

The economy of the People's Republic of China is the second largest in the world when measured by Purchasing Power Parity, with a GDP (PPP) of US \$9.412 trillion in 2005. When measured in USD-exchange rate terms it is the 4th largest in 2005 with approximately US \$2.22 trillion, set to overtake the German economy by 2009. It is the world's fastest growing major economy, and its continued growth is critical to the overall health of the world economy and to the welfare of its population of 1.3 billion (most of whom have yet to enjoy western style affluence). Its per capita GDP in 2005 was approximately US \$1,703 (US \$7,204 with PPP). As of 2005, 70% of China's GDP is in the private sector. The smaller public sector is dominated by about 200 large state enterprises concentrated mostly in utilities, heavy industries, and energy resources.

# ECONOMY OF THE PEOPLE'S REPUBLIC OF CHINA

Since 1978 the People's Republic of China (PRC) government has been reforming its economy from a Soviet-style centrally planned economy to a more market-oriented economy but still within the political framework, provided by the Communist Party of China. This system has been called "Socialism with Chinese characteristics" and is one type of mixed economy. These reforms started since 1978 has helped lift millions of people out of poverty, bringing the poverty rate down from 53% of population in 1981 to 8% by 2001.

To this end the authorities have switched to a system of household responsibility in agriculture in place of the old collectivization, increased the authority of local officials and plant managers in industry, permitted a wide variety of small-scale enterprise in services and light manufacturing, and opened the economy to increased foreign trade and foreign investment. The government has emphasized raising personal income and consumption and introducing new management systems to help increase productivity. The government also has focused on foreign



trade as a major vehicle for economic growth. While the accuracy of official PRC figures remain the subject of much debate, Chinese officials claim the result has been a tenfold increase in GDP since 1978. Some international economists believe that Chinese economic growth has been in fact understated during much of the 1990s and early 2000s, failing to fully factor in the growth driven by private enterprises.

### **Agriculture**

Production of wheat from 1961-2004. Data from FAO, year 2005. Y-axis : Production in Metric ton. Main agricultural products: rice, wheat, potatoes, sorghum, peanuts, tea, millet, barley, cotton, oilseed, pork, fish.

China ranks first worldwide in farm output. Just under half of China's labor force is engaged in agriculture, even though only about 15.4% of the land is suitable for cultivation. There are 329 million Chinese farmers - roughly half the work force - mostly laboring on small pieces of land relative to U.S. farmers. Virtually all arable land is used for food crops, and China is among the world's largest producers of rice, potatoes, sorghum, millet, barley, peanuts, tea, and pork. Major non-food crops, including cotton, other fibers, and oil seeds, furnish China with a large proportion of its foreign trade revenue. Agricultural exports, such as vegetables and fruits, fish and shellfish, grain and grain products, and meat and meat products, are exported to Hong Kong. Yields are high because of intensive cultivation, but China hopes to further increase agricultural production through improved plant stocks, fertilizers, and technology. According to the United Nations World Food Program, in 2003, China fed 20% of the world's population on 7% of the world's arable land.

### **Industry**

China ranks third worldwide in factory output. Main industries: iron and steel, coal, machine building, armaments, textiles and apparel, petroleum, cement, chemical fertilizers, footwear, toys, food processing, automobiles, consumer electronics, tele-

communications, electronic information.

Industrial production growth rate: 12.6% (2002 est.)

Major state industries are iron, steel, coal, machine building, light industrial products, armaments, and textiles. These industries completed a decade of reform (1979-1989) with little substantial management change. The 1999 industrial census revealed that there were 7,930,000 industrial enterprises at the end of 1999; total employment in state-owned industrial enterprises was about 24 million. The automobile industry is expected to grow rapidly in the coming decade, as is the petrochemical industry. Machinery and electronic products have become China's main exports.

### **Labor**

One of the hallmarks of China's socialist economy was its promise of employment to all able and willing to work and job-security with virtually lifelong tenure. Reformers targeted the labor market as unproductive because industries were frequently overstuffed to fulfill socialist goals and job-security reduced workers' incentive to work. This socialist policy was pejoratively called the iron rice bowl.

In 1979-1980, the state reformed factories by giving wage increases to workers, which was immediately offset by sharply rising inflation rates of 6%-7%. In other words, although they were given more pay, their money was worth less and they could buy less, which meant they were poorer. The state remedied this problem, in part, by distributing wage subsidies. The reforms also dismantled the iron rice bowl, which meant it witnessed a rise in unemployment in the economy. In 1979, immediately after the iron rice bowl was dismantled, there were 20 million unemployed people. Although this was partly due to a rapid rise in population, it was greatly exacerbated by the dependency created by the former socialist policies.

### **Energy and mineral resources**

Electricity: production: 2.19 trillion kWh (2004) consumption: 2.17 trillion kWh (2004) exports:



10.6 billion kWh (2003) imports: 1.546 billion kWh (2003) Electricity - production by source: fossil fuel: 80.2% hydro: 18.5% other: 0.1% (2001) nuclear: 1.2% Oil: production: 3.504 million bbl/day (2004) consumption: 6.391 million bbl/day (2004) exports: 340,300 bbl/day (2004) imports: 3.226 million bbl/day (2004) net imports: 2.9 million barrel/day (2004 est.) proved reserves: 18.26 billion bbl (2004) Natural gas: production: 35.02 billion cu m (2003) consumption: 33.44 billion cu m (2003 est.) exports: 2.79 billion cu m (2004) imports: 0 m? (2004 est.) proved reserves: 2.53 trillion cu m (2004)

Over the past decade China has managed to keep its energy growth rate at just half the rate of GDP growth, a considerable achievement. Although energy consumption slumped in absolute terms and economic growth slowed during 1998, mainland China's total energy consumption may double by 2020 according to some projections. China is expected to add approximately 15,000 megawatts of generating capacity a year, with 20% of that coming from foreign suppliers. Beijing, due in large part to

environmental concerns, would like to shift China's current energy mix from a heavy reliance on coal, which accounts for 75% of China's energy, toward greater reliance on oil, natural gas, renewable energy, and nuclear power.

The PRC has closed some 30,000 coal mines over the past 5 years to cut overproduction. This has reduced coal production by over 25%. Since 1993, China has been a net importer of oil; today imported oil accounts for 20% of the processed crude in China. Net imports are expected to rise to 3.5 million barrels (560,000 m<sup>3</sup>) per day by 2010. China is interested in developing oil imports from Central Asia and has invested in Kazakhstan oil fields. Beijing is particularly interested in increasing China's natural gas production - currently just 10% of oil production - and is incorporating a natural gas strategy in its tenth 5-year plan (2001-2005), with the goal of expanding gas use from its current 2% share of China's energy production to 4% by 2005 (gas accounts for 25% of U.S. energy production).

Beijing also intends to continue to improve energy efficiency and promote the use of clean coal technology. Only one-fifth of the new coal power plant capacity installed from 1995 to 2000 included desulfurization equipment. Interest in renewable sources of energy is growing, but except for hydropower, their contribution to the overall energy mix is unlikely to rise above 1%-2% in the near future. China's energy section continues to be hampered by difficulties in obtaining funding, including long-term financing, and by market balkanization due to local protectionism that prevents more efficient large plants from achieving economies of scale.

**Environment**

A harmful by-product of China's rapid industrial development has been increased pollution. A 1998 World Health Organization report on air quality in 272 cities worldwide concluded that seven of the 10 most-polluted cities were in China. According to the PRC's own evaluation, two-thirds of the 338 cities for which air-quality data are available are considerable

red polluted - two-thirds of them moderately or severely so. Respiratory and heart diseases related to air pollution are the leading causes of death in China. Almost all of the nation's rivers are considered polluted to some degree, and half of the population lacks access to clean water. Ninety percent of urban water bodies are severely polluted. Water scarcity also is an issue; for example, severe water scarcity in northern China has forced the government to plan a large-scale diversion of water from the Yangtze River to northern cities, including Beijing and Tianjin. Acid rain falls on 30% of the country. Various studies estimate pollution costs the Chinese economy about 7% of GDP each year.

China's communist leaders are increasingly paying attention to the country's severe environmental problems. In March 1998, the State Environmental Protection Administration (SEPA) was officially upgraded to a ministry-level agency, reflecting the growing importance the PRC government places on environmental protection. In recent years, the PRC has strengthened its environmental legislation and made some progress in stemming environmental deterioration. In 1999, the PRC invested more than 1% of GDP in environmental protection, a proportion that will likely increase in coming years. During the 10th 5-Year Plan the PRC plans to reduce total emissions by 10%. Beijing in particular has invested heavily in pollution control as part of its successful campaign to win the competition to host the 2008 Olympic Games.

The PRC is an active participant in the climate change talks and other multilateral environmental negotiations. It is a signatory to the Basel Convention governing the transport and disposal of hazardous waste and the Montreal Protocol on Substances That Deplete the Ozone Layer, as well as the Convention on the International Trade in Endangered Species of Wild Flora and Fauna and other major environmental agreements.

The question of environmental impacts associated with the Three Gorges Dam project has generated controversy among environmentalists inside and



outside China. Critics claim that erosion and silting of the Yangtze River threaten several endangered species, while Chinese officials say the hydroelectric power generated by the project will enable the region to lower its dependence on coal, thus lessening air pollution.

The U.S.-China Forum on Environment and Development, co-chaired by the U.S. Vice President and the Premier of the People's Republic of China, has been the principal vehicle of an active program of bilateral environmental cooperation since its inception in 1997. Despite positive reviews of the Forum's achievements from both sides, the PRC has often compared the U.S. program, which lacks a foreign assistance component, with those of Japan and several European Union countries that include generous levels of aid.

### Services

Statistics Exports: \$762.0 billion (2005) Exports - commodities: machinery and equipment, plastics, optical and medical equipment, iron and steel Exports - partners: US 21.0%, EU 18.1%, Hong Kong 17.0%, Japan 12.4%, ASEAN 7.2%, South Korea 4.7% (2004) Imports: \$660.12 billion (2005) Imports - commodities: machinery and equipment, oil and mineral fuels, plastics, optical and medical equipment, organic chemicals, iron and steel Imports - partners: Japan 16.8%, EU 12.4%, ASEAN 11.2%, South Korea 11.1%, US 7.9%, Russia 2.2% (2004) China ranks ninth worldwide in services' output. High power and telecom density ensure this sector

remain on high-growth trajectory in the long-term. China's global trade exceeded \$1 trillion (\$1.15 trillion) in 2004, more than doubling from 2001. At the end of 2004, China became the world's third largest trading nation behind the United States and Germany [4]. The trade surplus however was stable at \$30 billion. (>40 billion in 1998, <30 billion in 2003). China's primary trading partners include Japan, U.S., South Korea, Germany, Singapore, Malaysia, Russia, and the Netherlands. According to U.S. statistics, China had a trade surplus with the U.S. of \$170 billion in 2004, more than doubling from 1999. Wal-Mart, the United States' largest retailer, is China's 7th largest export partner, just ahead of the United Kingdom. Out of the 5 busiest ports in the world, 3 are in China.

The PRC has experimented with decentralizing its foreign trading system and has sought to integrate itself into the world trading system. In November 1991, the PRC joined the Asia-Pacific Economic Cooperation (APEC) group, which promotes free trade and cooperation in economic, trade, investment, and technology issues. In 2001, China served as APEC chair, and Shanghai hosted the annual APEC leaders meeting.

During his 1999 visit to the United States, Premier Zhu Rongji signed a bilateral Agricultural Cooperation Agreement, which lifted longstanding Chinese prohibitions on the import of citrus, grain, beef, and poultry. In November 1999, the United States and PRC reached a historic bilateral market-access agreement to pave the way for the PRC's accession to the World Trade Organization (WTO). As part of the far-reaching trade liberalization agreement, the PRC agreed to lower tariffs and abolish market impediments after it joins the world trading body. Chinese and foreign businessmen, for example, will gain the right to import and export on their own - and to sell their products without going through a government middleman. Average tariff rates on key U.S. agricultural exports will drop from 31% to 14% in 2004 and on industrial products from 25% to 9% by 2005. The agreement also opens new opportu-

nities for U.S. providers of services like banking, insurance, and telecommunications. After reaching a bilateral WTO agreement with the EU and other trading partners in summer 2000, the PRC worked on a multilateral WTO accession package. To increase exports, the PRC has pursued policies such as fostering the rapid development of foreign-invested factories, which assemble imported components into consumer goods for export. The PRC joined the WTO on December 11, 2001, after 15 years of negotiations, the longest in GAIT history.

The U.S. is one of China's primary suppliers of power-generating equipment, aircraft and parts, computers and industrial machinery, raw materials, and chemical and agricultural products. However, U.S. exporters continue to have concerns about fair market access due to China's restrictive trade policies and U.S. export restrictions. Intellectual property theft makes many Western companies wary of doing business in mainland China. Some Western politicians and manufacturers also say the value of the Yuan is artificially low and gives export from mainland China an unfair advantage. These and other issues are behind the recent push for greater protectionism by some in the US Congress, including a 27.5% consumer tax on imports.

Trade volume between China and Russia reached \$29.1 billion in 2005, an increase of 37.1% compared with 2004.

China's export of machinery and electronic goods to Russia grew 70%, which is 24% of China's total export to Russia in the first 11 months of 2005. During the same time, China's export of high-tech products to Russia increased by 58%, and that is 7% of China's total exports to Russia. Also in this time period border trade between the two countries reached \$5.13 billion, growing 35% and accounting for nearly 20% of the total trade. Most of China's exports to Russia remain apparel and footwear.

Russia is China's eighth largest trade partner and China is now Russia's fourth largest trade partner, and China now has over 750 investment projects in Russia, involving \$1.05 billion. China's contracted

investment in Russia totaled \$368 million during January-September of 2005, twice that in 2004.

Chinese imports from Russia are mainly those of energy sources, such as crude oil, which is mostly transported by rail, and electricity exports from neighboring Siberian and Far Eastern regions. In the near future, exports of both of these commodities are set to increase, as Russia is building a giant pipeline to Pacific Ocean with a branch to Chinese border, and Russian power grid monopoly UES is building some of its hydropower stations with a view of future exports to China.

As of 31 December 2005, there were an estimated 37,504,000 broadband lines in China. It represents nearly 18% world share. Over 70% of the broadband lines were via DSL and the rest via cable modems.

### Foreign investment

Foreign investment stalled in late 1989 in the aftermath of the Tiananmen protests. In response, the government introduced legislation and regulations designed to encourage foreigners to invest in high-priority sectors and regions. A significant example of this is the Encouraged Industry Catalogue which sets out the degree of foreign involvement allowed in various industry sectors.

In 1990, the government eliminated time restrictions on the establishment of joint ventures, provided some assurances against nationalization, and allowed foreign partners to become chairs of joint venture boards. In 1991, the PRC granted more preferential tax treatment for Wholly Foreign Owned Enterprises and contractual ventures and for foreign companies which invest in selected economic zones or in projects encouraged by the state, such as energy, communications and transport. It also aut-

horized some foreign banks to open branches in Shanghai and allowed foreign investors to purchase special "B" shares of stock in selected companies listed on the Shanghai and Shenzhen Securities Exchanges. These "B" shares are sold to foreigners but carry no ownership rights in a company. In 1999, China received nearly \$39 billion in foreign direct investment.

Opening to the outside remains central to China's development. Foreign-invested enterprises produce about 45% of China's exports, and China continues to attract large investment inflows. Foreign exchange reserves exceeded \$800 billion in 2005, more than doubling from 2003. China became the world's largest holder of reserves in 2006.

### Macro-economic trend

This is a chart of trend of gross domestic product of China at market prices estimated by the International Monetary Fund with figures in millions of Chinese Yuan.

Year	Gross Domestic Product	US Dollar Exchange	Inflation Index (2000=100)
1980	460,906	1.49 Yuan	25
1985	896,440	2.93 Yuan	30
1990	1,854,790	4.78 Yuan	49
1995	6,079,400	8.35 Yuan	91
2000	9,921,500	8.27 Yuan	100
2005	18,232,100	8.19 Yuan	106

For purchasing power parity comparisons, the US Dollar is exchanged at 2.05 Yuan only.

### Currency

*Currency: 1 yuan = 10 jiao = 100 fen*

*Exchange rates: yuan per US\$1 - Starting July 21, 2005 China has allowed the Renminbi to fluctuate at a daily rate of up to .03%. The rate of exchange in early 2006 was Rmb8.07:US \$1. 8.2793 (January 2000), 8.2783 (1999), 8.2790 (1998), 8.2898 (1997), 8.3142 (1996), 8.3514 (1995)*