China

Just the Facts

➤ Even after two decades of rapid growth, China's economy is still in the early stages of development.

➤ The key drivers of China's growth have been exports and investment. Exports are increasingly comprised of higher-value-added products and are becoming less dependent on items such as apparel, toys, and footwear. Inflows of foreign direct investment remain strong, attracted, in part, by burgeoning consumer demand.

➤ Increasing industrialization is leading to growing demand for a range of imported goods. While Chinese imports of commodities have received a lot of attention, China is also a significant importer of technology products.

➤ The consumer outlook is favorable, with the fastest-growing age group being people between 35 and 59. Not only are these peak earning years, but income growth tends to be the most rapid.

➤ Can there be too much of a good thing? China's government is moving to slow near-term growth. Bottlenecks in infrastructure, logistics, and the power industry have resulted in labor and electricity shortages and reflect an economy that is growing too fast.
China: Just the Facts

China’s economy is large and growing rapidly. The exact size of the economy, the rate of growth, and the drivers of that growth are, obviously, key issues. However, on each of these points, there is often confusion and misunderstanding. Below we attempt to present the facts.

Large and Populous…but Not Particularly Rich

With 1.3 billion people, China is the most populous country on earth. In terms of landmass, it is the fourth-largest country in the world. So it is a big country with a lot of people. For most of the 20th century, however, those natural advantages meant little for its economy.

In 1978, two years after Chairman Mao’s death, Deng Xiaoping came to power and initiated a series of reforms that shifted the country away from state control and toward a market-based economy. Those reforms were desperately needed given that in 1980 China ranked 134th out of 152 countries in an International Monetary Fund (IMF) ranking of per capita GDP.

By 2003, China’s GDP had reached $1.410 trillion, based on prevailing exchange rates, making its economy the world’s seventh largest (see Figure 1), roughly equivalent in size to that of California. However, this statement is somewhat misleading because, on a per capita basis, China is not a particularly rich country. In 2003, China’s per capita GDP was around $1,100, which placed it 111th out of 179 countries listed in the IMF’s database, behind countries such as Egypt and Colombia, but still significantly better than its 1980 ranking. Moreover, regional income disparities within China are large, with a tenfold difference in per capita income between the richest province (Shanghai) and the poorest (Guizhou).

Figure 1. The World’s Seven Largest Economies (2003)

GDP in trillions of U.S. dollars and per capita GDP

Note: LHS=Left-Hand Scale and RHS=Right-Hand Scale
Source: International Monetary Fund
**Slowing Hyper Growth...but Decades of Fast Growth Still Ahead**

Clearly, China’s economy has experienced rapid growth in recent years (see Figure 2), but it is likely that the fastest rates of growth are now in the past. Real GDP growth averaged 12% per year in 1991–96, but growth slowed to a rate of less than 10% in the years after 1996. Even still, growth of “just” 9% in 2003 was significantly better than that of any of the world’s other large economies.

**Figure 2. China’s Real GDP Growth**

Since 1980

![China's Real GDP Growth Chart](source: United Nations Statistics Division)

Moreover, even after two decades of rapid growth, China’s economy is still in the early stages of development. As we discuss in detail below:

- It is still a largely rural and agricultural economy; 60% of the population lives in rural areas, while agriculture accounts for close to half of employment.
- Per capita consumption levels are low, both in absolute terms and as a share of income. The Chinese Academy of Social Sciences (CASS) recently estimated that only about one-fifth of the population could be categorized as “middle class.” So the majority of the population lives in rural areas and has a relatively simple lifestyle.
- While the economy is steadily becoming industrialized, production is still heavily concentrated in lower-value-added, labor-intensive activities, such as the manufacture of textiles, shoes, and toys.
Drivers of Growth

The key drivers of China’s growth in recent years have been exports and investment (see Figure 3). These two factors have been interrelated; hence, rising levels of exports have contributed to heavy levels of investment.

Figure 3. Consumption, Investment, and Exports
As a percentage of GDP

With regard to investment, China’s share of foreign direct investment (FDI) remains one of the largest in the world (see Figure 4).

Figure 4. Foreign Direct Investment in Ten Countries
As a percentage of total world foreign direct investment in 2003
Three factors, in particular, have been driving FDI in China:

➤ *More relaxed regulations* have allowed foreign companies to increase their presence in China’s economy. A key factor here was China’s accession to the World Trade Organization in 2001, which eliminated many restrictions that had held back foreign firms’ profitability.

➤ There has been an *improvement in Chinese competitiveness* both in terms of manufacturing costs as well as in the quality of finished products.

➤ Foreign companies’ interest in taking advantage of China’s *burgeoning consumer demand* (which we discuss in detail below).

Largely as a result of this FDI, China’s exports are increasingly comprised of technology products, such as data processing and telecom equipment, and so are becoming less dependent on items such as apparel, toys, and footwear, although China will remain a dominant force in those industries (see Figure 5).

**Figure 5. 2003 Export Value of Principal Commodities**

<table>
<thead>
<tr>
<th>US$ in billions</th>
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<tbody>
<tr>
<td>Data Processing Equipment</td>
</tr>
<tr>
<td>Apparel and Clothing</td>
</tr>
<tr>
<td>Telecom Equipment</td>
</tr>
<tr>
<td>Toys</td>
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<tr>
<td>Footwear</td>
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<tr>
<td>Furniture</td>
</tr>
<tr>
<td>Mineral Fuels</td>
</tr>
<tr>
<td>Optical &amp; Measuring Equipment</td>
</tr>
<tr>
<td>Plastics</td>
</tr>
<tr>
<td>Leather Products</td>
</tr>
</tbody>
</table>

Source: United Nations Statistics Division
Imports Rise with Industrialization

Increasing industrialization is, not surprisingly, leading to growing demand for a range of imported goods. Here too, however, there is often confusion surrounding the true picture. While Chinese imports of commodities have received a lot of attention recently, China is also a significant importer of technology products, including integrated circuits, data processing equipment, and semiconductors (see Figure 6).

Figure 6. 2003 Import Value of Principal Commodities

![Graph showing import values of commodities](chart)

Source: United Nations Statistics Division

Furthermore, China’s imports of these and other products have been growing almost as rapidly as its exports (see Figure 7). This is because the bulk of China’s imports are intermediate goods that are used as components of future exports.

Figure 7. Imports of Goods and Services

![Graph showing year-over-year percentage change in imports and exports](chart)

Source: United Nations Statistics Division

While Chinese imports of commodities have received a lot of attention of late, China is also a significant importer of technology products.
The end result is that the country’s overall trade balance is only modestly in surplus (see Figure 8).

**Figure 8. China’s Trade Balance as a Percentage of GDP**

![Graph showing China's trade balance as a percentage of GDP](image)

Source: United Nations Statistics Division

In other words, while China’s large trade surplus with the U.S. receives a lot of attention, it is a misleading indicator of China’s overall trade picture. In fact, half of China’s trade surplus with the U.S. is offset by its trade deficit with the Middle East, Latin America, and other countries in Asia (see Figure 9).

**Figure 9. China’s Trade Deficit/Surplus by Region**

![Bar chart showing China's trade deficit/surplus by region](image)

Source: World Trade Organization

*Half of China’s trade surplus with the U.S. is offset by its trade deficit with the Middle East, Latin America, and other countries in Asia.*
Yet, China’s large trade surplus with the U.S., combined with its pegged exchange rate (of around 8.28 yuan to the dollar) have been two of the factors behind the country’s amassing of a sizable amount of foreign exchange reserves (see Figure 10). Note that with regard to the pegged exchange rate, Citigroup economists continue to expect a mild band widening, possibly to plus or minus 3% in early 2005, with domestic factors — namely, a very strong economy and growing inflation risks — being the key drivers of exchange rate policy reform.

**Figure 10. Foreign Exchange Reserves**

<table>
<thead>
<tr>
<th>US$ in billions</th>
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<tbody>
<tr>
<td>$500</td>
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<td>$300</td>
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<td>$200</td>
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<tr>
<td>$100</td>
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<tr>
<td>$0</td>
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</table>

Source: International Monetary Fund and The People’s Bank of China

While some observers anticipated that this buildup in foreign exchange reserves would lead to a liquidity-driven pickup in inflation, that has not been the case (see Figure 11). Instead, a boom in productivity (discussed in detail below) has helped keep inflation low in recent years, although some of the factors that have contributed to the recent overheating of the economy have pushed inflation up in the last 18 months. (We discuss this “overheating” below.)

**Figure 11. Consumer Price Inflation**

<table>
<thead>
<tr>
<th>Year-over-year percentage change</th>
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<tbody>
<tr>
<td>30%</td>
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<tr>
<td>20%</td>
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<tr>
<td>10%</td>
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<tr>
<td>0%</td>
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<tr>
<td>-10%</td>
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</table>

Source: International Monetary Fund
Growing Consumer Demand

We noted above that one of the factors spurring FDI in China is foreign companies’ interest in taking advantage of burgeoning consumer demand. Importantly, 35- to 59-year-olds comprise the fastest-growing age group in China today. As Figure 12 illustrates, the United Nations forecasts that in 2005 there will be 455 million Chinese in this age group, representing one-third of the total population, and rising to more than 500 million in 2010 (almost 40% of the total population).

The fact that a significant percentage of the Chinese population is made up of people of working age bodes well for consumer purchasing power. For most individuals worldwide, peak earning and spending years typically occur between the ages of 35 and 59. This is consistent with the “life cycle hypothesis,” which is based on the observation that an individual’s economic behavior varies with age.

Importantly, not only are a large number of Chinese moving into their peak earning years, but, for the reasons outlined below, per capita incomes are rising too. As Figure 13 illustrates, per capita GDP has grown at a 9% annual rate since 2000.

Figure 12. Millions of Chinese 35- to 59-Year-Olds (LHS) and 35- to 59-Year-Olds as a Percentage of the Total Population (RHS)

The fact that a significant percentage of the Chinese population is made up of people of working age bodes well for consumer purchasing power.

Figure 13. China’s GDP per Capita on a Purchasing Power Parity Basis

Source: International Monetary Fund
Key factors driving income growth include 1) a shift from rural to urban areas, 2) a rise in productivity, and 3) a growing number of working women.

**A Move to the Cities**

As recently as 1980, only about 20% of the people in China lived in an urban setting (see Figure 14). While the number of Chinese that live in cities is still relatively low, that number is growing rapidly, and the number of city residents is forecast to rise from just over 33% in 2000 to almost 50% in 2010. This migration to urban areas reflects, in large part, the greater opportunities for individuals in cities thanks to government development programs.

![Figure 14. Urban Population as a Percentage of Total Population](source)

**A Rise in Productivity**

Rising levels of productivity (see Figure 15) are also helping to drive income gains. Two factors that should continue to drive Chinese productivity growth are 1) technology transfers and 2) steadily improving educational standards. In addition, the shift from rural to urban areas implies rising average wages due to higher productivity in urban industries such as manufacturing.

![Figure 15. Implied Productivity Growth](source)
Technology Transfer
Technology transfer can involve the transfer of both physical technology and business processes. In terms of physical technology, reflecting the antiquated state of much of China’s infrastructure, the adoption of the latest technologies as part of an upgrade of the infrastructure is accelerating productivity. For example, in 2001 only about 14% of Chinese had a fixed line telephone (see Figure 16). However, following the adoption of wireless technologies, more than 20% of Chinese had a mobile cell phone in 2003.

Figure 16. Main Telephone Lines and Mobile Cellular
Subscribers per 100 people

![Graph showing the increase in Main Telephone Lines and Mobile Cellular subscribers over years 2000-2005.]

Source: International Telecommunication Union

As for the transfer of business processes, local worker productivity in China is benefiting from knowledge transfer by foreign companies that have established a presence in China (e.g., Taiwanese electronics manufacturers). Moreover, indirect productivity gains can also come from competitive pressures resulting from foreign investment. For example, the entry of foreign retailers and vendors into Chinese markets is forcing local competitors to boost the efficiency of their operations.

Improving Education Standards
While technology transfer primarily involves external factors, rising education standards in China should also boost productivity levels. Not surprisingly, income per capita tends to be highly correlated with educational attainment. However, educational standards in China still have room to rise further; as Figure 17 illustrates, in 2001 less than 70% of Chinese received a secondary education and only 13% received a tertiary education. This trend should improve in step with the migration from the countryside to the cities.
A Shift into Higher-Value-Added Industries

Furthermore, the shift from rural to urban areas implies rising average wages due to higher productivity in urban industries such as manufacturing. In 1985, agriculture still employed a majority of the economically active population in China (see Figure 18), but that percentage has been dropping steadily, reflecting the rapid growth of employment in the relatively well-paid manufacturing and services sectors.
Working Women
A third factor that has been boosting consumer incomes has been the rising participation rate of Chinese women (see Figure 19) in the workforce.

Figure 19. Participation Rate of Women in China
Percentage of women aged 15-64 in labor force

Not only are there are a large number of single women who are working (and, increasingly, delaying the age at which they get married), but there are also a large number of dual-income couples. Moreover, married women are opting to have fewer children, which tends to boost their disposable income. Between 1990 and 2002, the total fertility rate (i.e., births per women) in China fell from 2.1 to 1.9.

An Emerging Middle Class
While favorable demographics and rising incomes are supporting consumer spending growth, lifestyle and behavioral changes are also playing a role. Many Chinese have grown up in an environment where the traditional attributes of austerity and frugality have much less significance than they did for prior generations.

Specifically, the oldest individuals in the 35–59 age group in China were born just before the end of World War II (i.e., before Chairman Mao’s rise to power), while the youngest members of this group were born just as the Cultural Revolution was winding down in the 1960s. So most of the people in this age group have no memory of the key events that influenced an older generation of Chinese. That older generation, which lived most of their lives in an environment of uncertainty and austerity, is steadily having less influence.

As a result of these lifestyle and behavioral changes, as well as rising income levels, a burgeoning middle class is starting to emerge in China. In fact, CASS recently estimated that the Chinese middle class accounted for nearly one-fifth (19%) of the population in 2003 (see Figure 20). (CASS considers a household to be middle class if it has assets of between $18,000 and $36,000.)
Note, however, that CASS estimated that nearly half of city dwellers (49%) are now in the middle class. The percentage of the Chinese population that is in the middle class has been increasing at a rate of one percentage point each year and, at the current rate of economic growth, CASS projects that 40% of Chinese will be in the middle class by 2020.

Finally, in the next section we discuss the steps that the government is taking to cool an overheating economy, which include measures to slow investment growth. As China’s investment process gradually becomes more efficient, investment as a share of GDP is likely to fall, even as growth stays robust. This fall in investment as a percentage of GDP is likely to be matched by a rise in consumption as a percentage of GDP, meaning that consumption should grow even faster than overall GDP in the years ahead.

### Too Much of a Good Thing?

Given the robust outlook for growth outlined in this report, Smith Barney’s China economist Yiping Huang believes that, in the near term, China may have too much of a good thing. Specifically, he thinks China’s economy is being hampered by critical bottlenecks in infrastructure, logistics, and the power industry, reflecting an economy that is growing too fast.

Reflecting these inefficiencies, China is in the throes of tight labor markets, rising wage rates, and increasing manufacturing costs. This is particularly true of coastal China, where many of the country’s exports are produced.

➤ **Tight labor markets.** A number of factors have contributed to a shortage of migrant labor in the coastal regions. First, more farmers have chosen to stay at home lately, partly reflecting that rising food prices increased the level of rural income by 10.6% during the first half of 2004. Second, there is an absence of an efficient nationwide information network for matching labor supply and demand. Third, as the coastal provinces upgrade the technology in manufacturing plants, there is a scarcity of workers with the skills necessary to operate it.
➤ **Rapidly rising wage rates.** Reflecting these factors, Yiping Huang estimates that the cost of migrant labor could easily rise by 20%–30% over the next year. This forecast increase would be 40%–50% if companies begin to pay regular social welfare contributions for their employees.

➤ **Rising manufacturing costs.** Other nonwage costs are also on the rise. Whether due to capacity shortages or raw material limitations, 24 of China’s 31 provinces had to ration power consumption this summer. In northern China, a chronic water shortage problem is worsening and on August 1 the Beijing municipal government raised water prices for industrial use in order to ease the shortage. Finally, the lack of railway capacity has forced many companies to use other means of transportation, which has increased distribution costs.

➤ **Credit tightening.** In an attempt to cool the economy and ease the pressures outlined above, The People’s Bank of China raised interest rates on October 28, the first such tightening in nine years. This followed administrative measures in April 2004 that were designed to slow investment in some areas that looked too exuberant, such as real estate, automobiles, aluminum, and steel.

In part for these reasons, Yiping Huang recently cut his forecast for real GDP growth in China in 2005 to 7.8% from 8.2%, although he raised his 2004 estimate to 9.2% from 8.5%. Longer term, however, as this report illustrates, China’s economy is still in the early stages of development, with decades of relatively strong growth still ahead once the near-term obstacles to sustained, noninflationary expansion have been removed.

### Risks

In the near term, one risk is that China’s economy could experience a “hard landing” in which GDP growth slows sharply and much more than expected. Longer-term risks to growth are that the inefficiencies in infrastructure, logistics, and the power industry are not overcome and act as serious impediments to sustained, noninflationary expansion.

Other risks that could potentially derail China’s long-term growth path include problems in the banking sector, high levels of unemployment, income inequality, regional disparities, and the Taiwan issue.

Specifically, the banking sector is largely state owned, and many Chinese banks have been lending primarily to state firms. The risk is that this lending may be motivated more by political forces than market ones, which could ultimately lead to overinvestment and excess capacity. Related to this point, high levels of unemployment could occur if investments are undertaken that do not generate adequate returns, leading to plant closings and layoffs. Moreover, while employment levels have been growing rapidly, many of those gains have been concentrated in coastal China, which creates the risk that income inequalities and regional disparities could develop, leading to social unrest.

Finally, there is the ever-present issue of Taiwan, which mainland China views as a renegade province. Should this issue ever escalate to military action that could, of course, have serious repercussions for China’s economy.
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Smith Barney Equity Research Ratings Distribution

Data current as of 30 September 2004

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<th>Buy</th>
<th>Hold</th>
<th>Sell</th>
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<td>% of companies in each rating category that are investment banking clients</td>
<td>40%</td>
<td>55%</td>
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