



# China's Economic Conditions

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## Summary

Since the initiation of economic reforms 30 years ago, China has become one of the world's fastest-growing economies. From 1979 to 2008 China's real gross domestic product (GDP) grew at an average annual rate of nearly 10%; it grew 13% in 2007 (the fastest annual growth since 1994). However, the current global economic crisis has hit China hard – real GDP growth slowed to 9% in 2008, and many analysts predict the economy will slow even more sharply in 2009. Millions of workers have reportedly already lost their jobs. This is of great concern to the Chinese government, which views healthy economic growth as critical to maintaining social stability. China also faces a number of other challenges to its economic growth and stability, including pervasive government corruption, an inefficient banking system, over-dependence on exports and fixed investment for growth, the lack of rule of law, severe pollution, and widening income disparities. The Chinese government has indicated that it intends to create a “harmonious society” over the coming years that would promote more balanced economic growth and address a number of economic and social issues. The severity of the current global economic crisis has induced the Chinese government to seek means to quickly promote greater domestic demand; in November the government announced plans to implement a \$586 billion economic stimulus package, largely aimed at infrastructure projects.

Trade and foreign investment plays a major role in China's booming economy. From 2004 to 2008, the value of total Chinese merchandise trade doubled. It is estimated that in 2008 China was the world's second largest merchandise exporter and the third largest importer. Over half of China's trade is conducted by foreign-invested firms in China. In 2008, foreign direct investment (FDI) in China totaled \$92 billion, making it the third largest global destination for FDI. The combination of large trade surpluses, FDI flows, and large-scale purchases of foreign currency have helped make China the world's largest holder of foreign exchange reserves at \$1.9 trillion at the end 2008. The global financial crisis is having a significant impact on China's trade, as exports and imports in November and December 2008 and January 2009 declined on a year-on-year basis. FDI flows have also declined sharply during this period.

China's economy and its economic policies are of major concern to many U.S. policymakers. On the one hand, U.S. consumers, exporters, and investors have greatly benefited from China's rapid economic and trade growth. China's large holdings of U.S. securities have helped keep U.S. interest rates relatively low. Many analysts hope that China will make positive contributions to a global economic recovery. On the other hand, the surge in U.S. imports of Chinese products has put competitive pressures on various U.S. industries. Many U.S. policymakers have argued that China maintains a number of economic policies that violate its commitments in the World Trade Organization and/or are harmful to U.S. economic interests, such as its currency policy. Concerns have also been raised over China's rising demand for energy and raw materials (and the impact of that demand has on world prices), increased pollution levels, China's growing FDI (such as in energy and raw materials) around the world, including countries where the United States has political and human rights concerns, and the potential implications of China's large holdings of U.S. debt. The global economic crisis has also raised concerns over the future pace of Chinese economic reforms. 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.

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**T**he 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 2008, China's real gross domestic product (GDP) grew at an average annual rate of nearly 10%. From 1980 to 2008, China's economy grew 14 fold in real terms, and real per capita GDP (a common measurement of living standards) grew over 11 fold. By some measurements, China is now the world's second largest economy and some analysts predict it could become the largest within a few decades.

China's economic rise has led to a substantial increase in U.S.-China economic ties. Total trade between the two countries surged from \$5 billion in 1980 to \$409 billion in 2008 (U.S. data). In 2008, China was the United States's 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 low-cost labor for export-oriented manufacturing. 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, which helps 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 rose from \$10 billion in 1990 to \$266 billion in 2008, and are 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 to domestic producers) to flood U.S. markets with low-cost goods, and that such practices threaten American jobs, wages, and living standards.

China faces a number of significant economic challenges, including the fallout from the global financial crisis (which has slowed foreign demand for its exports and hence threatens economic growth), a weak banking system, widening income gaps, growing pollution, unbalanced economic growth (through over-reliance on exports and fixed investment), and widespread economic inefficiencies resulting from non-market policies. The Chinese government views a growing economy as vital to maintaining social stability.

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 March 5, 2009, the Bank of China reported that the exchange rate between China's currency (the renminbi or yuan) and the U.S. dollar stood at 6.84, an appreciation of about 19% since China's currency was reformed in July 2005.
- At a press conference during her visit to China on February 21, 2009, Secretary of State Hillary Rodham Clinton stated that she appreciated "greatly the Chinese government's continuing confidence in the United States treasuries."
- On February 16, 2009, the Chinese government stated that foreign direct investment (FDI) in China in January had declined 5.7% on a year-on-year basis.

- On February 11, the government reported that exports and imports had declined by 17.5% and 43.1%, respectively, on a year-on-year basis.
- On February 12, 2009, a Chinese state-owned firm, Aluminum Corporation of China (Chinalco), announced it would invest \$19.5 billion in Rio Tinto Group (a leading international mining group), the largest Chinese overseas investment to date.
  - On February 1, 2009, the Chinese government announced that 20 million migrant workers (15.4% out of an estimated 130 million migrants) had lost their jobs due to the global financial crisis.
  - On November 15, 2008, Chinese President Hu Jintao attended the summit meeting of the Group of 20 (G-20) countries in Washington, D.C. to discuss the current global financial crisis. Hu stated that “steady and relatively fast growth in China is in itself an important contribution to international financial stability and world economic growth.”
  - On November 9, 2008, the Chinese government announced it would implement a two-year, \$586 billion stimulus package, mainly dedicated to infrastructure projects.
  - On June 13, 2008, the Netherlands Environmental Assessment Agency announced that, according to its estimates, China in 2007 became the world’s largest emitter of CO<sub>2</sub>, surpassing the United States by 14%, and accounting for two-thirds of last year’s global carbon dioxide increase.
  - On May 12, 2008, China’s Sichuan Province was struck by a strong earthquake. The Chinese government estimated that (as of June 23, 2008) 69,181 people were killed, 374,171 injured, and 18,498 were missing.

## **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 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**). 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 9.9%; it grew by 13.0% in 2007, but slowed to 9.0% in 2008. Since 1980, economic reforms helped to produce a 14-fold increase in the size of the economy in real terms and a 11-fold increase in real per capita GDP (a common measurement of living standards).<sup>1</sup>

**Table 1. China's Average Annual Real GDP Growth: 1960-2008**

| Time Period             | Average Annual Growth (%) |
|-------------------------|---------------------------|
| 1960-1978 (pre-reform)  | 5.3                       |
| 1979-2008 (post-reform) | 9.9                       |
| 1990                    | 3.8                       |
| 1991                    | 9.3                       |
| 1992                    | 14.2                      |
| 1993                    | 14.0                      |
| 1994                    | 13.1                      |

<sup>1</sup> Source: Global Insight Database.

| Time Period | Average Annual Growth (%) |
|-------------|---------------------------|
| 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        | 13.0                      |
| 2008        | 9.0                       |

**Source:** Official Chinese government data and Economist Intelligence Unit.

## 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, China's gross savings as a percentage of GDP has steadily risen, reaching 52% in 2008 (compared to a U.S. rate of 8%), among the world's highest savings rates.<sup>2</sup>

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

<sup>2</sup> Source: EIU Database.



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, 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.

## Measuring the Size of China's Economy

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 2008 was \$4.2 trillion; its per capita GDP (a commonly used living-standards measurement) was \$3,190. 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 2**).

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, the PPP exchange rate nearly doubles the size of the Chinese economy from \$4.2 trillion (nominal dollars) to \$8.3 trillion (PPP dollars), significantly larger than Japan's GDP in PPPs (\$4.4 trillion), and 58% the size of the U.S. economy. PPP data also raise China's per capita GDP from \$3,190 (nominal) to \$6,210.<sup>3</sup> The PPP figures indicate that, while the size of China's economy is substantial, its living standards (those rising) remain far below those of the U.S. and Japan. China's per capita GDP on a PPP basis was only 13.6% 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.<sup>4</sup>

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<sup>3</sup> These figures represent country averages and do not reflect the growing level of income disparity in China, especially between rural areas and cities along the coast.

<sup>4</sup> For a further discussion of PPP measurements and Chinese living standards, see CRS Report RS22808, *How Large is China's Economy? Does it Matter?*, by Wayne M. Morrison and Michael F. Martin.

**Table 2. Comparisons of U.S., Japanese, and Chinese GDP and Per Capita GDP in Nominal U.S. Dollars and PPP, 2008**

| Country       | Nominal GDP<br>(\$ billions) | GDP in PPP<br>(\$ billions) | Nominal Per<br>Capita GDP | Per Capita<br>GDP in PPP |
|---------------|------------------------------|-----------------------------|---------------------------|--------------------------|
| United States | 14,142                       | 14,142                      | 46,540                    | 45,540                   |
| Japan         | 4,977                        | 4,404                       | 38,100                    | 34,590                   |
| China         | 4,236                        | 8,252                       | 3,190                     | 6,210                    |

**Source:** Economist Intelligence Unit (estimated, based on World Bank Data).

## 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. According to Chinese data, annual utilized FDI in China grew from \$636 million in 1983 to \$92 billion in 2008. The cumulative level of FDI in China at the end of 2008 stood at an estimated \$853 billion, making China one of the world's largest destinations of FDI.<sup>5</sup>

Based on cumulative FDI for 1979-2008, about 41% of FDI in China has come from Hong Kong, 10.5% from the British Virgin Islands,<sup>6</sup> 8.1% from Japan, and 7.5% from the United States (see **Table 3**).<sup>7</sup> Hong Kong was the largest investor in China in 2008, while the United States ranked sixth, accounting for 3.2% of total. Annual U.S. FDI flows to China peaked at \$5.4 billion in 2002, declined annually through 2007, before increasing by 12.5% (to \$2.9 billion) in 2008 (see **Figure 1**). The U.S. share of total annual FDI flows to China fell from 10.2% in 2002 to 3.2% in 2008.<sup>8</sup>

The Chinese government estimates that in 2007, there were 286,200 foreign-invested companies in China. These firms employed more than 42 million people and accounted for 31.5% of gross industrial output value.<sup>9</sup>

<sup>5</sup> China stopped publishing cumulative data by country after 2005. Data in table 3 reflect 2005 cumulative data and reported annual flows.

<sup>6</sup> The British Virgin Islands is a large source of FDI because of its status as a tax haven.

<sup>7</sup> 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 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.

<sup>8</sup> Note, U.S. data on bilateral FDI flows with China differ significantly with Chinese data.

<sup>9</sup> 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.

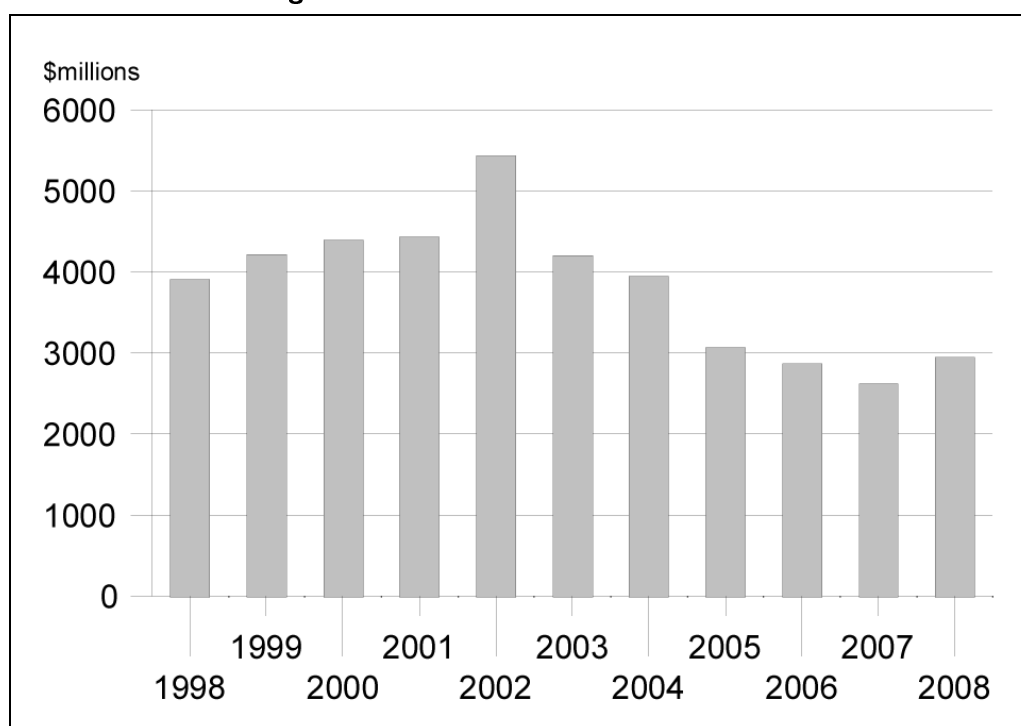
**Table 3. Major Foreign Investors in China: 1979-2008**

(\$ billions and % of total)

| Country                | Estimated Cumulative Utilized<br>FDI: 1979-2008 |            | Utilized FDI in 2008 |            |                    |
|------------------------|---|------------|----------------------|------------|--------------------|
|                        | Amount  | % of Total | Amount               | % of Total | % Change over 2007 |
| Total                  | 852.6   | 100.0      | 92.4                 | 100.0      | 23.6               |
| Hong Kong              | 341.0   | 40.0       | 41.0                 | 44.4       | 48.1               |
| British Virgin Islands | 89.8  | 10.5       | 16.0                 | 17.3       | -3.6               |
| Japan                  | 69.3  | 8.1        | 3.7                  | 4.0        | 1.8                |
| United States          | 64.0  | 7.5        | 2.9                  | 3.2        | 12.5               |
| Taiwan                 | 47.6  | 5.6        | 1.9                  | 2.1        | -0.3               |
| Singapore              | 37.5  | 4.4        | 4.4                  | 4.8        | 39.3               |
| South Korea            | 31.8  | 3.7        | 3.1                  | 3.4        | -14.8              |

**Source:** Chinese Ministry of Commerce.

**Note:** Ranked by cumulative top seven investors through 2008. Cumulative data by country estimated by CRS using previous years data.

**Figure 1. U.S. FDI in China: 1998-2008**

**Source:** Chinese Ministry of Commerce and Chinese Yearbook, various years. (Note, Chinese and U.S. data on bilateral FDI flows differ sharply).

## China's Trade Patterns

Economic reforms have transformed China into a major trading power. Chinese exports rose from \$14 billion in 1979 to \$1,429 billion in 2008, while imports over this period grew from \$16 billion to \$1,132 billion (see **Table 4**). In 2004, China surpassed Japan as the world's third-largest merchandise trading economy, after the European Union (EU) and the United States, and in 2007 it became the second largest exporter, surpassing the United States (and was the second largest in 2008). China's exports have grown dramatically in recent years, more than doubling in size from 2003 to 2008, with an average annual growth rate of nearly 27%. Imports over this period increased by an average of 19% per year. China's trade surplus, which totaled \$32 billion in 2004, surged to \$297 billion in 2008.

**Table 4. China's Merchandise World Trade: 1979-2008**

(\$ 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         |

**Source:** International Monetary Fund, *Direction of Trade Statistics and Global Trade Atlas* (using official Chinese statistics).

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 \$1.95 trillion at the end December 2008, making it the world's largest holder.

## 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.

According to Chinese trade data, its top five trading partners in 2008 were the EU, the United States, Japan, the 10 nations that constitute the Association of Southeast Asian Nations (ASEAN), and Hong Kong. China's largest export markets in 2008 were the EU, the United States, and Japan, while its top sources for imports were Japan, the EU, and ASEAN (the United States ranked sixth). China maintained substantial trade surpluses with the United States, the EU, and Hong Kong, but reported deficits with Japan and ASEAN. China reported that it had a \$171 billion trade surplus with the United States, but U.S. data show that it had a \$266 billion deficit with China. These trade imbalance data disparities occur with many of China's other major trading partners as well (see **Table 5**).

Chinese data indicated that 18% of its exports went to the United States in 2008. However, many analysts contend that the United States is a much more significant market for China than its trade data indicate, and they attempt to show this by taking U.S. data on its imports from China (\$338 billion in 2008) and dividing it by China's official data on its total exports (\$1,429 billion), which yields about 24% (i.e., the percent of Chinese exports that go to the United States).<sup>10</sup>

A growing 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 2008 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.

Additional information on China's trade with other countries and regions, including Africa, Iran, and North Korea, can be found in the **Appendix**.

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<sup>10</sup> Such calculations represent a very rough estimate and should be interpreted with caution.

**Table 5. China's Major Trading Partners: 2008 (\$ billions)**

| Country             | Total Trade | Chinese Exports | Chinese Imports | China's Trade Balance | Trading Partner's Reported Trade Balance With China |
|---------------------|-------------|-----------------|-----------------|-----------------------|---|
| European Union      | 425.9       | 293.0           | 132.9           | 160.1                 | -247.6  |
| United States       | 333.8       | 252.3           | 81.5            | 170.8                 | -266.2  |
| Japan               | 266.8       | 116.2           | 150.6           | -34.5                 | -18.6   |
| ASEAN <sup>a</sup>  | 231.0       | 114.1           | 116.9           | -2.8                  | n.a.  |
| Hong Kong           | 203.7       | 190.8           | 12.9            | 177.8                 | -3.1  |
| Total Chinese Trade | 2,560.4     | 1,428.9         | 1,131.5         | 297.4                 | n.a.  |

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

**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)<sup>11</sup> 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 2008 are listed in **Table 5** and **Table 6**, respectively, using the harmonized tariff system (HTS) on a two-digit level.

<sup>11</sup> EIU *Industry Wire*, April 4, 2007.

**Table 6. Major Chinese Exports: 2008**

| HS        | Description   | \$ millions | Percent of Total | 2008/2007 % Change |
|-----------|---|-------------|------------------|--------------------|
| --World-- |   | 1,428,869   | 100.0            | 17.3               |
| 85        | Electrical machinery  | 342,082     | 23.9             | 13.9               |
| 84        | Machinery   | 268,740     | 18.8             | 17.5               |
| 61        | Knit apparel  | 60,590      | 4.2              | -1.2               |
| 72        | Iron and steel  | 53,494      | 3.7              | 33.9               |
| 62        | Woven apparel   | 52,430      | 3.7              | 10.8               |
| 73        | Iron and steel products   | 48,344      | 3.4              | 31.7               |
| 90        | Optical, photographic, cinematographic, measuring checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof | 43,385      | 3.0              | 17.2               |
| 94        | furniture and bedding   | 42,786      | 3.0              | 19.0               |
| 87        | vehicles, not railway (mainly auto parts ,motorcycles trucks, and bicycles)   | 39,316      | 2.8              | 23.4               |
| 95        | toys and sports equipment   | 32,695      | 2.3              | 20.8               |

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

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

**Table 7. Major Chinese Imports: 2008**

| HS    | Description   | \$ millions | percent of total | 2008/2007 % change |
|-------|---|-------------|------------------|--------------------|
| World |   | 1,131,469   | 100              | 18.3               |
| 85    | Electrical machinery  | 266,639     | 23.6             | 3.5                |
| 27    | Mineral fuel, oil etc   | 168,643     | 14.9             | 61.1               |
| 84    | Machinery   | 138,707     | 12.3             | 11.5               |
| 26    | Ores, slag, and ash   | 85,236      | 7.5              | 58.1               |
| 90    | Optical, photographic, cinematographic, measuring checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof | 77,696      | 6.9              | 12.0               |
| 39    | Plastic   | 48,841      | 4.3              | 7.8                |
| 29    | Organic chemicals   | 39,301      | 3.5              | 2.4                |
| 87    | Vehicles, not railway (mainly autos and parts)  | 26,941      | 2.4              | 21.8               |
| 74    | Copper and articles thereof   | 26,085      | 2.3              | -4.0               |
| 72    | Iron And Steel  | 24,520      | 2.2              | 6.6                |

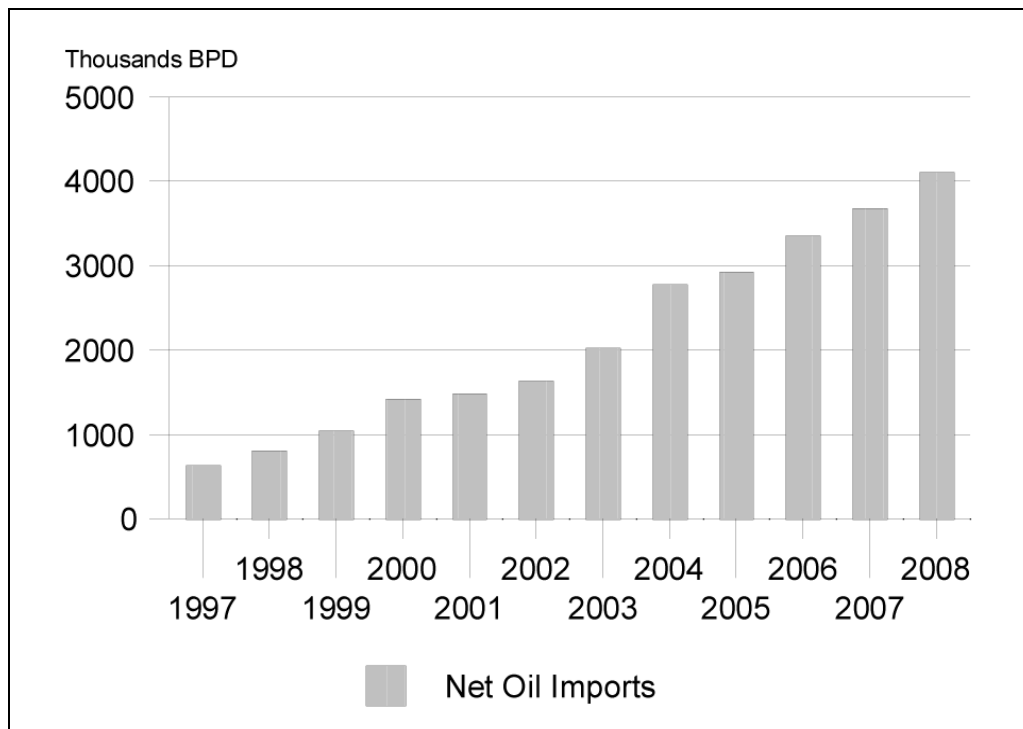
**Source:** World Trade Atlas, using official Chinese statistics.

**Notes:** Top 10 imports in 2008, two-digit level, harmonized tariff schedule.

## China's Growing Appetite for Imported Oil

China's rapid economic growth has fueled a growing demand for energy, such as petroleum, and that demand is becoming an increasingly important factor in determining world oil prices. China is the world's second largest consumer of oil products (after the United States) at 7.6 million barrels per day (bpd) in 2007 (compared to 3.9 million in 1997), and that level is projected to increase to 13.6 million bpd by 2030 (depending on China's future growth and energy policies).<sup>12</sup> 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 4.1 million bpd in 2008. China's net oil imports doubled from 2003 to 2008 (see **Figure 2**), and making it the world's third largest net oil importer (after the United States and Japan). 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. China's dependence on imported oil could rise from about the current level of about 50% to 80% by 2030.<sup>13</sup>

**Figure 2. China's Net Oil Imports: 1997-2008**



**Source:** U.S. Energy Administration and China Energy Newswire.

<sup>12</sup> Global Insight, *Global Petroleum Outlook Forecast Tables (Long-Term)*, August 2008.

<sup>13</sup> 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.



## 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 state-owned enterprises) to invest overseas. The Chinese government generally refers to these activities as overseas direct investment (ODI). There appears to be several factors driving this investment:

- China's massive accumulation of foreign exchange reserves has led government officials to seek more profitable ways of investing these holdings (which traditionally have mainly 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 reportedly will initially manage over \$200 billion, making it one of the world's largest sovereign wealth funds. 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.
- 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.<sup>14</sup> On June 20, 2005, Haier Group, a major Chinese home appliances manufacturer, made a \$1.28 billion bid to take over Maytag Corporation, although the bid was later withdrawn.
- Acquisition of energy and raw materials has been a major priority of China's overseas investment strategy. As such, China has 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.<sup>15</sup> 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. In August 2005, the China National Petroleum Corporation (CNPC), China's largest oil company, purchased PetroKazakhstan Inc., a Canadian-registered company, for \$4.2

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<sup>14</sup> The Chinese government is believed to be the largest shareholder in the company.

<sup>15</sup> For a monthly listing of China's international activities relating to energy and raw materials, see China Institute at the University of Alberta at <http://www.uofaweb.ualberta.ca/chinainstitute/index.cfm>.

billion.<sup>16</sup> According to the Eurasia Group, since the 1990s CNPC has signed energy deals with Sudan worth \$10 billion, with \$4 billion in actual investment.<sup>17</sup> On February 12, 2009, a Chinese state-owned firm, Aluminum Corporation of China (Chinalco), announced it would invest \$19.5 billion in Rio Tinto Group (a leading international mining group) and reportedly is the largest Chinese overseas investment to date.

China is a relatively small, but quickly growing, global investor. China's annual ODI increased from \$2.9 billion in 2003 to \$52.2 billion in 2008; its ODI in 2008, was nearly double 2007 levels (\$26.5 billion). China's cumulative ODI through 2008 was \$170.1 billion.

**Table 8** lists the top 10 destinations for China's cumulative ODI as of 2007. Hong Kong was by far the major destination (accounting for 58% of total), followed by the Cayman Island (14%), the British Virgin Islands (6%), and the United States (2%).<sup>18</sup> China's cumulative FDI in Africa through 2007 was \$4.4 billion; major destinations of that ODI were South Africa, Nigeria, and the Sudan.

Some analysts contend that much of the ODI going to Hong Kong and Caribbean islands represents "round-tipping," that is, investment that is sent overseas but then re-invested elsewhere (especially) to take advantage of favorable treatment afforded to foreign investment. Some of that capital could be also going into tax havens. The largest sectors of China's cumulative ODI through 2007 included leasing and business services (26% of total), wholesale and retail trade (17%), financial intermediation (14%), and mining (13%).

**Table 8. Top 10 Destinations for China's Overseas Direct Investment: 2007**  
(\$ millions)

| Country                | FDI in 2007 | Cumulative FDI Through 2007 |
|------------------------|-------------|-----------------------------|
| Hong Kong              | 13,732      | 68,781                      |
| Cayman Islands         | 2,602       | 16,811                      |
| British Virgin Islands | 1,876       | 6,627                       |
| United States          | 196         | 1,881                       |
| Australia              | 532         | 1,444                       |
| Singapore              | 398         | 1,444                       |
| Russian Federation     | 478         | 1,422                       |
| Canada                 | 1,033       | 1,255                       |
| South Korea            | 57          | 1,214                       |
| United Kingdom         | 567         | 950                         |

<sup>16</sup> *Asia Times*, August 24, 2005.

<sup>17</sup> Eurasia Group, *China's Overseas Investments in Oil and Gas Production*, October 16, 2006, p. 20.

<sup>18</sup> In terms of regions, Asia accounted for 71.0% of China's ODI, followed by Latin America (20.0%), Europe (2.8%), Africa (2.8%), North America (2.2%), and Oceania (1.1%).

| Country           | FDI in 2007 | Cumulative FDI Through 2007 |
|-------------------|-------------|-----------------------------|
| Total Chinese ODI | 26,506      | 117,911                     |

Source: China Statistical Yearbook, 2008.

## 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.

- **The global financial crisis.** This crisis currently poses the biggest overall threat to China's economic growth. China is highly dependent on foreign trade and investment for its economic growth and thus an economic slowdown among China's major trading partners could have a big impact on China's future growth (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 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, increasing the level of non-performing loans held by the banks and boosting inflationary pressures.<sup>19</sup>
- **State-owned enterprises (SOEs),** which account for about one-third 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.
- **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

<sup>19</sup> 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.

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. According to some estimates, over 50% of state-owned bank loans 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. Many private companies in China find it difficult to borrow from state banks.

- **Growing public unrest.** The Chinese government acknowledged that there were over 87,000 protests (many of which were violent) in 2005 (compared with 53,000 protests in 2003) over such issues as pollution, government corruption, and land seizures.<sup>20</sup> 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.<sup>21</sup> The global financial crisis, which has already caused significant job losses in China could lead to sharply increased levels of worker unrest.
- **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. Reports of slave labor in northern China in 2007, which included kidnapped children and mentally handicapped people, raised public anger over the lack of enforcement of labor laws.
- **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

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<sup>20</sup> See CRS Report RL33416, *Social Unrest in China*, by Thomas Lum.

<sup>21</sup> *China's Human Development Report 2005*.

profits. This has led to a proliferation of unsafe food and consumer products being sold in China or exported abroad.<sup>22</sup> Lack of government enforcement of food 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 concerns over the health and safety of Chinese products (such as fish, pet food, tires, and toys) in the United States and other countries could lead consumers to reduce their purchases of Chinese products and could undermine China's efforts to develop and promote internationally recognized Chinese brands.

- **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. 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.

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 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.

## Fallout From the Current Global Financial Crisis<sup>23</sup>

China's economy has suffered a sharp slow-down as a result of the global financial crisis, largely caused by a decline in foreign demand for Chinese imports. After experiencing double-digit growth in monthly exports (on a year-on-year basis) from January to October 2008 (with the

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<sup>22</sup> See CRS Report RS22713, *Health and Safety Concerns Over U.S. Imports of Chinese Products: An Overview*, by Wayne M. Morrison.

<sup>23</sup> For additional information, see CRS Report RS22984, *China and the Global Financial Crisis: Implications for the United States*, by Wayne M. Morrison.

exception of February), Chinese monthly exports have declined. They fell by 2.2% in November 2008, 2.8% in December 2008, and 17.5% in January 2009 (year-on year basis). During the same period, China's imports dropped even more sharply: 18.0%, 21.3%, and 43.1%, respectively. China's FDI flows have declined as well; in January they fell by 5.7% on a year-on-year basis. A

In January 2009, the Chinese government stated that 20 million migrant workers had lost their jobs due to the global financial crisis. The real estate market in several Chinese cities has exhibited signs of a bursting bubble, including a slow down in construction, falling prices, and growing levels of unoccupied buildings. In addition, the value of China's largest stock market, the Shanghai Stock Exchange Composite Index, has fallen by over 58% from January 2008 to February 2009). The Chinese government contends that its economic stimulus policies will enable the economy to grow by 8.0% in 2009. However, several economic forecasting firms doubt this can be achieved. Global Insight predicts China's real GDP growth will be 5.9%.<sup>24</sup>

China has taken a number of steps to stimulate its economy. On November 9, 2008, it announced that it would implement a two-year \$586 billion stimulus package, mainly dedicated to infrastructure projects. Interest rates were cut twice in October and real estate taxes were cut. The government also pledged to cut export targets and boost subsidies to small and medium-sized firms.

Analysts debate what role China might play in responding to the global financial crisis, given its huge foreign exchange reserves but its relative reluctance to become a major player in global economic affairs and its tendency to be cautious with its reserves. Some have speculated that China, in order to help stabilize its most important trading partner, the United States, would boost purchases of U.S. securities (especially Treasury securities).<sup>25</sup> This would help the U.S. government fund the purchases of troubled assets and programs to stimulate the economy.<sup>26</sup> Additionally, China might try to shore up the U.S. economy by buying U.S. stocks.

On September 21, 2008, the White House indicated that President Bush had called Chinese President Hu Jintao about the financial crisis and steps the Administration was planning to take. An unnamed Chinese trade official was reported by *Inside U.S. Trade* as stating that "the purpose of that call was to ask for China's help to deal with this financial crisis by urging China to hold even more U.S. Treasury bonds and U.S. assets." The official was further quoted as saying that China recognized that it "has a stake" in the health of the U.S. economy, both as a major market for Chinese exports and in terms of preserving the value of U.S.-based assets held by China and that a stabilized U.S. economy was in China's own interest.<sup>27</sup> At a press conference during her visit to China on February 21, 2009, Secretary of State Hillary Rodham Clinton stated that she appreciated "greatly the Chinese government's continuing confidence in the United States treasuries." Some contend that taking an active role to help the United States (and other troubled)

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<sup>24</sup> Global Insight, *China*, February 17, 2009.

<sup>25</sup> In September 2008, China overtook Japan to become the largest foreign holder of U.S. Treasury securities. See CRS Report RL34314, *China's Holdings of U.S. Securities: Implications for the U.S. Economy*, by Wayne M. Morrison and Marc Labonte.

<sup>26</sup> Such a move would help keep U.S. interest rates relatively low. Likewise, if China decided not to sharply increase its purchases of U.S. securities, U.S. interest rates could go up.

<sup>27</sup> *Inside U.S. Trade*, China Trade Extra, September 24, 2008.

economies would boost China's image as a positive contributor to the world economic order, similar to what occurred during the 1997-1998 Asian financial crisis when it offered financial assistance to Thailand and pledged not to devalue its currency even though other East Asian economies had done so, a move that was highly praised by U.S. officials at the time.

On the other hand, there are a number of reasons why China would be reluctant to significantly increase its purchases of U.S. assets. One concern would be whether increased Chinese investments in the U.S. economy would produce long-term economic benefits for China. Some Chinese investments in U.S. financial companies have fared poorly, and Chinese officials would be reluctant to put additional money into investments that were deemed to be too risky.<sup>28</sup> Secondly, a sharp economic downturn of the Chinese economy would likely increase pressure on the government to invest money at home, rather than overseas. Many analysts (including some in China) have questioned the wisdom of China's policy of investing a large volume of foreign exchange reserves in U.S. government securities (which offer a relatively low rate of return) when China has such huge development needs at home. Many Chinese officials contend that maintaining strong economic growth in China is the most effective action China can take to promote global growth. Several economists in the West have suggested for years that China should boost domestic spending and appreciate its currency to promote more balanced growth, greater economic efficiency, and improve the country's living standards.

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<sup>28</sup> For example in June 2007, China's sovereign wealth fund bought \$3 billion worth of shares from Blackstone LP (a U.S. private equity firm) at \$31 each, but the value of those shares fell to below \$8 as of October 2008.

## Appendix. China's Growing Economic Ties with Africa, North Korea, and Iran

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. Although China's trade with these countries is relatively small (compared with its major trading partners), it is growing rapidly. China is also a major trading partner of various countries that pose challenges to U.S. foreign policy, such as Iran, Sudan, and North Korea.<sup>29</sup>

### China-Africa Trade

#### China's Imports From Africa

China's imports from Africa as a percent of its total imports grew from 2.8% in 2004 to 3.8% in 2007 (to \$36.3 billion).<sup>30</sup> As a whole, Africa was China's seventh largest source of imports in 2007. China's imports from Africa grew by 25.9% over the previous year (compared to total Chinese imports growth of 20.8%). Mineral fuels were by far China's largest import from Africa, accounting for 72% of total imports. Angola was China's largest source of imports from Africa, accounting for 35% of those imports in 2007, followed by South Africa, Sudan, the Congo, and Equatorial Guinea. China's imports from Sudan were up 112% over the previous year (see **Table A-1** and **Table A-2**). In 2006, China was Sudan's largest source of imports (18.2% of total).<sup>31</sup>

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<sup>29</sup> For additional information on policy challenges posed by North Korea, see CRS Report RL33590, *North Korea's Nuclear Weapons Development and Diplomacy*, by Larry A. Niksch; and CRS Report RL32493, *The North Korean Economy: Leverage and Policy Analysis*, by Dick K. Nanto and Emma Chanlett-Avery. For information on policy challenges posed by Sudan, see CRS Report RL33574, *Sudan: The Crisis in Darfur and Status of the North-South Peace Agreement*, by Ted Dagne.

<sup>30</sup> In comparison, U.S. imports from Africa in 2006 were \$92.0 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%.

<sup>31</sup> Central Intelligence Agency, *the 2008 World Factbook*.



**Table A-1. Top Five African Sources of Chinese Imports: 2004-2007**

(\$ millions)

|                     | 2004          | 2005          | 2006          | 2007          | 2006-2007<br>% Change |
|---------------------|---------------|---------------|---------------|---------------|-----------------------|
| <b>Africa Total</b> | <b>15,641</b> | <b>21,114</b> | <b>28,768</b> | <b>36,330</b> | <b>25.9</b>           |
| Angola              | 4,718         | 6,581         | 10,931        | 12,885        | 17.9                  |
| South Africa        | 2,955         | 3,444         | 4,095         | 6,608         | 61.4                  |
| Sudan               | 1,706         | 2,615         | 1,941         | 4,114         | 111.9                 |
| Congo               | 1,569         | 2,278         | 2,785         | 2,828         | 1.6                   |
| Equatorial Guinea   | 995           | 1,486         | 2,538         | 1,697         | -33.1                 |

Source: *World Trade Atlas*. Official Chinese statistics.

**Table A-2. Top Five Chinese Imports from Africa: 2004-2007**

(\$ millions and %)

| HS 2 Commodity<br>Description | 2004   | 2005   | 2006   | 2007   | % of<br>Total<br>2007 | 2006-2007<br>% Change |
|-------------------------------|--------|--------|--------|--------|-----------------------|-----------------------|
| Mineral fuel, oil, etc        | 10,135 | 14,676 | 21,083 | 25,997 | 71.8                  | 23.3                  |
| Ores, slag, ash               | 1,393  | 1,577  | 2,116  | 3,298  | 9.1                   | 55.9                  |
| Precious stones and metals    | 742    | 967    | 1,196  | 1,358  | 3.8                   | 13.5                  |
| Wood                          | 473    | 524    | 705    | 915    | 2.5                   | 29.8                  |
| Iron and steel                | 439    | 475    | 315    | 851    | 2.4                   | 170.6                 |

Source: *World Trade Atlas*. Official Chinese statistics.

### China's Mineral Fuel Imports From Africa

Africa has become an important source of China's surging energy needs. In 2007, 72% of China's imports from Africa were mineral fuels. China's fuel imports from Africa rose from \$10.1 billion in 2004 to \$26.0 billion in 2007. In 2007, Africa supplied 24.8% of China's imported mineral fuels (compared with 9.1% in 1997). Angola was China's second largest overall mineral fuel supplier and its largest African supplier. Other major African suppliers (and the world rank) of mineral fuel to China were Sudan (7<sup>th</sup>), the Congo (12<sup>th</sup>), Equatorial Guinea (18<sup>th</sup>), and Libya (19<sup>th</sup>) (see **Table A-3**).

**Table A-3. Top Five African Suppliers of Mineral Fuel to China: 2007**

| Country             | Imports<br>(\$millions) | Rank as a Supplier<br>of Mineral Fuel to<br>China |
|---------------------|-------------------------|---|
| Angola              | 12,876                  | 2   |
| Sudan               | 4,086                   | 7   |
| Congo               | 2,307                   | 12  |
| Equatorial Guinea   | 1,566                   | 18  |
| Libya               | 1,528                   | 19  |
| <b>Africa Total</b> | <b>25,997</b>           | —   |

Source: *Global Trade Atlas*.

### China's Exports to Africa

The share of Chinese exports going to Africa rose from 2.3% in 2004 to 3.1% in 2007 (to \$37.3 billion).<sup>32</sup> If Africa were treated as a single trading partner, it would rank as China's seventh largest export market in 2007. Exports to Africa grew by 39.7% over the previous year (compared to China's total exports growth of 25.7%). Major Chinese exports to Africa in 2007 included electrical machinery, machinery (such as computers and components), vehicles (mainly motorcycles and trucks), apparel, and iron and steel products. The top five African destinations of Chinese exports in 2007 were South Africa, Egypt, Nigeria, Algeria, and Morocco (see **Table A-4** and **Table A-5**). In 2006, China was Sudan's second largest export market (31% of total).<sup>33</sup>

**Table A-4. China's Top Five African Export Markets: 2004-2007**  
(\$ millions)

| Country             | 2004          | 2005          | 2006          | 2007          | 2006-2007<br>% Change |
|---------------------|---------------|---------------|---------------|---------------|-----------------------|
| <b>Africa Total</b> | <b>13,815</b> | <b>18,687</b> | <b>26,705</b> | <b>37,314</b> | <b>39.7</b>           |
| South Africa        | 2,952         | 3,826         | 5,769         | 7,429         | 28.8                  |
| Egypt               | 1,389         | 1,935         | 2,976         | 4,432         | 48.9                  |
| Nigeria             | 1,719         | 2,305         | 2,856         | 3,800         | 33.1                  |
| Algeria             | 981           | 1,405         | 1,952         | 2,709         | 48.8                  |
| Morocco             | 944           | 1,206         | 1,570         | 2,162         | 37.8                  |

Source: *World Trade Atlas*. Official Chinese statistics.

<sup>32</sup> In comparison, total U.S. exports to Africa in 2007 were \$23.7 billion (2.0% of total U.S. exports in 2007).

<sup>33</sup> Central Intelligence Agency, *the 2008 World Factbook*.

**Table A-5. Top Five Chinese Exports to Africa: 2004-2007**  
(\$ millions)

| HS 2 Commodity Description                  | 2004  | 2005  | 2006  | 2007  | % of Total 2007 | 2006-2007 % Change |
|---|-------|-------|-------|-------|-----------------|--------------------|
| Electrical machinery and parts <sup>a</sup> | 1,905 | 2,799 | 4,122 | 5,806 | 15.6            | 40.9               |
| Machinery, mechanical appliances, and parts | 1,374 | 2,141 | 3,220 | 4,517 | 12.1            | 40.3               |
| Vehicles (excluding railway)                | 936   | 1,448 | 2,023 | 3,165 | 8.5             | 56.4               |
| Knit apparel                                | 828   | 938   | 1,537 | 2,940 | 7.9             | 91.3               |
| Iron/steel products                         | 654   | 903   | 1,225 | 1,920 | 5.1             | 56.7               |

**Source:** *World Trade Atlas*. Official Chinese statistics.

- a. 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.

## China's Trade with North Korea

China is North Korea's largest trading partner and a major supplier of foreign aid (largely in the form of food and fuel).<sup>34</sup> In 2007, Chinese exports to, and imports from, North Korea totaled \$1.4 billion and \$582 million, respectively. North Korea was China's 68<sup>th</sup> largest source of imports (0.06% of total) and its 68<sup>th</sup> largest export market (0.11% of total).<sup>35</sup> Chinese exports to North Korea rose by 13.0% and imports were up 24.3%, over 2006 levels. China accounted for 37.3% of North Korea's exports and 39.8% of its imports (2005 data).<sup>36</sup> According to Chinese data, its top five exports to North Korea (2007) were oil, machinery, electrical machinery (such as TVs), plastics, and vehicles (see **Table A-6**), while its top imports from North Korea were ores, coal, woven apparel, fish, and iron and steel (see **Table A-7**).

<sup>34</sup> See CRS Report RL31785, *Foreign Assistance to North Korea*, by Mark E. Manyin; and CRS Report RL32493, *The North Korean Economy: Leverage and Policy Analysis*, by Dick K. Nanto and Emma Chanlett-Avery.

<sup>35</sup> Source: *World Trade Atlas*.

<sup>36</sup> Economist Intelligence Unit, *Country Report, North Korea*, February 2008, p. 5.

**Table A-6. Major Chinese Exports to North Korea: 2004-2007**

(\$ millions and % change)

|                                      | 2004       | 2005         | 2006         | 2007         | 2006-2007<br>% Change |
|--------------------------------------|------------|--------------|--------------|--------------|-----------------------|
| <b>Total Exports</b>                 | <b>795</b> | <b>1,085</b> | <b>1,232</b> | <b>1,392</b> | <b>13.0</b>           |
| Mineral fuel, oil, etc. (mainly oil) | 204        | 286          | 348          | 402          | 15.7                  |
| Machinery                            | 40         | 77           | 83           | 104          | 25.0                  |
| Electrical machinery (such as TVs)   | 46         | 57           | 98           | 69           | -29.0                 |
| Plastics                             | 32         | 52           | 52           | 55           | 5.0                   |
| Vehicles (except railway)            | 18         | 28           | 28           | 54           | 92.1                  |

Source: *World Trade Atlas*.**Table A-7. Major Chinese Imports from North Korea: 2004-2007**

(\$ millions and % change)

|                                       | 2004       | 2005       | 2006       | 2007       | 2006-2007<br>% Change |
|---------------------------------------|------------|------------|------------|------------|-----------------------|
| <b>Total Imports</b>                  | <b>582</b> | <b>497</b> | <b>468</b> | <b>582</b> | <b>24.3</b>           |
| Mineral fuel, oil, etc. (mainly coal) | 53         | 112        | 102        | 170        | 55.1                  |
| Ores, slag, and ash                   | 59         | 92         | 118        | 164        | 38.5                  |
| Woven apparel                         | 49         | 58         | 63         | 60         | -4.7                  |
| Iron and steel                        | 75         | 72         | 35         | 45         | 28.2                  |
| Fish and seafood                      | 261        | 92         | 43         | 30         | -30.8                 |

Source: *World Trade Atlas*.

## China's Trade With Iran

According to the International Monetary Fund (IMF), China was Iran's largest second trading partner, after EU in 2006.<sup>37</sup> China was Iran's fourth largest export market (at \$9.0 billion), and its second largest source of imports (at \$4.9 billion). China has become an increasingly important trading partner for Iran in recent years. Iranian exports to China as a share of its total exports rose from 9.7% in 2002 to 12.9% in 2006, while Iranian imports from China as a share of its total imports increased from 4.7% to 10.6%.

Iran constitutes a relatively minor, though growing, trading partner for China. According to Chinese data, Iran was its 16<sup>th</sup> largest trading partner in 2007. China's exports to, and imports from, Iran totaled \$7.3 billion and \$13.3 billion, respectively. China's exports to Iran rose by 62.1% and imports from Iran were up by 33.7%. China's top exports to Iran in 2007 were iron and steel (\$1.6 billion), machinery (\$1.1 billion), vehicles and parts (\$880 million). China's

<sup>37</sup> China was the largest if EU countries are counted separately.

imports from Iran were dominated by crude oil, which totaled \$11.6 billion and constituted 87.2% of total Chinese imports. Iran was China's third largest source of mineral fuels imports in 2007; these constituted 11.1% of China's total world oil of these products.<sup>38</sup> According to press reports, China's state-owned oil companies have signed oil and gas deals with Iran worth over \$100 billion.<sup>39</sup>

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<sup>38</sup> *The Iran Daily* (July 25, 2007) contended that Iran had become China's largest source of oil imports.

<sup>39</sup> *Reuters News*, December 21, 2006.