lawrence and Thomas Lum.

Author Contact Information

Wayne M. Morrison
Specialist in Asian Trade and Finance
wmorrison@crs.loc.gov, 7-7767