

CRS Report for Congress

China's Economic Conditions

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China's Economic Conditions

Summary

Since the initiation of economic reforms in 1979, China has become one of the world's fastest-growing economies. From 1979 to 2005 China's real gross domestic product (GDP) grew at an average annual rate of 9.7%. Real GDP grew by 11.1% in 2006, and during the first quarter of 2007, it rose by 11.1% over the same period in 2006. China is expected to continue to enjoy rapid economic growth over the next several years, provided that it continues to implement needed reforms, particularly in regard to its inefficient state-owned enterprises and the state banking system. If projected growth levels continue, China could become the world's largest economy within a decade or so.

Trade and foreign investment continues to play a major role in China's booming economy. In 2006, exports rose by 27% to \$969 billion, while imports were up by 20% to \$792 billion. This produced a trade surplus of about \$177 billion. From 2003 to 2006, the value of total Chinese trade doubled. On the basis of current trends, China could surpass the United States in 2007 to become the second largest merchandise exporter (after the European Union). Well over half of China's trade is conducted by foreign firms operating in China. The combination of trade surpluses, foreign direct investment flows, and large-scale purchases of foreign currency have helped make China the world's largest holder of foreign exchange reserves at \$1.3 trillion as of June 2007.

Although the economy has shown remarkable growth in recent years, Chinese officials have expressed concern over a number of areas that they perceive as threatening future growth, including rising inflation, over-dependence on exports and fixed investment for growth, widening income gaps, and growing pollution. The government has indicated its goal over the coming years to create a "harmonious society" that would promote more economic balanced growth and address a number of economic and social issues.

China's economy continues to be a concern to many U.S. policymakers. On the one hand, U.S. consumers, exporters, and investors have greatly benefitted from China's rapid economic and trade growth. On the other hand, the surge in Chinese exports to the United States has put competitive pressures on various U.S. industries. Many U.S. policymakers have argued that China often does not play by the rules when it comes to trade and they have called for greater efforts to pressure China to fully implement its World Trade Organization (WTO) commitments and to change various economic policies deemed harmful to U.S. economic interests, such as its currency policy, its use of subsidies to support state-owned firms, and trade and investment barriers to U.S. goods and services. In addition, China's rising demand for energy and raw materials has raised prices for such commodities and has sharply increased pollution levels, which may have important global implications.

This report provides an overview of China's economic development, challenges China faces to maintain growth, and the implications of China's rise as a major economic power for the United States. This report will be updated as events warrant.

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China's Economic Conditions

The rapid rise of China as a major economic power within a time span of about 28 years is often described by analysts as one of the greatest economic success stories in modern times. From 1979 (when economic reforms were first introduced) to 2006, China's real gross domestic product (GDP) grew at an average annual rate of over 9.7%. In 2006, real GDP it grew by about 11.1%. The Chinese economy in real terms was 11 times larger in 2006 than it was in 1979, and real per capita GDP was 8 times larger. By some measurements, China is now the world's second largest economy and some analysts predict China could become the largest within a decade.

China's economic rise has led to a substantial increase in U.S.-China economic relations. Total trade between the two countries has surged from \$5 billion in 1980 to an estimated \$343 billion in 2006. For the United States, China is now its 2nd largest trading partner (2006), its 4th largest export market, and its 2nd largest source of imports. Many U.S. companies have extensive manufacturing operations in China in order to sell their products in the booming Chinese market and to take advantage of low cost labor for manufacturing products for export. These operations have helped U.S. firms 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 have enabled the Federal government to fund its budget deficits and 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 and growing U.S. trade deficits with China, which have risen from \$10.4 billion in 1990 to \$233 billion in 2006, and are viewed by many Members 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 to domestic producers) to flood U.S. markets with low cost goods, and that such practices threaten American jobs, wages, and living standards. Congressional concerns over perceived negative China's economic practices have led to the introduction of numerous bills in the 110th Congress, some of which would impose restrictions on imported Chinese products.

While most economists content China will continue to experience rapid economic growth over the next several years, they note that it faces a number of significant challenges, including a weak banking system, widening income gaps, growing pollution, unbalanced economic growth (through over-reliance on exports), and widespread economic inefficiencies resulting from non-market policies.

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.

Most Recent Developments

- On July 11, 2007, China revised its estimate of 2006 real GDP growth from 10.7% to 11.1%; it also reported that its foreign exchange reserves topped \$1.33 trillion at the end of June 2007.
- On July 10, 2007, the government reported that during the first six months of 2007, exports surged by 29% while imports increased by 18.3%, over the same period in 2006. The trade surplus during this period hit \$113 billion.
- On June 29, 2007, the Chinese National People's Congress passed a new contract labor law intended to improve labor rights and stop abuses (such as unpaid labor and forced overtime). The law passed two weeks after the Chinese media reported that government raids had uncovered evidence that hundreds of people (including many children) had been forced to work as virtual slaves in illegal brick kilns and coal mines in northern China. China's Xinhua News Agency stated that reports of such abuses have "sparked a nationwide outcry."¹
- On June 22, 2007, the Netherlands Environmental Assessment Agency announced that, according to its estimates, China in 2006 became the world's largest emitter of CO₂, surpassing the United States by 8%.

An Overview of China's Economic Development

China's Economy Prior to Reforms

Prior to 1979, China 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 according to centrally planned output targets. Private enterprises and foreign-invested firms were nearly nonexistent. 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

¹ Xinhua News Agency, July 9, 2007.

inefficient, mainly because there were few profit incentives for firms and farmers; competition was virtually nonexistent, 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 hoped that gradual reform would significantly increase economic growth and raise living standards.

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. 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.

China's Economic Growth Since Reforms: 1979-Present

Since the introduction of economic reforms, China's economy has grown substantially faster than during the pre-reform period (see **Table 1**).² 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, such as the Great Leap Forward from 1958-1960 and the Cultural Revolution from 1966-1976). During the reform period (1979-the present), China's average annual real GDP grew by 9.7%; it grew by an estimated 10.7% in 2006 over the previous year. Since economic reforms were begun, the size of the economy in real terms has increased eleven-fold, and real per capita GDP (a common measurement of living standards) has gone up eight-fold. Data for the first quarter of 2007 indicate that real GDP grew by 11.1% over the previous period in 2006.

² In January 2006, China made major revisions to its GDP data for 1993-2004. The revisions indicated that, based on new estimates of growth in the service sector, the size of China's economy and its GDP growth were significantly higher than previously estimated. For example, real GDP growth in 2004 had been originally measured at 9.5%, but the revised figure puts this rate at 10.1%, and the overall size of the economy in 2004 was estimated to be nearly 17% bigger.

Table 1. China's Average Annual Real GDP Growth: 1960-2007

Time period	Average annual % growth
1960-1978 (pre-reform)	5.3
1979-2006 (post-reform)	9.7
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
First Quarter 2007*	11.1

Source: Official Chinese government data and Economist Intelligence Unit.

* Percent change over same period in 2006.

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 state-owned enterprises (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 (these now account for half of Chinese domestic savings). As a result, savings as a percentage of GDP has steadily risen; it reached nearly 50% in 2005, among the highest savings rates in the world.

Several economists have concluded that productivity gains (i.e., increases in efficiency in which inputs are used) were 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 nonstate enterprises, which tended to pursue more productive activities than the centrally controlled SOEs. 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.

China's Industrial Sector

China's rapid economic growth has largely come from the expansion of its industrial manufacturing. As seen in **Table 2**, the total value-added output of all manufacturing rose by over 178% between 1995 and 2003. In 2003, the industries with the largest value-added output were electrical machinery, industrial chemicals, transport equipment, iron and steel, and non-electrical machinery (such as computers). An important factor in China's rapid economic rise has been the decline of the state-owned or controlled enterprises relative to the private sector and foreign-owned enterprises. Before the 1979 reforms, state-owned enterprises (SOEs) accounted for about three-fourths of total industrial value-added output. In 2005, that share had declined to about 38%. About 28% of the valued-added industrial output came from foreign-invested firms in China and 18% from private Chinese companies. The rest came from locally owned town and village enterprises and various enterprises jointly owned by the state and private companies. According to the Economist Intelligence Unit (EIU), the number of SOEs fell from 118,000 in 1995 to 27,477 in 2005.³ According to some estimates, Chinese SOEs have shed over 60 million of workers since 1998. Many SOEs have been transferred into state holding companies, which, while mainly state-owned, are run like private companies (and many of which are listed in various stock exchanges overseas, including in the United States).

According to the Organization for Economic Cooperation and Development (OECD), the industries in China still dominated by SOEs (in 2003) include tobacco processing (SOEs control 98.6% of value added output), petroleum and natural gas extraction (93.8%), coal mining (81.4%), petroleum processing and coking (77.3%), smelting and pressing of ferrous metals (63.1%), and transport equipment (63.1%).⁴

³ EIU, *Business, Industry Overview, China Manufacturing*, January 12, 2007.

⁴ OECD, *OECD Economic Surveys, China*, 2005, p. 39.

Table 2. Major Chinese Industries Based on Value-Added Output: 1995 and 2003
(\$ millions and % Change)

	1995	2003	1995/2003 % change
Total manufacturing	148,059	411,846	178.2
Electrical machinery	14,834	66,521	348.4
Industrial chemicals	16,888	45,727	170.8
Transport equipment	9,641	35,000	263.0
Iron and steel	12,612	34,119	170.5
Non-electrical machinery	13,401	31,395	134.3
Food products	8,476	25,776	204.1
Textiles	10,758	23,036	114.1
Tobacco	7,335	19,010	159.2
Other non-metallic mineral products (such as china, pottery, earthenware, and glass products)	10,776	16,334	51.6
Petroleum refineries	6,721	15,554	131.4

Source: 2006 China Statistical Yearbook.

Measuring the Size of China's Economy

The actual size of the 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 2006 is estimated at about \$2.7 trillion; its per capita GDP (a commonly used living-standards measurement) was \$2,070. Such data would indicate that China's economy and living standards are significantly lower than those of the United States and Japan, respectively considered to be the number-one and number-two largest economies (see **Table 3**).

Many economists, however, contend that using nominal exchange rates to convert Chinese data into U.S. dollars substantially underestimates the size of China's economy. This is because prices in China for many goods and services are significantly lower than those in the United States and other developed countries. Economists have attempted to factor in these price differentials by using a purchasing power parity (PPP) measurement, which attempts to convert foreign currencies into U.S. dollars on the basis of the actual purchasing power of such currency (based on surveys of the prices of various goods and services) in each respective country. This PPP exchange rate is then used to convert foreign economic data in national currencies into U.S. dollars.

Because prices for many goods and services are significantly lower in China than in the United States and other developed countries (while prices in Japan are higher), the PPP exchange rate raises the estimated size of Chinese economy from

\$2.7 trillion (nominal dollars) to \$9.9 trillion (PPP dollars), significantly larger than Japan's GDP in PPPs (\$4.0 trillion), and nearly three-fourths the size of the U.S. economy. PPP data also raise China's per capita GDP from \$2,070 (nominal) to \$7,530. The PPP figures indicate that, while the size of China's economy is substantial, its living standards fall far below those of the U.S. and Japan. China's per capita GDP on a PPP basis was only 17% of U.S. levels. Thus, even if China's GDP were to overtake that of the United States in the next few decades, its living standards would likely remain substantially below those of the United States for many years to come.

Table 3. Comparisons of U.S., Japanese, and Chinese GDP and Per Capita GDP in Nominal U.S. Dollars and PPP, 2006

Country	Nominal GDP (\$ billions)	GDP in PPP (\$ billions)	Nominal Per Capita GDP	Per Capita GDP in PPP
United States	13,247	13,247	44,244	44,244
Japan	4,365	3,963	34,247	31,095
China	2,720	9,904	2,070	7,530

Source: Economist Intelligence Unit.

Notes: PPP data for China should be interpreted with caution. China is not a fully developed market economy; the prices of many goods and services are distorted due to price controls and government subsidies.

Data do not reflect China's GDP revisions made in July 2007.

Foreign Direct Investment in China

China's trade and investment reforms and incentives led to a surge in foreign direct investment (FDI), which has been a major source of China's capital growth. Annual utilized FDI in China grew from \$636 million in 1983 to about \$70 billion in 2006.⁵ The cumulative level of FDI in China at the end of 2006 stood at nearly \$698 billion, making China one of the world's largest destinations of FDI.

Based on cumulative FDI for 1979-2006 about 40% of FDI in China has come from Hong Kong, 8.3% from Japan, 8.2% from the British Virgin Islands,⁶ and 7.7% from the United States (see **Table 4**). As of 2006, the United States was the 4th

⁵ In 2006, the Chinese government revised its 2005 FDI total from \$60.3 billion to 72.4 billion, claiming previous estimates excluded FDI in the banking, insurance, and securities sectors.

⁶ The British Virgin Islands is a large source of FDI because of its status as a tax haven. Much of the FDI originating from Hong Kong comes from non-Hong Kong investors, such as Taiwanese.

largest overall (cumulative) investor in China (at \$54 billion).⁷ It was the 5th largest investor for the year 2006 and accounted for 4.6% (\$2.9 billion) of total. U.S. FDI flows to China peaked at \$5.4 billion in 2002, but have declined each year since. The largest sector for FDI flows to China in 2006 was manufacturing, which accounted for about 58% of total (see **Table 5**).

Table 4. Major Foreign Investors in China: 1979-2006
(\$ billions and % of total)

Country	Cumulative Utilized FDI: 1979-2006		Utilized FDI in 2006	
	Amount	% of Total	Amount	% of Total
Total	697.5	100.0	63.0	100.0
Hong Kong	279.7	40.1	20.2	32.1
Japan	57.9	8.3	4.6	7.3
British Virgin Islands	57.2	8.2	11.3	17.9
United States	54.0	7.7	2.9	4.6
Taiwan	44.0	6.3	2.2	2.1
South Korea	36.3	5.2	5.2	3.9

Source: Chinese government statistics. Top six investors according to cumulative FDI from 1979 to 2006. Data for 2006 do not reflect FDI in the financial sector (these were included for 2005 data only and are reflected in cumulative totals).

Note: Chinese data on FDI differ significantly from that of investor countries.

Table 5. Foreign Direct Investment by Sectors in 2006
(\$ billions and % of total)

Sectors	Utilized FDI	Percent of Total
Total	\$69.5	100%
Manufacturing	40.1	57.7
Real Estate Development	8.2	12.0
Financial Intermediation	6.7	9.6
Leasing and Business Services	4.2	6.0
Transport, Storage, Post, and Telecommunication Services	2.0	2.9

Source: Chinese National Bureau of Statistics.

⁷ According to the Chinese government, major U.S. investors in China (based on 2003 sales volumes) include Motorola (\$5.8 billion in sales volume), General Motors (\$2.2 billion), Dell Computer (\$2.1 billion), Hewlett Packard (\$1.3 billion), and Kodak (\$0.6 billion).

China's Trade Patterns

Economic reforms have transferred China into a major trading power. Chinese exports rose from \$14 billion in 1979 to \$969 billion, while imports over this period grew from \$16 billion to \$792 billion (see **Table 6**). In 2004, China surpassed Japan as the world's third-largest trading economy (after the European Union and the United States). China's trade has grown dramatically in recent years, doubling in size from 2003 to 2006. China's trade surplus, which totaled \$32 billion in 2004, surged to \$178 billion in 2006. In July 2007, the government reported that during the first six months of 2007, exports surged by 29%, while imports increased by 18.3%, over the same period in 2006. The trade surplus during this period hit \$113 billion. At this rate of growth, China's merchandise exports in 2007 could exceed U.S. exports for the first time.⁸

Table 6. China's Merchandise World Trade, 1979-2006
(\$ 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

Source: International Monetary Fund, *Direction of Trade Statistics*, and official Chinese statistics.

The rapid growth of China's exports over the past few months indicates that China may surpass the United States as the world's second largest exporter in 2007. As indicated in **Table 7**, Chinese exports in August, September, November, and December 2006, and in January and April 2007, were larger than U.S. exports. From January-May 2007, U.S. exports were 3.9% higher than Chinese exports. However, during this period, U.S. exports were up by 10.8% (over the same period in 2006), while Chinese exports were up by 27.8%.

⁸ U.S. total merchandise exports were \$1,037.1 billion in 2006.

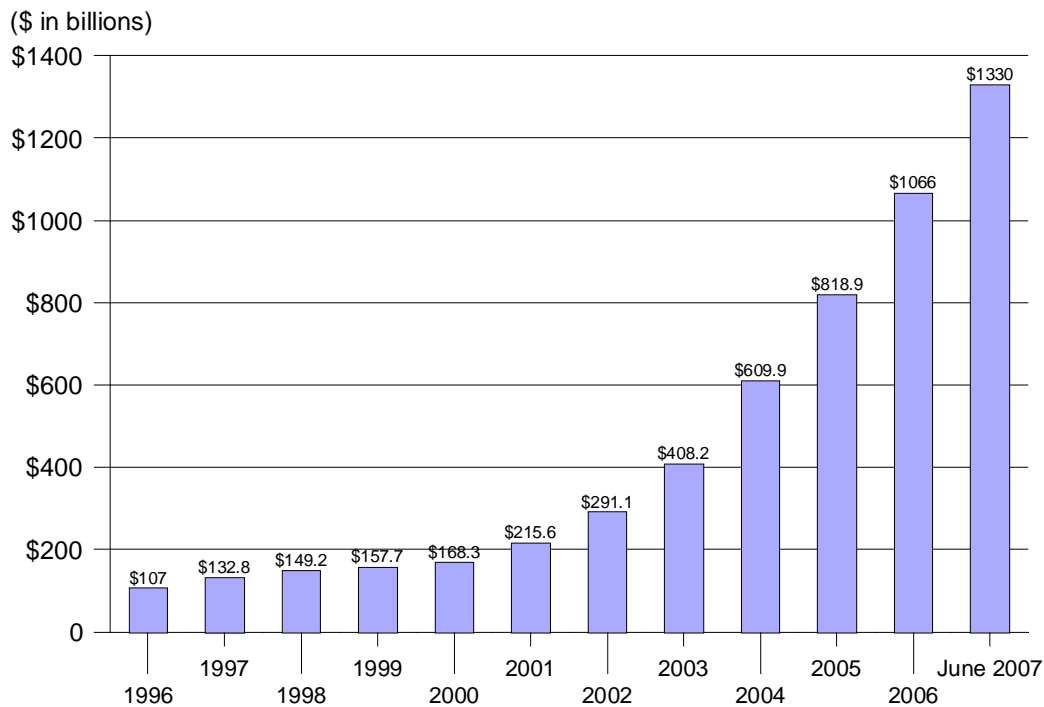
**Table 7. Monthly U.S. and Chinese Total Merchandise Exports:
August 2006-May 2007**
(\$ billions)

	2006					2007					Total Jan- May 2007
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	
U.S.	89.3	88.4	92.4	91.2	89.2	85.8	85.0	100.1	91.8	97.9	460.6
China	90.7	91.6	88.1	95.8	94.1	86.6	82.1	83.4	97.5	94.1	443.5

Sources: USITC Dataweb and Chinese Ministry of Commerce.

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. As seen in **Figure 1**, China's accumulation of foreign exchange reserves has been particularly acute over the past few years. China's total reserves reached \$1,330 billion at the end of June 2007. During the first six months of 2007, reserves rose by \$266.3 billion, which was more than the amount of added reserves for the entire year in 2006 (\$247.3 billion).

Figure 1. China's Foreign Exchange Reserves: 1996-June 2007



Source: Official Chinese government data.

Note: End of year data unless otherwise specified.

China's Major Trading Partners

China's trade data often differ significantly from those of its major trading partners, especially with the United States. This is largely due to the large share of China's trade (both exports and imports) passing 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.

According to Chinese trade data, its top five trading partners in 2006 were the European Union (EU), Hong Kong, the United States, Japan, and the 10 nations that constitute the Association of Southeast Asian Nations (ASEAN) (see **Table 8**). China's largest export markets were the United States, the EU, and Hong Kong, while its top sources for imports were Japan, Hong Kong, and the EU (the United States ranked 7th). China maintained substantial trade surpluses with the United States, the EU, and Hong Kong, but had large deficits with Taiwan, South Korea and Japan. China reported that it had a \$144 billion trade surplus with the United States (U.S. data show that surplus at about \$233 billion).

U.S. trade data indicate that the importance of the U.S. market to China's export sector is likely much higher than is reflected in Chinese trade data. Based on U.S. data on Chinese exports to the United States and Chinese data on total Chinese exports, it is estimated that Chinese exports to the United States as a share of total Chinese exports grew from 15.3% in 1986 to nearly 30.0% in 2006. A growing level of Chinese exports is from foreign-funded enterprises (FfEs) in China. According to Chinese data, FfEs were responsible for 58% of Chinese exports in 2006 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. A large share of the products made by such firms is likely exported to the United States.

Table 8. China's Major Trading Partners: 2006
(\$ billions)

Country	Total trade	Chinese exports	Chinese imports	China's trade balance
European Union	272.3	182.0	90.3	91.7
Hong Kong	262.8	155.4	107.4	48.0
United States	262.7	203.5	59.2	144.3
Japan	207.6	91.8	115.8	-24.0
ASEAN ^a	160.8	71.3	89.5	-18.2
South Korea	134.5	44.5	89.8	-45.3
Taiwan	107.8	20.7	87.1	-66.4

Source: China Monthly Statistics.

Note: Chinese data on its bilateral trade often differ substantially from the official trade data of many of its trading partners.

a. Association of Southeast Asian Nations (ASEAN) member countries are Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Cambodia, Laos, Myanmar (Burma), and Vietnam.

Major Chinese Trade Commodities

China's abundance of cheap labor (the average labor cost per hour in China was \$1.35, compared with \$24.50 in the United States in 2006)⁹ has made it internationally competitive in many low-cost, labor-intensive manufactures. As a result, manufactured products constitute an increasingly larger share of China's trade. A substantial amount of China's imports is comprised of parts and components that are assembled in Chinese factories (major products include consumer electronic products and computers), then exported. China's top 10 exports and imports in 2006 are listed in **Tables 9 and 10**, respectively.¹⁰

⁹ EIU *Industry Wire*, April 4, 2007.

¹⁰ Based on the Harmonized Tariff Schedule, 4 digit level.

Table 9. Top 10 Chinese Exports: 2006

HS #	Description	Exports (\$billions)	As a % of Total Exports	2006-2006 Percent Change (%)
	Total Exports	969.3	100.0	27.2
8471	Automatic data processing machines and units thereof; magnetic or optical readers, machines for transcribing and processing coded data, NESOI	93.1	9.6	21.8
8525	Transmission apparatus for radiotelephony, radiotelegraphy, radio broadcasting or tv; tv cameras; still image video cameras and recorders	44.2	4.6	42.8
8473	Parts etc for typewriters & other office machines	33.0	3.4	15.5
8529	Parts for television, radio and radar apparatus	25.2	2.6	38.8
8542	Electronic integrated circuits and micro-assemblies; parts thereof	21.6	2.2	47.6
9013	Liquid crystal devices nesoi; lasers; opt appl; pt	13.8	1.4	20.8
8528	Television receivers, including video monitors and video projectors	13.0	1.3	54.2
6110	Sweaters, pullovers, vests etc, knit or crocheted	12.9	1.3	36.7
6204	Women's or girls' suits, ensembles, suit-type jackets, dresses, skirts, divided skirts, trousers, etc.	12.5	1.3	18.0
8517	Electric apparatus for line telephony etc, parts	11.8	1.2	25.1

Source: World Trade Atlas.

Notes: Harmonized Tariff, four-digit level. NESOI means not elsewhere specified or included.

Table 10. Top 10 Chinese Imports: 2006

HS #	Description	Value (\$billions)	Percent of Total (%)	2005-2006 Percent Change (%)
	Total	791.8	100.0	19.9
8542	Electronic integrated circuits and micro-assemblies; parts thereof	107.2	13.5	30.4
2709	Crude oil from petroleum and bituminous minerals	66.4	8.4	38.7
9013	Liquid crystal devices NESOI; lasers; optical appliances and instruments NESOI; parts and accessories thereof	35.9	4.5	17.3
2601	Iron ores & concentrates	20.8	2.6	13.6
8471	Automatic data processing machines and units thereof; magnetic or optical readers, machines for transcribing and processing coded data, NESOI	19.9	2.5	10.6
8529	Parts for television, radio and radar apparatus	19.7	2.5	18.8
8473	Parts etc for typewriters & other office machines	19.1	2.4	16.3
2710	Oil (not crude) from petrol & bituminous mineral etc.	15.6	2.0	49.0
8541	Diodes, transistors and similar devices; photosensitive semiconductor devices; light-emitting diodes; mounted piezoelectric crystals; parts thereof	13.2	1.7	17.1
8479	Machines and mechanical appliances having individual functions, NESOI, and parts	10.0	1.3	16.4

Source: World Trade Atlas.

Notes: Harmonized Tariff, four-digit level. NESOI means not elsewhere specified or included.

China's Growing Trade with Africa and Latin America¹¹

China has sought to expand its trade with countries around the world, especially those that possess energy and raw materials China needs to sustain its rapid economic growth, such as those in Africa and Latin America. Although China's trade with these countries is relatively small, it is growing rapidly and at a faster clip than its total trade with the world. Many Members of Congress have expressed concern over China's growing economic influence in Africa and Latin America.

Africa. China's imports from Africa as a percent of its total imports grew from 2.8% in 2004 to 3.6% in 2006 (to \$28.8 billion).¹² China's imports from Africa grew by 36.2% over the previous year (compared to total Chinese imports growth of 19.9%). Mineral fuel was by far China's largest import from Africa, accounting for 73.3% of total imports.¹³ Angola was China's largest source of imports from Africa, accounting for 37.9% of those imports in 2006, followed by South Africa, the Congo, Equatorial Guinea, and Sudan (see **Tables 11** and **12**).

The share of Chinese exports going to Africa rose from 2.3% in 2004 to 2.8% in 2006 (to \$26.7 billion).¹⁴ Exports to Africa grew by 42.9% over the previous year (compared to China's total exports which rose by 27.1%). Major exports to Africa in 2006 included electrical machinery, machinery (such as computers and components), vehicles (mainly motorcycles and trucks), apparel, and iron and steel products. The top 5 African destinations of Chinese exports in 2006 were South Africa, Egypt, Nigeria, Algeria, and Morocco (see **Tables 13** and **14**).

¹¹ See CRS Report RS22119, *China's Growing Interest in Latin America*, by Kerry Dumbaugh and Mark P. Sullivan; and CRS Report RL33055, *China and Sub-Saharan Africa*, by Raymond W. Copson, Kerry Dumbaugh, and Michelle Weijing Lau.

¹² In comparison, U.S. imports from Africa in 2006 were \$80.4 billion. Note, the United States reports import trade data on a customs basis, while China reports imports on a cost, insurance, and freight (C.I.F.) basis. The C.I.F. basis differs from the customs basis in that the former includes the cost of insurance and freight and thus raises the value of imports (which the customs basis does not), by about 10%.

¹³ In 2006, 23.7% of China's mineral fuel imports (and 31.6% of its crude oil imports) came from Africa.

¹⁴ In comparison, total U.S. exports to Africa in 2006 were only \$19.0

Table 11. Top 5 African Sources of Chinese Imports: 2004-2006
(\$ millions)

	2004	2005	2006	2005-2006 % change
Africa total	15,640.9	21,114.1	28,767.6	36.3
Angola	4,717.7	6,580.7	10,930.9	66.1
South Africa	2,955.3	3,443.6	4,095.3	18.9
Congo	1,568.9	2,278.0	2,784.6	22.2
Equatorial Guinea	995.3	1,486.1	2,537.6	70.8
Sudan	1,705.5	2,614.7	1,941.4	-25.8

Source: World Trade Atlas. Official Chinese statistics.

Table 12. Top Five Chinese Imports from Africa: 2004-2006
(\$ millions and %)

HS 2 Commodity Description	2004	2005	2006	Percent of Total 2006	2005-2006 % change
Mineral fuel, oil etc	10,135.3	14,676.2	21,083.3	73.3	43.7
Ores, slag, ash	1,393.4	1,577.2	2,115.7	7.4	34.1
Precious stones and metals	742.4	967.1	1,196.2	4.2	23.7
Cotton+Yarn fabric	663.0	678.4	727.6	2.5	7.2
Wood	472.5	523.9	704.7	2.4	34.5

Source: World Trade Atlas. Official Chinese statistics.

Table 13. China's Top 5 Export Markets: 2004-2006
(\$ millions)

Country	2004	2005	2006	2005-2006 % Change
Africa total	13,815.1	18,686.8	26,704.9	42.9
South Africa	2,951.9	3,825.9	5,768.8	50.8
Egypt	1,389.0	1,935.3	2,976.3	53.8
Nigeria	1,719.3	2,305.3	2,855.7	23.9
Algeria	980.5	1,404.7	1,951.6	38.9
Morocco	944.3	1,206.0	1,569.6	30.2

Source: World Trade Atlas. Official Chinese statistics.

Table 14. Top 5 Chinese Exports to Africa: 2004-2006
(\$ millions)

HS 2 Commodity Description	2004	2005	2006	Percent of total 2006	2005- 2006 % change
Electrical machinery and parts*	1,905.3	2,799.3	4,122.3	15.4	47.3
Machinery, mechanical appliances, and parts	1,373.7	2,140.9	3,220.1	12.1	50.4
Vehicles (excluding railway)	935.5	1,448.3	2,023.4	7.6	39.7
Knit apparel	828.3	937.8	1,536.9	5.8	63.9
Iron/steel products	653.6	903.3	1,225.4	4.6	35.7

Source: World Trade Atlas. Official Chinese statistics.

*Includes, electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles.

Latin America. The share of China's imports from Latin America rose from 3.5% in 2004 to 4.0% in 2006 (to \$31.4 billion).¹⁵ Chinese imports from Latin America rose by 28.9% in 2006 over the previous year. China's top 5 import partners in 2006 were Brazil (which accounted for 41.0% of total), Chile, Argentina, Peru, and Venezuela. China's top 5 import commodities from the region were ores, grains (mainly soybeans), mineral fuel (which rose by over 190% in 2006), copper articles, and electrical machinery (mainly printed circuits) (see **Tables 15** and **16**).

The share of Chinese exports going to Latin America rose from 2.2% in 2004 to 2.8% in 2006. Chinese exports to the region rose by 50.2% over the previous year (to \$26.9 billion).¹⁶ China's top 5 Latin American export markets were Brazil (which accounted for 27.4% of imports), Panama, Chile, Argentina, and Venezuela. China's top 5 exports to Latin America were electrical machinery, machinery (such as computers), apparel, vehicles, and organic chemicals (see **Tables 17** and **18**).

¹⁵ U.S. imports from Latin America in 2006 were \$133.7 billion.

¹⁶ U.S. exports to Latin America in 2006 were \$89.0 billion.

**Table 15. China's Top 5 Latin American Import Partners:
2004-2006**
(\$ millions)

Country	2004	2005	2006	2005-2006 % Change
Latin America total	19,519.4	24,361.6	31,393.1	28.9
Brazil	8,656.1	9,981.8	12,907.2	29.3
Chile	3,672.0	4,942.7	5,688.9	15.1
Argentina	3,255.5	3,799.7	3,696.2	-2.7
Peru	1,523.1	2,264.7	2,875.4	27.0
Venezuela	738.3	1,230.7	2,651.4	115.4

Source: World Trade Atlas. Official Chinese statistics.

**Table 16. China's Top Five Imports From Latin America:
2004-2006**
(\$ millions)

HS 2 Commodity Description	2004	2005	2006	Percent of total in 2006	2005-2006 Percent Change
Ores, slag, ash	4,979.3	7,533.9	10,031.5	32.0	33.2
Misc, grain, seed, fruit	3,614.2	4,625.5	4,783.2	15.2	3.4
Mineral fuel, oil etc	1,026.3	1,624.6	4,712.4	15.0	190.1
Copper+articles thereof	2,185.1	2,400.4	2,442.1	7.8	1.7
Electrical machinery & parts	697.2	975.9	1,839.8	5.9	88.5

Source: World Trade Atlas. Official Chinese statistics.

**Table 17. China's Top 5 Latin American Export Markets:
2004-2006**
(\$ millions)

Country	2004	2005	2006	2005-2006 %change
Latin America	13,163.2	17,940.8	26,945.0	50.2
Brazil	3,675.1	4,829.3	7,380.3	52.8
Panama	2,186.7	3,151.4	3,868.3	22.8
Chile	1,690.2	2,150.7	3,110.0	44.6
Argentina	852.0	1,325.5	2,003.3	51.1
Venezuela	595.6	907.9	1,699.1	87.2

Source: World Trade Atlas. Official Chinese statistics.

Table 18. China's Top 5 Imports From Latin America: 2004-2006
(\$ millions)

HS 2 Commodity description	2004	2005	2006	Percent of total 2006	2005-2006 % change
Electrical machinery and parts	2,150.7	3,286.0	5,381.6	20.0	63.8
Machinery	1,270.1	2,023.7	3,489.2	13.0	72.4
Woven and knit apparel*	1,605.9	2,027.8	2,665.8	9.9	31.5
Vehicles (excluding railway)	470.2	863.8	1,563.8	5.8	81.0
Organic Chemicals	569.7	733.6	1,047.7	3.9	42.8

Source: World Trade Atlas. Official Chinese statistics.

*Combines HS61 (woven apparel) and HS62 (knit apparel).

China's Trade with North Korea

North Korea's nuclear test on October 9, 2006, has led many U.S. policymakers to call on China to impose economic sanctions against its neighbor in response to its nuclear activities. China is North Korea's largest trading partner and a major supplier of foreign aid (largely in the form of food and fuel).¹⁷ In 2005, Chinese exports to, and imports from, North Korea totaled \$1.1 billion and \$497 million, respectively. China accounted for 37.3% of North Korea's exports and 39.8% of its imports. However, North Korea was China's 57th largest export market (0.14% of total) and its 59th largest source of its imports (0.08% of total).

Preliminary Chinese data for 2006 indicate that its imports from North Korea fell by 5.8%, to \$468 million, over the same period in 2005, while its exports rose by 13.6%, to \$1.2 billion. North Korea's ranking for Chinese imports and exports in 2006 fell to 64th and 65th, respectively. According to Chinese data, its top five exports to North Korea (2006) were oil, meat, electrical machinery (such as TVs), machinery, and plastics (see **Table 19**), while its top imports from North Korea were ores, coal, woven apparel, fish, and iron and steel (see **Table 20**).

¹⁷ See CRS Report RL31785, *Foreign Assistance to North Korea*, by Mark E. Manyin; and CRS Report RL32493, *The North Korean Economy: Background and Policy Analysis*, by Dick K. Nanto and Emma Chanlett-Avery.

Table 19. Major Chinese Exports to North Korea: 2003-2006
(\$ millions and % change)

	2003	2004	2005	2006	2005-/2006 % change
Total Exports	628.0	794.5	1,084.7	1,231.9	13.6
Mineral fuel, oil, etc. (mainly oil)	180.7	204.4	285.7	347.5	21.6
Meat (mainly pork)	63.6	140.6	104.2	118.9	7.3
Electrical machinery (such as TVs)	39.6	45.8	56.6	97.6	72.5
Machinery	27.0	39.6	77.1	83.0	7.8
Plastics	24.6	32.0	52.2	52.0	-0.4

Source: *World Trade Atlas*.

Table 20. Major Chinese Imports From North Korea: 2003-2006
(\$ millions and % change)

	2003	2004	2005	2006	2005-2006 % change
Total Imports	395.5	582.2	496.5	467.7	-5.8
Ores, slag, and ash	15.0	58.9	92.3	118.4	28.3
Mineral fuel, oil, etc. (mainly coal)	17.2	53.0	112.2	102.3	-8.8
Woven apparel	52.2	49.1	58.3	63.3	8.6
Fish and seafood	206.9	261.2	92.4	43.2	-53.2
Iron and steel	46.8	75.0	72.2	35.2	-51.2

Source: *World Trade Atlas*.

Major Long-Term Challenges Facing the Chinese Economy

China's economy has shown remarkable economic 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.

- **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 yuan has appreciated somewhat since reforms were introduced in July 2005, analysts contend that it remains highly undervalued against the dollar. 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; they could increase the level of non-performing loans held by the banks (see below) and could also lead to inflationary pressures.¹⁸
- **State-owned enterprises (SOEs),** which account for about one-third of Chinese industrial production, put a heavy strain on China's economy. Over half are believed to 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.
- **The banking system** faces several major difficulties due to its financial support of SOEs and its failure to operate solely on market-based principles. China's banking system is regulated and controlled by the central government, which sets interest rates and attempts to allocate credit to certain Chinese firms. The central government has used the banking system to keep afloat money-losing SOEs by pressuring state banks to provide low-interest loans, without which a large number of the SOEs would likely go bankrupt. Currently, over 50% of state-owned bank loans now go to the SOEs, even though a large share of loans are not likely to be repaid. The precarious financial state of the Chinese banking system has made Chinese reformers reluctant to open the banking sector to foreign competition. Corruption poses another problem for China's banking system because loans are often made on the basis of political connections. This system promotes widespread inefficiency in the economy because savings are generally not allocated on the basis of obtaining the highest possible returns.
- **Growing public unrest.** The Chinese government reported that there were over 87,000 protests (many of which became violent) in 2005 (compared with 53,000 protests in 2003) over such issues as

¹⁸ 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.

pollution, government corruption, and land seizures.¹⁹ 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. Protests have broken out over government land seizures and plant shutdowns in large part due to perceptions that these actions benefitted a select group with connections. 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 security system.²⁰

- **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 lack of the rule of law in China limits competition and undermines the efficient allocation of goods and services in the economy. In addition, China's poor regulation of health and safety standards has raised serious concerns, both in China and abroad, over the quality and safety of its food and consumer products. Recent reports of slave labor in northern China has also raised public anger over the lack of enforcement of labor laws.
- **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.

¹⁹ See CRS Report RL33416, *Social Unrest in China*, by Thomas Lum.

²⁰ *China's Human Development Report 2005*.

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, beef up 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 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.

Outlook for China’s Economy and Implications for the United States²¹

The short-term outlook for the Chinese economy appears to be positive, but it will likely be strongly influenced by the government’s ability to reform the SOEs and banking system to make them more responsive to market forces, increase the flexibility of its exchange rate policy, and to assist workers who lose their jobs due to economic reforms (in order to maintain social stability). Global Insight, an economic forecasting firm, projects that China’s real GDP will average 7.8% over the next 10 years, indicating that China could double the size of its economy in less than 10 years. Real GDP is projected to rise by 10.5% in 2007.²² China’s merchandise exports will likely exceed those of the United States in 2007.

China’s rise as an economic superpower is likely to pose both opportunities and challenges for the United States and the world trading system. China’s rapid economic growth has boosted incomes and is making China a huge market for a variety of goods and services. In addition, China’s abundant low-cost labor has led multinational corporations to shift their export-oriented, labor-intensive manufacturing facilities to China. This process has lowered prices for consumers, boosting their purchasing power. It has also lowered costs for firms that import and use Chinese-made components and parts to produce manufactured goods, boosting their competitiveness. Conversely, China’s role as a major international manufacturer has raised a number of concerns. Many developing countries worry that growing FDI in China is coming at the expense of FDI in their country. Policymakers in both developing and developed countries have expressed concern over the loss of domestic manufacturing jobs that have shifted to China (as well as the downward pressures on domestic wages and prices that may occur from competing against low-cost Chinese-made goods).

Many analysts contend that China’s currency policy, despite reforms undertaken in July 2005, is having a negative impact on the economies of many of its trading partners by artificially making its exports cheaper, and imports more expensive, than they would be under a floating system. They have urged China to move toward a

²¹ For further discussion of this issue, see CRS Report RL33604, *Is China a Threat to the U.S. Economy?*, by Craig K. Elwell, Marc Labonte, and Wayne Morrison.

²² Global Insight, *China: Interim Forecast Analysis: Economic Growth*, May 23, 2007.

floating exchange rate regime as soon as possible, contending that such a move would benefit China's economy and those of its trading partners.²³ For example, China's accumulation of large foreign exchange reserves has forced it to increase the money supply, which may eventually lead to inflationary pressures on the economy. In addition, many analysts contend that easy money policies have led to over-investment in certain economic sectors. However, Chinese officials have expressed concern that further currency reforms, if implemented too quickly, could prove disruptive to the economy. China announced on June 12th, 2007, that the consumer price index in May rose by 3.4%, over the same period in 2006, an indicator that inflation may be becoming a problem. In addition, the government reported that China's trade surplus for January-June totaled \$113 billion, indicating China's surplus for the full year could be well over \$200 billion. A number of bills have been introduced in the 110th Congress to address Chinese currency policy, including some that would impose sanctions against China unless it appreciated its currency to market levels.

China is attempting to establish and promote companies that can compete globally, especially in advanced technologies. In some cases, China has attempted to purchase large foreign companies. China's possession of large currency reserves and desire to become a world leader in the production of a variety of goods and strategic commodities will likely lead the Chinese government to expand efforts to take over major international corporations. Many Members charge that China's use of extensive subsidies to support state-owned firms threatens U.S. economic interests and may violate its WTO commitments.

China's rapid economic growth and continued expansion of its manufacturing base are fueling a sharp demand for energy and raw materials, which is becoming an increasingly important factor in determining world prices for such commodities. China is now the world's second largest consumer of oil products (after the United States) at 6.9 million barrels per day (bpd) in 2006, and that level is projected to rise to 13.4 million bpd by 2025.²⁴ The U.S. Energy Information Administration (EIA) predicted that nearly 40% of world oil demand growth in 2006 would come from China.²⁵ China's net oil imports in 2006 totaled 2.8 million bpd (up 16.8% over the previous year) and those imports are projected to rise to 10.9 million bpd by 2030. China's energy needs has become a central part of its foreign policy.

Obtaining energy supplies has become a major focus of China's foreign policy. This has increased concerns among U.S. policymakers for a number of reasons. First, China is becoming increasingly dependent on oil producers in the Persian Gulf region. Currently, China gets about 32% of its oil imports from the region, but by 2030, that level is projected to rise to 53%. This could induce China to become increasingly involved in Middle East affairs. In addition, China is actively involved in gaining greater access to energy in Africa, where it gets nearly a third of its oil

²³ For a discussion of this issue, see CRS Report RS21625, *China's Currency: A Summary of the Economic Issues*, by Wayne M. Morrison and Marc Labonte.

²⁴ Global Insight, *Global Petroleum Outlook Forecast Tables (Long-Term)*, January 2005.

²⁵ U.S. Energy Information Administration website at [<http://www.eia.doe.gov/>].

imports. Angola was China's 2nd largest source of oil in 2006. China has reportedly invested \$8 billion in Sudan's energy sector. Second, instead of just buying oil in international markets, China has increasingly sought to purchase or invest in foreign oil companies, production facilities, pipelines, oil fields, and refineries around the world.²⁶ Finally, China's thirst for oil has led it to obtain agreements with countries the United States has major human rights and foreign policy concerns with (such as Iran and Sudan). Many U.S. policymakers are concerned that China's energy needs will lead it to oppose U.S. foreign policy objectives and that this could result in increased tensions between the United States and China.

A growing concern over China's energy use and rising demand is the possible global environmental consequences. According to one estimate, one-third of the air pollution in the West Coast of the United States comes from China.²⁷ China's pollution levels are expected to significantly worsen. For example, according to the U.S. Energy Information Administration (EIA), China in 2004 was the world's second-largest emitter of carbon dioxide (CO₂) emissions (at 4.7 billion metric tons) after the United States, and constituted 17% of total world emissions (compared to 22% for the United States). EIA predicts that by the year 2010, China will become the world's largest emitter, and that by the year 2030, China's emissions will be 41% greater than U.S. levels.²⁸ The Netherlands Environmental Assessment Agency estimates that China became the largest CO₂ emitter in 2006.²⁹

Some U.S. policymakers have expressed concern over China's rising ownership of U.S. government debt, due to fears that China might attempt to use its holdings as leverage in its dealings with the United States on economic and/or political matters. China is the second largest foreign holder of Treasury securities (after Japan), and both the level of those holdings and China's share of total foreign holdings have increased sharply over the past few years. These went from \$51.8 billion in 1999 to \$420.2 billion at end of March 2007. China's U.S. Treasury securities holdings as a share of total foreign holdings over this period have grown from 4.1% to 28.7%. Some have raised concerns that threats by China to halt future purchases, or to sell existing holdings, could cause the value of the dollar to depreciate in world markets (raising import prices), increase U.S. interest rates, lead to a decline in U.S. stock and bond markets, and possibly cause the U.S. economy to slow. However, any such disruption to the U.S. economy would also hurt China's economy since about a third of China's exports go to the United States.

²⁶ See the National Bureau of Asian Research, *China's Search for Energy Security: Implications for the United States*, by Kenneth Lieberthal and Mikkal Herberg April 2006.

²⁷ The Aspen Institute, U.S.-China Relations, Eight Conference (April 9-15, 2006), *China Energy Issues*, by Hal Harvey, M.S., p. 15.

²⁸ EIA, *Country Background, China, Environment*, August 2006.

²⁹ The Netherlands Environmental Assessment Agency, *Chinese CO2 emissions in Perspective: Country Intercomparison of CO2 Emissions*, June 22, 2007, available at [<http://www.mnp.nl/en/index.html>].