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**China as Employer and Consumer:  
Economic Outlook for the 11<sup>th</sup> Five-Year Plan  
(2006-2010)**

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## About the Author

Arthur Kroeber has been managing editor of the *China Economic Quarterly* since 2002. A graduate of Harvard College, he began working in Asia in 1987 as a journalist specializing in economic affairs, and has reported from China, Taiwan, India, Pakistan, Thailand and Nepal. From 1992 to 2002 he was a correspondent of the Economist Intelligence Unit covering China and South Asia and was the author of numerous research reports on China and India. Mr. Kroeber is a regular contributor to the opinion page of the *Financial Times* and a consultant to *Oxford Analytica*. His articles have also appeared in the *Economist*, the *Far Eastern Economic Review*, *Wired*, and numerous newspapers. He speaks frequently on the Chinese economy at conferences in Asia and Europe.

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# China as Employer and Consumer:

## Economic Outlook for the 11<sup>th</sup> Five-Year Plan (2006 -2010)

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### I. Structure of China's economy and employment

China's impressive economic growth of the past quarter century (9.4 percent average annual real GDP growth between 1980 and 2004, by official figures) is not miraculous; on the contrary, it can largely be explained by conventional models of economic development.

The most important component of China's growth is the immense productivity gain arising from the shift of labor from low-productivity agriculture to higher-productivity services and industry. Average annual returns to labor in agriculture in China are US\$300; in services, US\$900 and in industry, US\$3,000. Enormous gains are thus possible simply by moving workers from farms into urban occupations.

Such gains, of course, can only be realized if it is possible to generate jobs for workers to move into, especially in manufacturing. China's ability to generate such employment is unusually high among developing countries: manufacturing accounts for about 32 percent of GDP, compared to, for instance, 18 percent in India. A variety of historical and policy reasons explain this. It is often forgotten that in pre-industrial times, up to the early 19th century, China was by far the world's most important manufacturer. In 1800, according to economic historian Angus Maddison, China accounted for about one-third of world manufacturing value – approximately equal to its share of world population. China's share of world manufacturing value fell to about one percent by 1950, rose slightly to three percent over the next 30 years of the command economy, and then rose much more rapidly during the reform period to around nine-percent in 2005.

The recent manufacturing take-off was made possible by a number of policies. The decision to open the country to foreign investment – radically different to the relatively closed development approaches taken by Japan, Taiwan and South Korea – brought two major benefits. First, foreign companies brought technology which enabled great increases in worker productivity. Second, they brought instant access to sources of demand in rich-country markets. This enabled China to rapidly develop export industries without costly and time-consuming investments in foreign distribution channels.

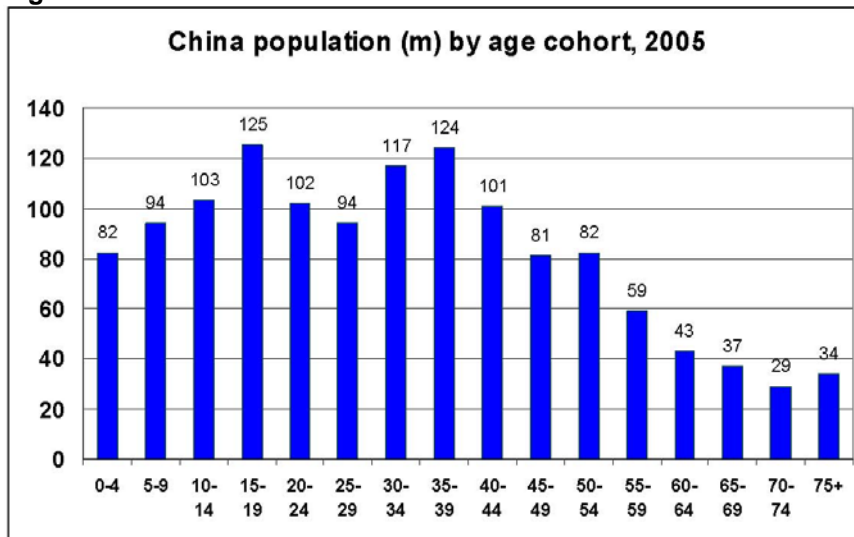
The other major policy factors were the devolution of economic decision-making (and accountability) to local governments, which spurred intense competition for investment; and the consistent bias in government spending towards infrastructure, rather than spending on social services. China's relatively high quality of infrastructure – especially in ports and logistics – distinguishes it sharply from other low-cost production countries, and uniquely enables China to integrate its low-cost labor force into global production chains.

## Prospects for future growth

The strong institutional foundations of China's growth suggest that continued rapid economic development is likely for the next two decades. The major source of China's growth has been structural productivity gains arising from the shift of labor from agriculture to industry and services. This process is by no means exhausted – in fact, China's ratio of agricultural workers to the total labor force is about the same as Japan's was in 1950, at the *beginning* of that country's most explosive period of economic growth.

Additional demographic and structural factors underpin this optimistic outlook. As Figure 1 demonstrates, the largest single demographic cohort is the 15-19 age group, i.e. the people who are entering the work force now and will continue to do so over the next decade, depending on how much schooling they receive. Demographic projections suggest that China's working age population will increase from 928 million today to a peak of 995 million in 2015. After that it will decline very slowly for another decade. Even using more conservative assumptions positing an earlier and lower peak and a swifter decline, China will be able to support a high-level of labor-intensive growth for many years to come.

**Figure 1**



Source: US Census Bureau

Perhaps more important, productivity is likely to rise sharply in coming years because of greatly increased rates of education. Educational participation has risen persistently in the past 15 years (see Figure 2). The government has an ambitious set of 50-year targets for educational targets (see Figure 3) and many of the intermediate milestones are well on their way to being met (It is, however, important to note that the government has not provided a convincing mechanism for financing its more ambitious educational aims). As a result, when the pace of productivity gains from sheer workforce participation begins to fall, productivity gains from higher levels of education should pick up the slack. In fact, it is likely that these two forces will work together to some extent over the next two decades, producing average annual growth in real GDP during the period of eight percent.

**Figure 2**

<b>Educational transitions</b> % of students advancing to next educational level			
	<b>Primary to middle school</b>	<b>Middle school to high school</b>	<b>High School to tertiary</b>
<b>1990</b>	74.6	40.6	27.3
<b>1995</b>	90.8	50.3	49.9
<b>2000</b>	94.9	51.2	73.2
<b>2004</b>	98.1	62.9	82.5

Source: China National Bureau of Statistics

**Figure 3**

<b>China's key education objectives, 2001-2050</b>				
<b>Objective</b>	<b>2001</b>	<b>2010</b>	<b>2020</b>	<b>2050</b>
Population receiving 9-year compulsory education, %	85	95	99	-
Gross senior secondary school enrollment rate, %	54	73	85	100
Gross tertiary enrollment rate, %	13	23	40	55
Average years of education of working age population	8.0	9.6	10.0	13.5
Working-age people with higher education, %	4.7	10.5	19.3	44.0
Engineers and scientists per million population	NA	NA	1,500	3,000
Education expenditure as % of GDP	2.9	6.6	7.2	7.8

Source: China Ministry of Education

The above analysis focuses mainly on long-term structural issues and ignores short- and medium-term problems such as excessive investment, industrial overcapacity, declining profitability, and financial sector weakness. While these problems are serious, the author believes that most of them are natural concomitants of rapid industrial growth in a large, low-income country and that their peril is frequently exaggerated by outside analysts. China's industrial development and impact on world prices for commodities and finished goods closely parallels that of the United States between 1865 and 1914. The era of U.S. emergence, while one of generally high growth, was also marked by several major financial panics. But the vastly different monetary systems of the two eras – then, a rigid gold standard which greatly aggravated the deflationary impact of cyclical downturns; now, a flexible fiat money system in which downturns can be neutralized by printing money – suggests that the era of Chinese emergence is likely to be fundamentally more stable.

Taking the oft-cited problem of bad loans in the banking systems as an example, the basic gamble taken by China's policy makers is that rapid economic growth will eventually reduce this problem to a manageable level relative to GDP, at which point it can be directly financed through the fiscal system. So long as most investment goes into productive rather than non-productive assets, and so long as the rate of bad loan creation is kept well below the rate of growth in GDP, this is a reasonable gamble.

A final point is that pessimistic views of China's growth prospects tend to focus one-sidedly on the transition costs created by the nation's rapid shift from planned to market economy.

These include social welfare and pension costs, as well as the weakness of the financial sector which is in essence a legacy of the planned economy. Yet there are also transitional benefits that contribute to economic growth. Chief among these is the emergence of the private sector. Since 1998, the state sector's share of business output has fallen by 13 percentage points, to 33 percent, while the private sector's share rose by ten points, to 45 percent (foreign enterprises account for the rest). According to a recent analysis by the OECD, private firms in China consistently enjoy profit ratios four to five percentage points higher than state firms. Thus the shift of production from state to private produces a one-off efficiency gain that boosts growth. This shift is likely to continue at a rapid pace for the next four or five years and then decelerate.

### Conclusions

Economic growth in China is underpinned by very powerful structural factors that will remain in place for many years. These factors suggest that China will be able to sustain a high rate of growth in output and job creation during the period when the population of working age is at its peak (2005-2015), and that improved education will generate significant productivity gains when the working-age population declines and the potential for growth from sheer accumulation of labor wanes. Economic policy has generally been supportive of growth, and incremental progress is visible in many areas of concern. While serious problems and distortions still exist, they are not sufficient to derail China's growth momentum, and in fact their solution is likely to be financed by the high growth that may reasonably be expected in the coming years. While it is improbable that China will be able to sustain the 9.4 percent average annual real GDP growth of the past 25 years, an average growth rate of 7.5-8 percent is certainly achievable for the next decade, and possibly for another decade thereafter.

## II. China as consumer

Much attention has been paid of late to China's role as a consumer. The resulting commentary is, on its face, rather contradictory. On the one hand, China is condemned as an extravagant, wasteful gobbler of energy, minerals and other natural resources, pillaging its own environment and putting a strain on worldwide supplies of crude oil, iron ore and other commodities. On the other, China is condemned for not relying enough on consumption to fuel economic growth.

The contradiction is more apparent than real. The two criticisms boil down to one, namely that China's growth depends too heavily on resource- and capital-intensive investment in industry, a disproportionate amount of whose output is exported. According to its critics, China should therefore strive for more "balanced" growth, relying more heavily on consumption expenditure rather than investment, and on domestic rather than foreign markets.

The only element of this criticism which is not to some degree specious is the terrible environmental cost which China's growth has imposed. While China's industrial development is not unprecedented in nature (it replicates what occurred in Great Britain at the beginning of the 19<sup>th</sup> century and in the United States at the end, albeit with certain

improvements such as the virtual absence of child labor), it is unprecedented in scale. Moreover, it takes place in an environment that has been under strain for many centuries as the result of intensive agriculture, pre-industrial manufacturing and high population density. China faces a real risk of making some populated areas virtually uninhabitable, either by turning them into toxic waste dumps, or by exhausting their water resources. Water shortages and contamination of drinking water are also the most likely sources of regime-threatening political unrest in the next decade. Despite much rhetoric on the subject, the government has made little progress in arresting environmental degradation or promoting more efficient water use.

### Why do Chinese save so much?

Returning to the world of purely economic concerns, the idea that China fails to consume enough (products and services, not natural resources) is often tied to the idea that China invests too much. There is a complicated debate among China economists about what the rate of investment is, whether it is too high and how long it can be sustained at the current level. The debate is obscured by the lack of wholly reliable investment data. Broadly, China appears in recent years to have invested at an average annual rate of 40 to 45 percent of GDP, higher than the prevailing rate of around 38 percent in the 1980s and 1990s, and higher also than the investment rates of Japan and South Korea during their periods of maximum growth. Critics of the high investment rate, both inside and outside China, note the cost in wasted resources and excess industrial capacity. Those who are more sanguine note that China has a comparative advantage in industry, which naturally requires higher investment than services, and that as a continental country, China's infrastructure requirement is proportionally greater than is that of a small country like Japan or South Korea. They also observe that, high as the investment rate is, the domestic savings rate is even higher – meaning that China's investment rate is more sustainable than that of early 1990s Southeast Asia, which relied heavily on short-term foreign capital.

Fascinating as it is to its participants, this debate is largely irrelevant to the question of Chinese consumption. The level of consumption is not necessarily related to the rate of investment, but is the exact inverse of national savings. A reduction in the investment rate may or may not lead to greater consumption; but a reduction in the national savings rate must create a corresponding increase in consumption. China's savings rate – though subject to some of the same uncertainties that cloud the investment rate – appears to have been well over 40 percent of GDP for most of the past decade, and may now be close to 50 percent. Consumption's share of GDP has correspondingly declined. Thus the correct way to approach the question, “Why do Chinese consume so little?” is to ask, “Why do Chinese save so much?”

The simplest answer to the latter question is “Because they are poor and have a lot to worry about”. Per capita GDP in China is still under US\$1,500; international experience suggests that domestic consumption tends to become a significant driver of economic growth at around the US\$3,000 per capita GDP mark. Under the growth scenario advanced above, China would reach this level in about 2015.

International benchmarks aside, there are good reasons to believe that household spending will not become a significant driver of economic growth in the next decade. The main one is that the transition from planned to market economy has involved a massive shift of financial risk from state-owned enterprises to households, thereby creating a large perceived need for precautionary saving by households to fund anticipated retirement, medical and educational expenses.

The shifting of risk is illustrated in Figure 4, which shows the sources of funding for education between 1993 and 2003. The government's share of education funding dropped from 82 percent to 62 percent during the period, while the household share rose by a corresponding amount. Less than half of the household contribution to educational expenditure takes the form of tuition, whose level is regulated by the state. The rest comes through various ad hoc (and often illegal) fees charged to parents by schools to make up funding shortfalls. A similar (and in some ways more dire) situation has arisen with respect to medical care, with hospitals frequently demanding cash payment in advance for many treatments.

**Figure 4**

<b>Sources of educational funds, 1993-2003</b> (All levels of education, % of total)							
	<b>1993</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Government funds	82	69	68	67	66	64	62
Tuition	8	13	14	15	16	17	18
Other	10	18	18	18	18	19	20

*Source: National Bureau of Statistics, China Economic Quarterly*

While it is true that educational and health care expenditure represent forms of consumption, it appears that precautionary saving for future costs considerably outstrips spending on current costs. This makes sense given that the actual level of costs is somewhat unpredictable, and that relatively high inflation in these costs can reasonably be expected (at present, the health, education and housing components of the consumer price index are rising at rates of five to eight percent; prices of most other goods and services are static or falling).

It is also important to note that household saving is only one component of national saving, the others being corporate and government saving. As Figure 5 shows, these latter sources of saving do much to explain why China's saving rate is so much higher than other countries'. Corporate saving has been high recently because of greatly increased corporate profitability in the 2000-2004 period. Profits have been rising not only in the fast-growing private sector but also in the state sector, which was substantially restructured following 1998, with the result that efficiency improved and many loss-making state enterprises exited the market.

Rising corporate profitability translates less quickly into consumption in China than in other countries, because most companies are not publicly listed, and most pay little or nothing in



dividends. In the United States, when corporate profits rise, stock prices and dividends also tend to rise. Shareholders can easily sell or borrow against their stock holdings to finance consumption, and they may also choose to spend, rather than re-invest, some of their dividend income. In China these transmission mechanisms do not exist, so profits tend to stay within the companies that generated them, and get disproportionately funneled into new investment.

**Figure 5**

<b>Structure of savings in China and other countries</b>						
% of GDP						
	<b>China</b>	<b>U.S.</b>	<b>France</b>	<b>Japan</b>	<b>Korea</b>	<b>Mexico</b>
Total domestic savings	45.0	14.3	20.7	25.5	31.0	20.8
Difference China/others		30.7	24.3	19.5	14.0	24.2
<i>Due to:</i>						
Household saving		13.4	7.4	10.0	13.7	10.2
Corporate saving		9.6	10.4	0.5	5.1	9.3
Government saving		7.8	6.6	9.1	-4.8	4.7

*Note: data for China is for 2004, for Mexico for 2001, and for other countries for 2002.*

*Source: Louis Kuijs (World Bank); figures derived from OECD and China National Bureau of Statistics*

Government saving may appear paradoxical, given that China's government runs a persistent budget deficit of one to three percent of GDP. However, government saving represents the difference between government revenue and government consumption expenditure. The government spends all of that saving, plus additional borrowed funds, to finance investment expenditure. Thus, despite apparent budget deficits, China's fiscal policy has been conservative by developing-country standards. About 60 percent of government expenditure goes to consumption (health, education, administration and so on), a relatively low figure; while 40 percent is invested in infrastructure, a relatively high proportion. This policy avoids the common Third World trap of running up large debts to finance unproductive expenditure, and is positive for economic growth, since investment in roads, communication networks and power plants produces long-term returns. However, as noted above, it shifts the burden of financing social welfare to households, and compels them to maintain a high rate of savings. Low government consumption thus leads directly to low household consumption.

## Conclusions

The implication of the above discussion is that there are three mechanisms for increasing consumption in China:

- a) an increase in the overall level of wealth (per capita GDP);
- b) improved financial intermediation, especially through the development of a stock market, enabling increases in corporate profits to stimulate consumption rather than simply encouraging new investment; and
- c) an increase in the share of government expenditure devoted to consumption, which

should also stimulate greater household spending to the extent that an improved social welfare system diminishes the need for precautionary savings.

As noted, the sheer increase in per-capita wealth is not likely on its own to generate a substantial shift to consumption for another decade or so. In the interim, financial-sector reforms and changes in fiscal policy will have to do the trick. This author's view is that while stock market reforms and changes in fiscal policy are theoretically capable of producing stronger consumption, it is highly unlikely that they will do so during the upcoming Eleventh Five-Year plan period (2006-2010).

Financial sector reform is likely to be quite substantial over the next five years. The domestic stock market, which has been essentially non-functional for the past four years, is now undergoing an important restructuring. Until this year, about 70 percent of the shares in domestically listed companies were a special class of shares held by state entities or other legal persons, and were not exchange-tradable. In the early years of the market (1993-2001) the shortage of tradable shares created a share-price bubble. But after 2001, when the government made clear its intent to release non-tradable shares into the market, prices plummeted. The problem for the government was thus to find a way to release its shares into the market without triggering a wholesale market collapse.

In May 2005, 46 listed firms were allowed to pilot a share reform under which all their shares were made tradable, with compensation (in cash, shares or options) given to existing shareholders to make up for declines in the share price. The pilot program was subsequently extended to all 1,300 domestically listed companies. The China Securities Regulatory Commission (CSRC) has indicated that by mid-2006, about 300 firms representing 60-70 percent of market capitalization will have completed restructuring, at which point new listings – on hold for most of the past two years – can resume. There is a huge backlog of companies waiting to list, and an enormous amount of funds available to buy shares (about US\$1 trillion in idle bank deposits). A substantial expansion of the stock market can be expected from 2007 onwards, and if it is handled properly it may, for the reasons outlined above, produce a boost to consumption.

Reform of the banking sector, which is almost entirely state owned, is also underway. A number of important regulatory measures enacted in 2002-2004 should gradually force the banks to price risk more carefully and act in a more commercial manner. Virtually all significant banks now have or will soon have foreign banks as strategic shareholders, and the expectation is that these strategic partners will introduce modern management techniques and technology. Improved financial intermediation and credit procedures should also boost consumption, since Chinese consumers at present have virtually no access to credit except for home mortgages. However it is unlikely that the slow process of bank reform will produce large increases in consumer credit within the next five years. Significant progress in this regard may become evident early in the next decade.

In the short term, the most plausible source of consumption stimulus is from the government. As noted, government consumption expenditures are relatively low, and this stance depresses private consumption as well, because it increases the need for precautionary saving. The IMF and World Bank have both argued that China has fiscal room to increase expenditure on services such as health and education, and that it ought to do so. The

government of Hu Jintao and Wen Jiabao has paid considerable lip service to the idea of a more socially responsive government, but has so far proved reluctant to alter fiscal policy in any substantial way. This conservative stance is likely to persist at least through the next Communist Party plenum, in late 2007. Thereafter, a re-ordering of fiscal priorities is possible, but given the large and complex nature of the Chinese state any reforms adopted then would be unlikely to have widespread macro-economic impact until 2010 or so.

In sum, the inertia of the current investment- and export-led growth model, combined with demographic factors that favor continued high rates of investment in labor-intensive industry and urban infrastructure, suggest that the structure of Chinese economic growth will remain more or less the same over the next five years. Beginning in 2010, a combination of financial sector and (perhaps) fiscal reforms will enable consumption to play a larger role, and beginning in or around 2015 consumption will be further boosted by China's attaining a level of wealth that in other countries has proved to be the take-off point for consumer spending.