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Chapter 1:

China's Consumption Driven Growth Path

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Chapter 1:**China's Consumption Driven Growth Path*****Introduction**

In December 2004 at the annual Central Economic Work Conference, China's top political leadership agreed to fundamentally alter the country's growth strategy by rebalancing the sources of economic growth. In place of investment and export-led development, they endorsed transitioning to a growth path that relied more on expanding domestic consumption.¹ Since then, China's top leadership, most notably Premier Wen Jiabao in his speeches to the annual meetings of the National People's Congress in the spring of 2006 and 2007 and at the Central Economic Work Conference in November- December 2006, has reiterated the goal of strengthening domestic consumption as a major source of economic growth.²

China's decision to rebalance the sources of economic growth is laudable. It increases the likelihood of China sustaining its strong growth, achieving more rapid job creation, improving income distribution or at least slowing the pace of rising income inequality, and reducing its outsized increases in energy consumption of recent years. It also would reduce global economic imbalances and thus lessen the risk that China would be subject to protectionist pressure, especially in Europe and the United States.

But at least through the first half of 2007, China's economic growth has become even more imbalanced. Although the growth of investment expenditures has moderated slightly, net exports of goods and services have soared. China's external surplus ballooned to a global record in 2006 and continued to expand at a breakneck pace in the first half of 2007. Most importantly, both government and private consumption expenditure as a share of GDP have

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<http://www.petersoninstitute.org/publications/papers/lardy0507.pdf>.

¹ "Central Economic Work Conference Convened in Beijing December 3 to 5," *People's Daily*, December 6, 2004, 1, available at: <http://www.people.com.cn>. (accessed July 21, 2006).

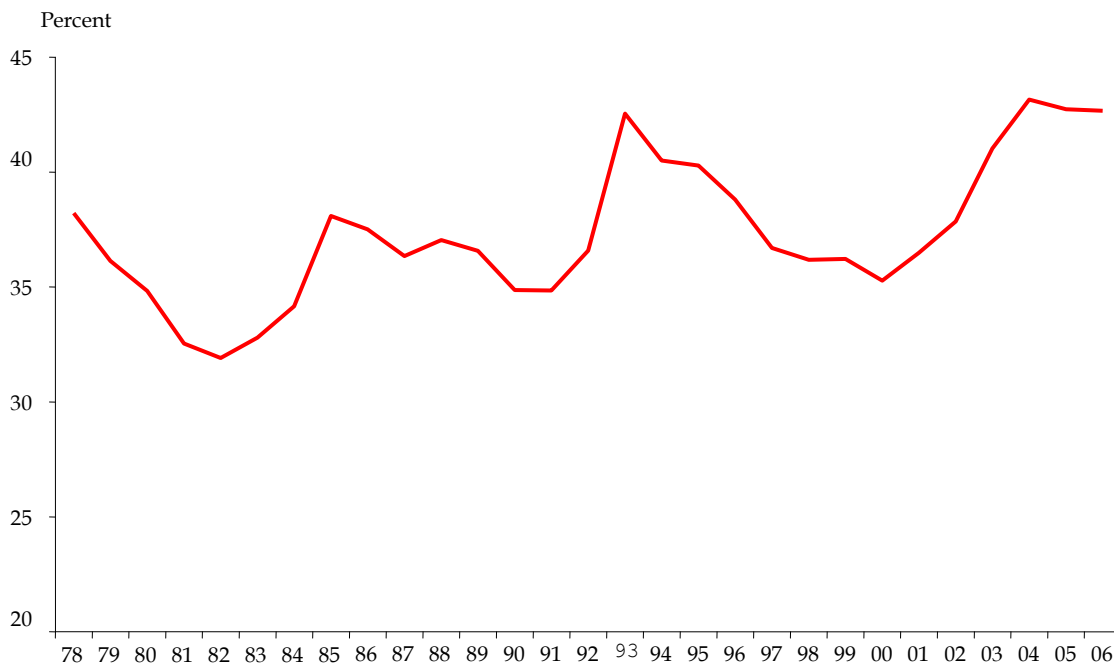
² Wen Jiabao, "Report on the Work of the Government," *People's Daily*, March 14, 2006, <http://english.people.com.cn> (accessed March 14, 2006). New China News Agency, "We must concretely grasp eight work items to do well in next year's economic work," December 1, 2006 at <http://politics.people.com.cn/GB/1024/3907488.html> (accessed December 12, 2006). Wen Jiabao, "Report on the Work of the Government," March 5, 2007.

continued to fall since 2004. As a consequence, China also is falling short of meeting several of its key domestic economic objectives.

The Sources of China's Economic Growth

China has been the fastest growing economy in the world over almost three decades, expanding at 10% a year in real terms, so real GDP in 2006 was about 13 times the level of 1978, when Deng Xiaoping launched China on the path of economic reform (National Bureau of Statistics of China, 2006a, p.24; Xie Fuzhan, 2007). China is now the world's fourth largest economy and its third largest trader and highly likely, within a year, to move up a notch in each category. Given this stunning long-term success, why would China's leadership entertain the idea of shifting to a new growth paradigm?

Figure 1: Investment as percent of GDP, 1978-2006

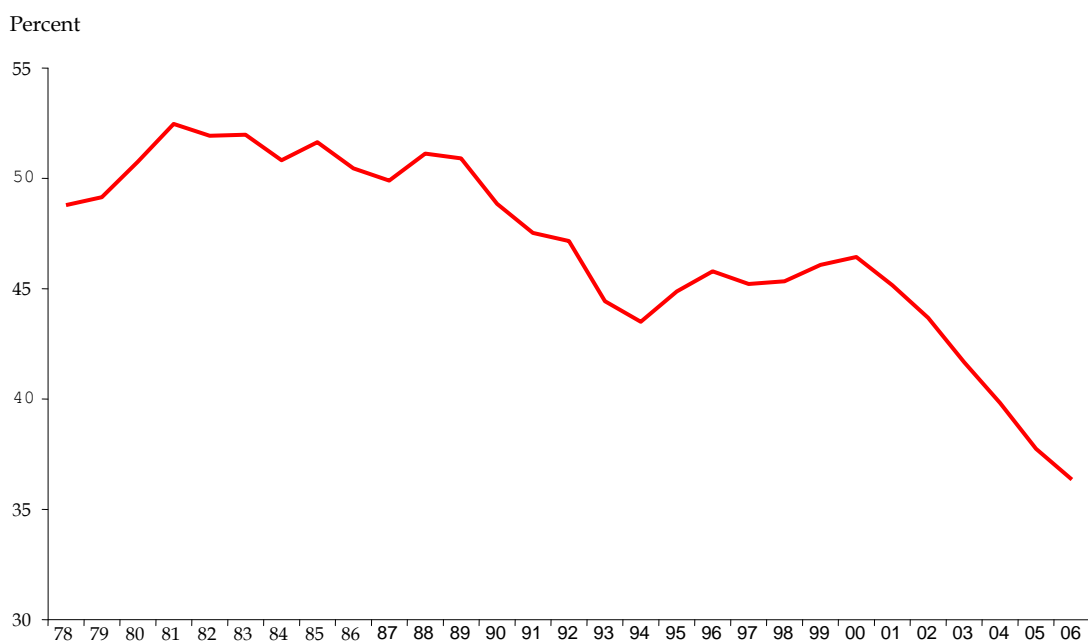


Source: National Bureau of Statistics of China, China Statistical Yearbook 2006; CEIC

In all economies the expansion of output is the sum of the growth of consumption (both private and government) plus investment, plus net exports of goods and services. Expanding investment has been an increasingly important driver of China's growth. As shown in Figure 1, investment averaged 36% of GDP in the first decade or so of economic reform, relatively high by the standard of developing countries generally but not in comparison with China's East

Asian neighbors when their investment shares were at their highest. But since the beginning of the 1990s, China's average investment rate has been higher and in 1993, and again in 2004-06, reached 43% of GDP, a level above the experience of China's East Asian neighbors in their high growth periods.³ Rising investment has been fueled by a rise in the national savings rate, which reached an unprecedented 52% of GDP in 2006.⁴ Rising investment was particularly important in 2001-2005, when it contributed just over half of China's growth (National Bureau of Statistics of China, 2006b, p.70), an unusually high share by international standards.

Figure 2: Household consumption as percent of GDP, 1978-2006



Source: National Bureau of Statistics of China, China Statistical Yearbook 2006; CEIC

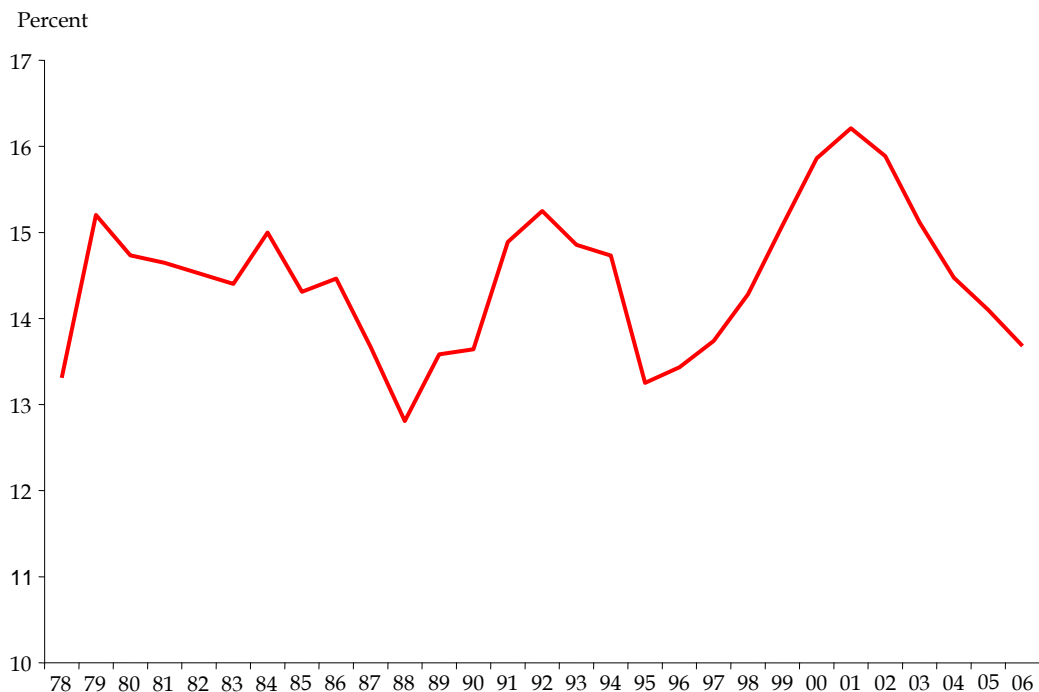
The growth of both household and government consumption (Figures 2 and 3) has been rapid in absolute terms throughout the reform period, but has lagged the underlying growth of the economy. As shown in Figure 2, in the 1980s household consumption averaged slightly more than half of GDP. This share fell to an average of 46% in the 1990s. But after 2000 household consumption as a share of GDP fell sharply – and by 2006 accounted for only 36% of

³ All of the analysis of the expenditure components of GDP, i.e. consumption, investment, and net exports, is based on the revised GDP expenditure data for the years 1978 through 2005 released by the National Bureau of Statistics of China (2006b) in late September 2006. Data for 2006 were released in May 2007.

⁴ By definition, the national savings rate is equal to investment as a share of GDP plus the current account as a percent of GDP. In China, these were 42.7% and 9.5% of GDP, respectively, in 2006.

GDP, by far the lowest share of any economy in the world.⁵ In the United States, household consumption accounted for 70% of GDP in the same year. In the United Kingdom, the household consumption share was 60%. In India, it was 61%.

Figure 3: Government consumption as percent of GDP, 1978-2006

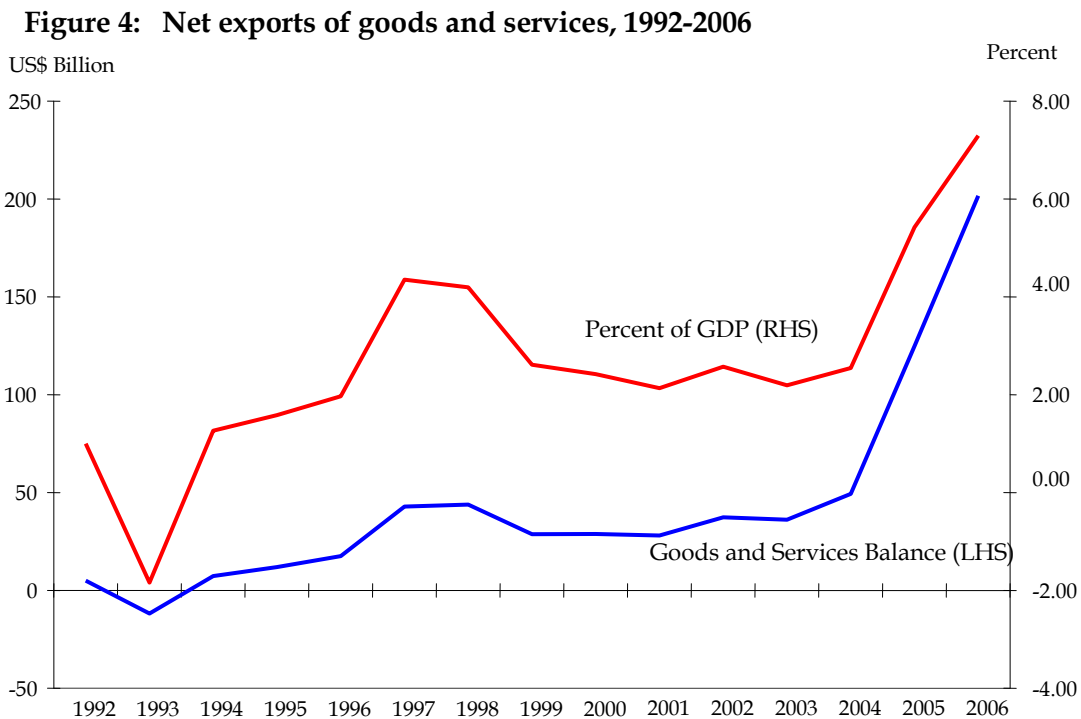


Source: National Bureau of Statistics of China, China Statistical Yearbook 2006; CEIC

As a result of these trends in household and government consumption, the relative importance of expanding consumption as a source of growth has diminished substantially, particularly compared with that of investment. In the first half of the 1980s consumption growth accounted for almost four-fifths of China's economic expansion, whereas in the five-year period 2001-2005, this share fell by one-half to only two-fifths (National Bureau of Statistics of China, 2006b, p.70).

⁵ The declining share of consumption in GDP is due to both a decline in household disposable income as a share of GDP and a decline in consumption as a share of disposable income. Some analysts believe that household consumption, particularly of services, is undercounted by China's National Bureau of Statistics and thus the share of household consumption in GDP is biased downwards. If GDP was undercounted by 8% or 12%, and the entire increment was private consumption of services, household consumption would have constituted 42% and 44%, respectively, of GDP in 2005 (Dragoneconomics Research & Advisory, 2007). Even on these alternative assumptions, however, private consumption as a share of GDP would be unusually low by international standards. These adjustments would also lower the investment share of GDP by 3 and 4 percentage points, respectively. The higher consumption and lower investment share of GDP would mean the degree of internal imbalance is less than that reflected in the official data. Note, however, that on these alternative assumptions, China's large and growing external imbalance would decline by only a few tenths of a percentage point.

In the last two years, the growth of net exports of goods and services has also become, for the first time in almost a decade, a major source of economic growth. As shown in Figure 4, the net exports of goods and services in 2005 more than doubled to reach \$124 billion and accounted for one-quarter of the growth of the economy (National Bureau of Statistics of China, 2006b, p.70). In 2006 they expanded further to \$209 billion and accounted for about one-fifth of China's growth (State Administration of Foreign Exchange International Balance of Payments Analysis Small Group, 2007, p.8).



Source: National Bureau of Statistics of China, China Statistical Yearbook 2006; International Monetary Fund, International Financial Statistics; CEIC

In sum, despite the decision of the Party in 2004 to stimulate domestic consumption demand, both household and government consumption have continued to fall as a share of GDP. The government has been more successful in moderating the growth of investment and thus the contribution of investment to GDP expansion has fallen from the extraordinarily high levels of 2002-2003. On the other hand net exports of goods and services have soared and their contribution to economic growth is currently unusually large leading, Premier Wen Jiabao at the National People's Congress in the spring of 2006 to opine that "we must strive to reduce our excessively large trade surplus."

Rethinking China's Growth Strategy

Several factors appear to underlie the December 2004 leadership decision to rebalance the sources of growth. First, investment-driven growth, or what the Chinese sometimes call extensive growth, appeared to be leading to less efficient use of resources. By some metrics, as investment growth accelerated, the efficiency of resource use declined. Multifactor productivity growth, a critical contributor to economic expansion in all economies, averaged almost 4% per annum in the first 15 years of economic reform (1978–93) but slowed to only 3% since 1993 (Kuijs and Wang, 2005, p.2). In short, as the investment share of GDP rose, the contribution of productivity improvements to GDP growth fell. In the words of Martin Wolf (2005), the chief economics commentator for the *Financial Times*, the surprising thing about the Chinese economy in recent years is not, as is so frequently asserted, how fast it is growing but rather, given the outsized share of output devoted to investment, how slowly it is growing.

The second reason underlying the leadership decision to rebalance the sources of growth is the desire to increase personal consumption and alleviate, or at least slow, the pace of increasing income inequality. In 2005, personal consumption in China was 30% less in real terms than the level that would have been achieved if the household consumption share of GDP had remained at the 1990 level rather than falling by more than 10 percentage points. India offers a useful comparison. In 2004 China's per capita GDP was two and a half times that of India. But, because household consumption as a share of GDP was so much lower in China, per capita consumption exceeded that in India by only two-thirds.⁶ The ultimate purpose of economic growth everywhere is improvements in human welfare. By this standard, China is falling far below potential.

Similarly, it appears that a portion of increasing income inequality in recent years can be attributed to the highly imbalanced regional pattern of growth. The positive differential in the pace of growth in coastal provinces compared to the national average has increased along with the sharply higher pace of growth of foreign trade (particularly exports) that has occurred since 2000.⁷ Moving away from heavy reliance on export led growth thus is consistent with Hu

⁶ Calculated on the basis of the Indian Ministry of Statistics and Program Implementation, *National Account Statistics*, available at: <http://mospi.nic.in>, IMF, *International Financial Statistics*; and National Bureau of Statistics of China (2006b, pp. 34, 36, 171).

⁷ From 1978 through 2000 China's trade turnover (imports plus exports) measured in value terms expanded at an average rate of 15 per cent per year. From 2000 through 2006 the pace accelerated to 25 per cent per year.

Jintao's emphasis on, creating a more "harmonious society," which requires, among other things, more balanced development between coastal and inland areas.

Third, China's extensive pattern of development has generated very modest gains in employment. Between 1978 and 1993, employment expanded by 2.5% per annum, but between 1993 and 2004, when the investment share of GDP was much higher than in the 1980s, employment growth slowed to only slightly over 1% (Kuijs and Wang, 2005). The recent more capital intensive pattern of growth contributed to a slower pace of job creation for the simple reason that the steel and other investment goods industries employ far fewer workers per unit of capital than do consumer goods industries, not to mention the even less favorable comparison with services.

Another reason China's leadership wishes to transition to a more consumption-driven growth path is burgeoning energy consumption and its detrimental effects on the environment. Investment-driven growth requires the output of machinery and equipment, and the inputs to produce them, to grow much more rapidly than the output of consumer goods. Rapid growth of output of investment goods, in turn, increases the demand for energy disproportionately. China's energy elasticity of GDP growth (the number of units of energy required to produce an additional unit of output) averaged a modest 0.6 in the 1980s and 1990s, leading over time to a substantial reduction in the amount of energy required to produce each unit of GDP. But this ratio rose to an average of 1 in 2001-05 (National Bureau of Statistics of China, 2006a, p.147). Although China continues to achieve energy efficiency gains in the production of virtually all products, from 2001 through 2005 these gains were no longer sufficient to offset the effect of the rapid expansion of the most energy intensive sectors of manufacturing, including steel, chemicals and cement.⁸

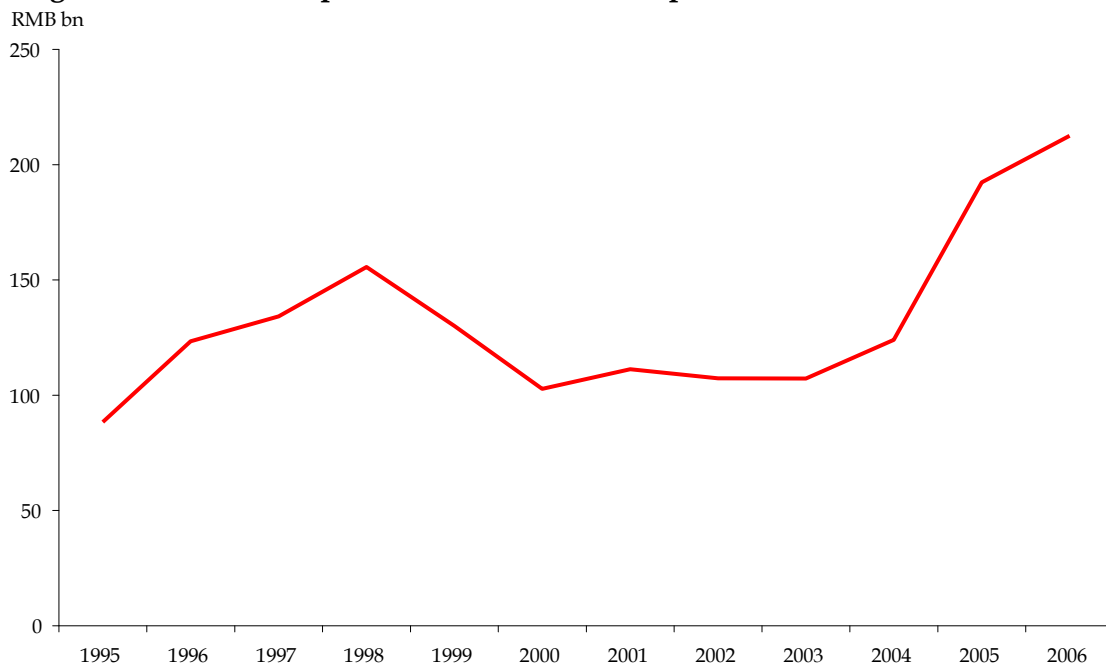
Since two-thirds of China's energy comes from coal, the burgeoning demand for energy generated by capital-intensive growth boosted coal consumption by two-thirds between 2000 and 2005. Coal consumption reached more than 2 billion tons in 2005, almost twice the level of coal consumption of the United States, even though China's economy is only one-sixth the size of the United States. As a result, China is now the second largest emitter of greenhouse gas and is home to 16 of the 20 cities with the worst air pollution on the globe. As a result of the massive

⁸ For example, in 2003 overall efficiency gains were the equivalent of about 30% of the adverse effect on energy efficiency stemming from the structural shift toward the most energy intensive subsectors of the industrial sector (Jin, 2006).

increase in coal consumption, the State Environmental Protection Agency (SEPA) reported that rather than cutting sulfur dioxide emissions in 2000–2005 by 10% to 18 million tons as planned, by 2005 emissions rose to 25.5 million tons, 42% above the goal.⁹

A fifth factor motivating China's leadership to seek a transition to a more consumption-driven growth pattern is less obvious but still important. Excessive reliance on investment and net exports to drive growth in recent years threatens to undo some of the progress China has made over the past six years in developing a commercially oriented banking system. A critical component of this process has been the injection of almost 4 trillion renminbi (RMB) (\$500 billion), mostly from the government, to cover past loan losses and to raise capital adequacy to meet prudential standards (Ma Guonan, 2006).

Figure 5: Losses of unprofitable industrial enterprises, 1995-2006



Source: National Bureau of Statistics of China, China Statistical Yearbook 2006; CEIC

Excess investment in some sectors could eventually lead to excess capacity and falling prices, which could create a new wave of nonperforming loans that would erode the substantial balance sheet improvements of state-owned banks over the past few years and could push some city commercial banks, which on average are far weaker, into insolvency. The National Development and Reform Commission (2006) in its report to the National People's Congress

⁹ Oster, 2006.

acknowledged that “adverse effects of surplus production capacity in some industries have begun to emerge. Prices for the products of these industries dropped and inventories grew, corporate profits shrank and losses mounted, and potential financial risk has increased.” This analysis is supported by the rapid increase in the magnitude of financial losses of unprofitable industrial enterprises. As shown in Figure 5, after several years of stability, losses have more than doubled since 2003. Since net profits of all enterprises rose sharply in this period (see Figure 7) there apparently has been a sharp increase in the dispersion of the profitability of China's industrial firms over the past three years.

The absence of significantly rising non-performing loans in the banking system in the past few years is not necessarily a sign that all is well, since China has had four consecutive years of double-digit growth and aggregate corporate profits have been rising. Moreover, based on China's exploding current account surplus in recent years (see Figure 6 and related discussion below) the RMB appears to be increasingly undervalued, contributing to the growth of profits in the tradable goods sector, i.e., manufacturing. Distress in the banking system could emerge, however, either from a slowdown in economic growth over the next few years or from a significant appreciation of the currency.

A final factor underlining the leadership's desire to transition to more consumption-oriented growth is that excess reliance on a growing trade surplus raises the prospect of a protectionist backlash in the United States, Europe, and other important markets for Chinese exports. China's central bank was perhaps the first to explicitly acknowledge this factor in its *Report on the Implementation of Monetary Policy Report 2005Q2*, in which it candidly stated that China's excessive trade surplus “will escalate trade frictions” (People's Bank of China Monetary Policy Analysis Small Group, 2005, p.28).

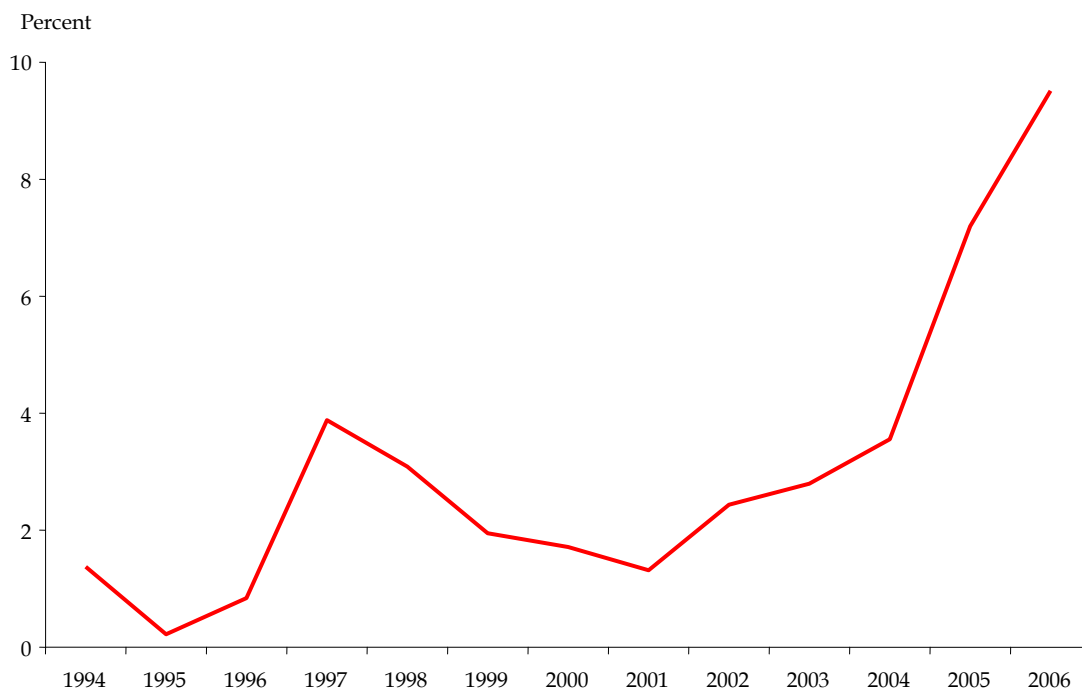
In sum, for a variety of reasons China's top political leadership and its leading economic advisory institutions by late 2004 came to the view that sustaining long-term rapid growth required a significant modification of the underlying growth strategy.

Implications for the Global Economy

China's new growth strategy, if realized, would have positive implications not only for China, but also for the global economy. As shown in Figure 6, China's current account surplus has soared in recent years. In 2006 it reached \$249 billion making China, for the first time, the world's largest global current account surplus country. China now is a major contributor to

global economic imbalances, along with the United States, which has the world's largest current account deficit. China's successful transition to a pattern of growth driven more by domestic consumption demand necessarily entails a reduction of China's national saving rate relative to its investment rate. That, in turn, would reduce China's current account surplus. Thus rebalancing of China's economic growth would contribute to a reduction of global economic imbalances as well.

Figure 6: Current account balance as percent of GDP, 1994-2006



Source: National Bureau of Statistics of China, China Statistical Yearbook 2006; State Administration of Foreign Exchange of China Website.

Promoting Consumption Driven Growth

Promoting domestic demand as a source of economic expansion requires that the growth of household and/or government consumption increase relative to that of the combined growth of investment and net exports. Policies to promote consumption fall into three broad categories: fiscal, exchange rate, and financial. Fiscal policy options include cutting personal taxes, increasing government consumption expenditures, i.e., government noninvestment outlays, or introducing a dividend tax on state-owned companies. Appreciation of the RMB would simultaneously reduce net exports and allow the government greater flexibility in the use of interest rate policy (Goodfriend and Prasad, 2006). As will be argued below, higher real interest rates are almost certainly necessary to reduce China's excessive rate of investment, which in

turn is a prerequisite to a successful transition to a more consumption-driven growth path. Finally, financial reform could increase interest income received by households, potentially raising household disposable income and thus consumption.

Fiscal Policy: The most obvious policy choice in economies seeking to stimulate consumption is to cut personal taxes, thus raising disposable income and personal consumption expenditures. In addition, governments can increase budgetary expenditures, notably those on health, education, welfare, and pensions, to add to domestic consumption demand. There is enormous scope to do so in China, since governments at all levels combined spend only 3% of GDP on these programs (National Bureau of Statistics of China, 2006b, p.288).¹⁰ The low level of social expenditure is reflected in the very limited share of the population that has health, unemployment and workers' compensation insurance. In 2003, for example, in urban areas only about one-half of the population was covered by basic health insurance, and in rural areas less than one-fifth of the population was covered by a cooperative health insurance program initiated on a trial basis in 2002 (OECD, 2005, p.185). In 2005, only 14% of China's workforce was covered by unemployment insurance, and only 11% were covered by workers' compensation (National Bureau of Statistics of China, 2006a, pp. 43, 201). In the same year the pension scheme covered 131.2 million workers, only 17% of those employed, plus 43.7 million retirees (National Bureau of Statistics of China, 2006a, pp. 43, 201).

The government has considerable potential to increase its expenditures on healthcare, unemployment compensation, and pensions without raising taxes on households, which likely would depress household consumption, offsetting to some degree the increase in government consumption. The government could simply reduce its own investment expenditures and reallocate the funds to consumption.¹¹ The government itself directly undertakes about 5% of all investment, an amount equivalent to a little over 2% of GDP (National Bureau of Statistics of China, 2006a, p.52). In addition, the government budget provides "capital transfers," that are used to finance additional investment expenditures.¹² For 2003, the most recent year for which China's National Bureau of Statistics has released the relevant data, these capital transfers were the equivalent of 8% of all fixed investment (National Bureau of Statistics of China, 2006b, pp.

¹⁰ Excluding capital expenditures.

¹¹ This reallocation, of course, would reduce government savings since the latter are defined as current revenues less current, i.e., noninvestment, outlays.

¹² Kuijs (2006, p.7) believes these funds are transferred to state-owned enterprises in electric power, water, transport, and other infrastructure sectors.

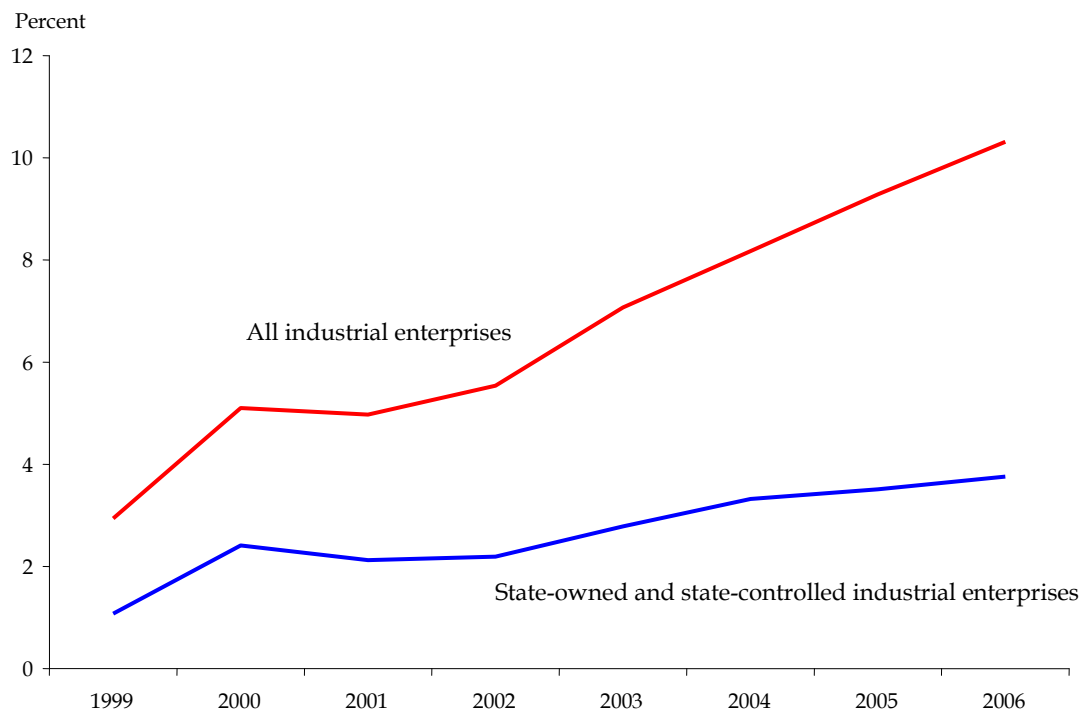
88-89). Thus the government's direct and indirect investment outlays combined amount to about 6% of GDP. A reduction in the government's direct investment and cutting capital transfers would free up resources to increase government consumption, i.e., outlays for health, education, welfare, and pensions. That would contribute significantly to a rebalancing of the structure of demand, away from investment and toward consumption.

Increased government consumption expenditures would also indirectly contribute to increasing household consumption as a share of GDP by reducing the household savings rate, which has increased significantly since the 1980s and has been running at about 25% of disposable income since 2000 (Kuijs, 2006). One reason for the rise in the savings rate in the 1990s was the reduction in the level of social services provided by the government and state-owned enterprises. For example, the share of total health outlays borne by individuals on an out-of-pocket basis increased from around 20% in 1978 to a peak of 60% in 2001 (IMF, 2006, p.49; National Bureau of Statistics of China, 2005, p.770; 2006b, p.882).

Increased provision of health care, unemployment compensation, and workers' compensation through the government budget can be expected to reduce household precautionary saving. As families gain confidence that the government will provide more of these services they will reduce their own saving voluntarily, i.e., increase consumption as a share of their own disposable income. Similarly greater government provision of educational services and old age support could lead to a reduction in savings associated with lifecycle events, such as children's education and retirement.

In other countries, increased government provision of health services has stimulated an increase in household consumption (China Economic Research and Advisory Program, 2005). For example, the introduction of National Health Insurance in Taiwan, which raised the fraction of the insured population from 57% in 1994 to 97% in 1998, substantially reduced household uncertainty about future health expenditures and thus stimulated increased consumption outlays. Households that previously enjoyed no health insurance coverage increased their consumption expenditures by an average of over 4% (Chou, Liu, and Hammitt, 2002, p.1889).¹³ Thus, China's transition to a more consumption-driven growth path needs to start with increased government consumption expenditures but with time is likely to be reinforced by changes in household consumption and saving decisions.

¹³ Consumption increased by 2.6% in households where one spouse was not in the labor force or unemployed and by 5.7% in households where both spouses worked.

Figure 7: Industry profits as percent of GDP, 1999-2006

Source: National Bureau of Statistics of China, China Statistical Yearbook 2006; CEIC

Finally, corporate tax policy should contribute importantly to the rebalancing of China's sources of economic growth. As shown in Figure 7, from 1999 through 2006, profits of industrial enterprises in China soared from 3% to over 10% of GDP (National Bureau of Statistics of China, 2005, p. 494; People's Bank of China Monetary Policy Analysis Small Group, 2006, p. 33). Although these profits are subject to China's corporate income tax, estimated retained after-tax earnings of industrial firms in 2006 amounted to 7.8% of GDP, compared with an estimated 1.5% in 1998.¹⁴ In addition, industrial firms retain depreciation funds that amount to another 6% to 7% of GDP (Kuijs, Mako, and Zhang, 2005).

Unfortunately, in state-owned firms these funds are not subject to a significant rate of return test prior to being reinvested. The reason is that the only available legal alternative to re-investment is low yielding bank deposits. Taking into account the relevant measure of inflation,

¹⁴ Before tax profits of industrial firms with annual sales above RMB5 million were RMB 1,900 billion in 2006 (People's Bank of China Monetary Policy Analysis Small Group, 2007, p.30). In 2004 the profits of all industrial firms exceeded those of firms with sales of more than RMB5 million by 15%. Assuming this ratio was unchanged in 2006 profits of all industrial firms in 2006 can be estimated at RMB 2,185 billion. China's three largest oil producers are subject to a windfall profits tax, which amounted to RMB41.71 billion 2006. Profits also are subject to the corporate income tax. While the statutory rate is 33%, various tax waivers reduce the applied rate to 24% for most domestic enterprises (Zhu Zhe, 2006). Assuming the average corporate tax rate on domestic firms is 24%, after-tax profits can be estimated at RMB 1,628 billion or 7.8% of reported 2007 GDP of RMB20, 941 billion.

the real after-tax rate of return on corporate deposits is typically negative.¹⁵ Given a negative real rate of return on deposits, it is rational for enterprise managers to reinvest all retained profits and depreciation funds—even when the investment projects have slightly negative anticipated rates of return—or to channel them illegally into potentially higher return stock investments.

Given the strong upward trend in profits as a share of GDP since 1999 and apparent upward trend in depreciation funds as a share of GDP as well, retained earnings have become an increasingly important source of investment financing in China's corporate sector and have contributed to the rising investment share of GDP in recent years.

For a number of years, the authorities have discussed requiring state-owned enterprises to pay dividends to their owner—the government (Kuijs, Mako, and Zhang, 2005). This policy has the potential simultaneously to reduce the pace at which investment grows, or at least subject investment to a more demanding rate of return hurdle, and to provide the government with additional resources that could be used to enhance government-provided social services.

Exchange Rate Policy: Exchange rate policy should be a third element supporting China's transition to a more consumption-driven growth path for two reasons. First, through its affect on relative prices, appreciation of the RMB will reduce the growth of exports and increase the growth of imports, reducing China's external imbalance. Second, China's highly undervalued exchange rate constrains the independence of monetary policy. China's central bank has had some success in sterilizing large foreign capital inflows, a key element in its program of controlling the growth of monetary aggregates and bank credit. But it has generally been reluctant to raise domestic interest rates since that would reduce the carry costs of foreigners moving money into China in anticipation of further RMB appreciation. Since lower carry costs increase the profits to be gained from any RMB appreciation, the authorities fear that raising domestic interest rates could cause capital inflows to become unmanageably large. Fixed nominal domestic interest rates on loans in 2002–03, when domestic price inflation was rising, led to a sharp decline in and ultimately to negative real interest rates on loans. Between the first

¹⁵ For example, effective August 19, 2006, the People's Bank of China raised the nominal interest rate on a one-year term corporate deposit to 2.52%. The corporate goods price index in August 2006 was up 2.9% compared with August 2005, making the real return -0.38%. Nominal returns on short-term deposits were less than 2.52%, as low as 0.72% for demand deposits, making the real return on deposits of less than one year as low as -2.18%. The most recent adjustment was effective May 19, 2007 when the one-year deposit rate was raised to 3.06%. But the corporate goods price index for May 2007 was up 5.1% compared with May 2006, making the real return -2.04%. The demand deposit rate was left unchanged at 0.72% so by mid May the real return fell to -4.38. In short deposit rates for corporates are becoming increasingly negative in real terms.

half of 2002 through the third quarter of 2004, the real interest rate on loans fell by 13 percentage points, from almost 9% to -4%.¹⁶ That fueled a very large increase in the demand for bank loans and thus a sharp increase in capital formation.

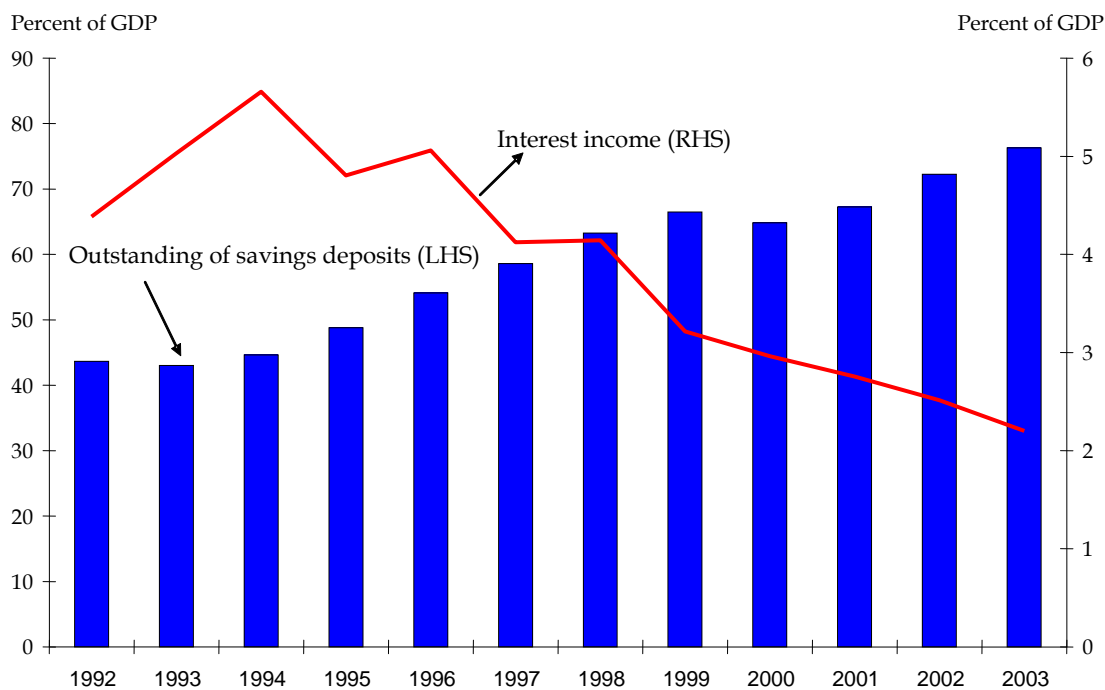
A more flexible exchange rate policy would allow the central bank greater flexibility in setting domestic interest rates and thus increase the potential to mitigate macroeconomic cycles by raising lending rates to moderate investment booms. That would lead, on average, to a lower rate of investment. A reduction in the rate of investment is a critical component of the policies to transition to a more consumption-driven growth path. In the absence of a reduction in investment, increased consumption demand would lead to inflation.

Financial Reform: The decline in household consumption as a share of GDP, shown in Figure 2, reflects not only an increase in savings as a share of household disposable income but also in a decline in the share of disposable income in GDP. Between 1993 and 2003 household disposable income as a share of GDP fell by 4.8 percentage points.¹⁷

Part of the explanation of this decline may be increasing financial repression. China's financial sector has been undergoing far reaching reform for more than a decade, suggesting that the degree of repression has eased in recent years. However, from the point of view of households this appears not to be the case. As shown in Figure 8, although household deposits in the banking system as a share of GDP almost doubled between 1993 and 2003, the stream of pre-tax interest earnings generated by these savings declined from an average of about 5% in 1992-95 to only 2.2% of GDP in 2003. The declining contribution of interest earnings to disposable income was even greater since the government introduced a 20% tax on interest income in 1999. Taking this factor into account, the decline in the contribution of after tax interest income to household disposable income over this period accounts for two-thirds of the decline in household disposable income as a share of GDP. More importantly, if interest earnings after 1995 had grown in line with the stock of household bank deposits and the government had not introduced a tax on interest income, the contribution of interest income to household disposable income by 2003 would have been 7.5% of GDP, 5.7 percentage points greater than the actual contribution.

¹⁶ The real interest rate is calculated as the one-year lending rate minus the inflation rate reflected in the corporate goods price index. The latter index is compiled and published by the People's Bank of China.

¹⁷ Calculated from data in the flow of funds accounts reported in the annual *China Statistical Yearbook*. These data were first released for 1993 and 2003 is the most recent year available.

Figure 8: Household savings and interest income, 1992-2003

Source: National Bureau of Statistics of China, China Statistical Yearbook 2006; CEIC

China's Pursuit of Consumption Driven Growth

Even before the 2004 Central Economic Work Conference, the government sought to raise farm incomes by reducing the agricultural tax levied on farm income (Ministry of Finance, Ministry of Agriculture, and State Tax Bureau, 2004). In 2004 the tax, which had been set at 8.4% of average yields, was eliminated in two provinces and reduced by 3 percentage points in 11 provinces and by 1 percentage point in all other provinces.¹⁸ By the end of 2005 the government had eliminated the tax in 28 provincial-level administrative units and had reduced it to less than 2% in the remaining three provinces, where the tax was eliminated entirely in 2006 (State Tax Bureau, 2005b). This early initiative was followed in 2006 with a doubling of the amount of income exempt from the personal income tax levied on wage earners.

The central government also has encouraged local governments to raise the minimum wage in urban areas, potentially increasing the consumption of low-income workers.

¹⁸ In 2004 the tax was eliminated in Jilin and Heilongjiang provinces, cut by 3 percentage points in 11 other grain-growing provinces (Hebei, Inner Mongolia, Liaoning, Jiangsu, Anhui, Jiangxi, Shandong, Henan, Hubei, Hunan, and Sichuan), and reduced by 1 percentage point in all other provinces.

All of these initiatives, however, are modest. Agricultural taxes collected fell from RMB33.7 billion in 2003 to RMB19.79 billion in 2004 and then to only RMB1.279 billion in 2005 (National Bureau of Statistics of China, 2005, p.281; 2006a, p.75). The tax burden on farmers was reduced by RMB23.4 billion in 2004 and an additional RMB22 billion in 2005 (Ministry of Finance, 2005; State Tax Bureau, 2005b). However, RMB23.4 billion is the equivalent of only 1% of rural consumption expenditure or 0.1% of GDP in 2004. Similarly, the State Tax Bureau (2005a) reported that raising the personal income tax exemption would reduce the tax take by RMB28 billion in 2006, only 0.13% of GDP.¹⁹

Finally, it is unlikely that the increase in minimum wages that went into effect on July 1, 2006 in most administrative jurisdictions had a significant positive effect on household consumption expenditures. There are two reasons for this. First, the *Regulations on the Minimum Wage* of the Chinese Ministry of Labor and Social Security (2003), give local governments considerable leeway in setting the minimum wage. In practice, in most jurisdictions, the minimum wage is only about one-fifth to one-quarter the average local wage.²⁰ Second, the share of the workforce earning the minimum wage appears to be quite small. In Beijing, for example, minimum wage workers accounted for only 2.4% of the workforce in 2002.²¹ Given the low ratio of the minimum wage to the average wage and the small share of the workforce earning the minimum wage, the 6.5% rise in the capital's minimum wage in 2003 could not have had more than a miniscule effect on the total wage bill.²²

In summary, the cuts in taxes on rural and urban incomes instituted by the central government beginning in 2004 and the increases in minimum wage levels combined raised household disposable income by less than 0.5% of GDP by 2006 and are unlikely to lead to significantly higher levels of household consumption expenditures. The cuts in taxes on urban and rural incomes are too small, and in rural areas they have been at least partially offset by increases in other taxes that fall partially on farmers.²³

¹⁹ Based on the preliminary 2006 GDP figure of RMB20,941 billion reported in January 2007 (Xie Fuzhan, 2007.)

²⁰ In Beijing the minimum wage was 25.5 and 23.5% of the average wage in 2002 and 2003, respectively. In 2004, in Shenzhen, the minimum wage was 18% of the average local wage (China's highest).

²¹ China Statistical Information Net, "Wages of Beijing Workers and Staff Increase Steadily; Differentials Across Industrial Branches Expand," www.hebei.gov.cn/economy/stat/column_detail.jsp?id=8515&subjectname=%E7%BB%9f (accessed July 10, 2006).

²² In 2002 the share of Beijing's wage income earned by minimum wage workers can be estimated as 0.6% of total wage income (0.25 x 0.024). Assuming that it had no effect on the number of minimum wage workers, the increase in the minimum wage would have raised total wage income by 0.04%.

²³ For details, see Lardy (2007).

On the other hand, central government expenditures on selected health, education, and other social programs have increased quite significantly in the past two years. The centerpiece of this effort is Premier Wen Jiabao's program to create a "new socialist countryside." The program entails increased subsidies for grain producers, designed to raise the incomes of some of China's poorest farmers; expanding the coverage of the rural cooperative medical system, which was first rolled out on a trial basis in 2002; and eliminating educational fees for rural primary education.

The increase in expenditures on some of these programs is impressive.²⁴ Outlays by the central government on the rural cooperative medical system rose seven-fold to RMB4.27 billion in 2006 allowing the number of rural residents covered by the program to more than double to 410 million. The government has pledged to make the program available in 80% of all administrative units by the end of 2007, an increase of almost seven-fold compared to 2004. The government has budgeted RMB220 billion (\$27.5 billion) over five years (2006-2010) to provide free rural primary school education, a significant commitment. Expenditures on this initiative in 2006 were RMB36.6 billion, allowing the government to eliminate tuition and miscellaneous school fees for 52 million students in 12 western provinces. The program will reach a total of 150 million students in 2007 as central and eastern provinces are brought into the program.

Government outlays on health expanded by an average of one-quarter in both 2005 and 2006, a substantial acceleration compared with an annual expansion of only 15% in the previous four years. In 2007 the government launched a pilot program to provide basic medical insurance for urban residents who are either unemployed or do not receive medical insurance through their employers.

Despite the initiatives summarized above, combined government expenditures at the national and sub-national level on education and public health rose by only 0.3% of GDP between 2004 and 2006. The apparent contradiction between the large increases in selective education and health outlays by the central government and the much more modest pace of increase in total outlays is explained by the overwhelmingly dominant role of provincial and local governments. In 2005, for example, sub-national governments financed 94% of all government spending on education and 98% of all government spending on public health.

²⁴ Data in the paragraphs that follow are taken from speeches presented at the National People's Congress in Beijing in early March 2007.

Thus, unless sub-national governments increase the priority they assign to funding education and health programs, total expenditures on these programs are unlikely to rise significantly.

Corporate tax policy is not yet facilitating a rebalancing of the sources of growth. In September 2006 Li Rongrong, chairman of China's State-Owned Asset Supervision and Administration Commission (SASAC), announced that the government would begin collecting such dividends in 2007.²⁵ But until the details of this program are clear it is premature to judge its effects. First, the magnitude of required dividend payments has not been disclosed. If all state-owned and state controlled industrial companies were to pay half their after-tax income as dividends, this would have amounted to 1.5% of GDP in 2006.²⁶ Additional dividends could also be collected from state-owned firms in the construction and services sectors. However, Mr. Li indicated that the dividend tax would be imposed only on industrial enterprises directly administered by SASAC in Beijing, suggesting that the magnitude of dividend payments could be modest.

More importantly, Mr. Li has argued that dividend payments would not be made to the Ministry of Finance, where they would be subject to budgetary allocation and thus would potentially be a source of funding for additional government provided social services. Rather, he has asserted that dividend payments would be made directly to SASAC, which he says he would use to finance investment outlays. If this approach were to be adopted, a dividend policy would not reduce the corporate savings rate and would not contribute to a rebalancing of the sources of economic growth.

In July 2005 the Chinese authorities revalued the RMB by 2.1% vis-à-vis the United States dollar and announced that the currency could fluctuate by up to 0.3% per day and that the RMB would be managed with reference to a basket of currencies, rather than simply being pegged to the United States dollar. These reforms could have led to an appreciation that would slow the growth of China's external surplus and give the People's Bank of China greater flexibility in adjusting interest rates.

²⁵ Carew (2006).

²⁶ Profits of all industrial firms sector in the first half are estimated to be RMB 2,185 billion (note 14). I assume that 41% accrued to state-owned and state-controlled firms, the share they accounted for in 2005 (National Bureau of Statistics of China, 2005, pp. 491 & 497; 2006b, p.509). Deducting the windfall profits tax of state-owned oil companies and the average corporate income tax of 24% (note 14) results in an estimate of after-tax profits of RMB650 billion or 3.1% of GDP.

But to date China's external surplus has grown at an accelerating rate despite a cumulative appreciation almost 8% nominally vis-à-vis the dollar and 6% on a real effective exchange rate (RER) basis.²⁷

Why have China's net exports as a share of GDP almost tripled since 2004 while its exchange rate, on a real trade-weighted basis has appreciated by about 3% per year? One hypothesis is that the RER of the RMB, as calculated by the IMF and JP Morgan and other investment banks, understates China's growing competitiveness in international markets. All of these institutions calculate the real exchange rate by comparing the rate of movement of consumer prices in China and in its trading partners. For example, if while the nominal effective exchange rate of the RMB was unchanged China experienced one percentage point more consumer price inflation than the average of its trading partners, the calculated RER of the RMB would show an appreciation of 1%.

The problem is that the CPI appears to be a poor measure of the prices of China's exports. Despite an 8% nominal appreciation of the RMB vis-à-vis the United States' dollar, from June 2005 through May 2007, the price of Chinese goods imported into the United States fell 1%.²⁸ Available data do not suggest that Chinese exporters cut their profit margins in order to avoid passing through the RMB appreciation to United States consumers. The most likely explanation is that productivity growth in China's export sector has been sufficiently high that firms producing exports could absorb the effect of the rising value of the RMB on their export earnings. Productivity growth over the two year period must have been 9% or about 4.4% per year in order to allow prices of Chinese exports in the United States to decline by 1% in the face of a nominal 8% increase in the value of the RMB vis-à-vis the dollar. Over this period, prices in the United States were rising by about 3% per year. If Chinese prices of export goods were declining by a little over 4% per year while prices of United States goods were rising by 3%, the Chinese currency would have needed to appreciate in nominal terms by a little over 7% per year to maintain the initial level of competitiveness of Chinese exports in the United States market. But nominal appreciation of the RMB against the United States dollar was only a little over half that pace so Chinese goods became more competitive. Since the RMB on a nominal

²⁷ An effective exchange rate is a weighted average of the bilateral exchange rates with each of a country's trading partners where the weights are the trade shares of each trading partner. A real exchange rate is one adjusted for relative price changes at home and abroad, typically based on consumer price data. JP Morgan's index (1994 = 100) of China's RER moved from 120.60 in June 2005 to 127.79 in May 2007, an appreciation of 6%.

²⁸ U.S. Department of Labor, Bureau of Labor Statistics, "Import/Export Price Indexes," available at: <http://data.bls.gov/cgi-bin/dsrv>, accessed June 18, 2007.

bilateral basis actually depreciated 2% against the Euro, the increase in Chinese competitiveness was even greater in Euro-land, now China's largest export market.

In short, the Chinese government has not yet used exchange rate policy to help rebalance economic growth. Appreciation of the RMB has been far too modest, so China's external surplus is now at a global record and continues to expand rapidly. The modest pace of appreciation reflects continued massive government intervention in the foreign exchange market, which has meant that the potential for the value of the currency to move by as much as 0.3% per day (0.5% per day starting mid-May 2007) has been entirely theoretical. Indeed, in the first quarter of 2007 the pace of intervention by the authorities increased dramatically, suggesting that the misalignment of the currency is increasing rather than decreasing. The continuing and increasing level of intervention directly contradicts the People's Bank of China July 2005 announcement that emphasized market forces and specifically stated that supply and demand would play an increasing role in determining the exchange rate.

In the absence of flow of funds data for the years since 2003 it is difficult to know whether financial reform in recent years has reduced financial repression and allowed households' interest income to rise. The interest rate households receive on demand deposits has been unchanged at 0.72% since February 2002, but inflation as measured by the CPI has ticked up 4 percentage points from -1% in 2002 to 3% in the first half of 2007. The central bank has increased deposit rates paid by banks on term deposits but by far less than the increase in inflation. For example, the one-year term deposit rate as of May 2007 was 3.06%, an increase of only 1.08 percentage points since February 2002. Given the decline in real interest rates available to households the contribution of interest income to household disposable income as a percentage of GDP probably has continued to decline since 2003.

Conclusion

China has failed to initiate the transition to more consumption-driven growth - indeed growth has actually become even more unbalanced since 2004. In 2005-06, the pace of investment demand moderated slightly, as reflected in a one-half percentage point reduction in investment as a share of GDP in 2005 and 2006 compared to 2004. But China has become increasingly dependent on a growing trade surplus to sustain high growth. Net exports jumped from 2.5% of GDP in 2004 to 7.3% of GDP in 2006 and accounted for almost 1/4 of China's economic growth over the two-year period. Over the same period household and government

consumption declined by 4.3 percentage points of GDP. Similarly, Premier Wen Jiabao acknowledged that while energy consumption per unit of GDP fell by 1.2 percentage points that this was far below the goal of reducing the consumption of energy per unit of output by 4% annually through 2010.

Government policy has failed to put China onto a new growth path for several reasons. First, the tax cuts on agricultural and wage income have raised disposable income only microscopically and thus have little potential to increase household consumption. While government funding for a few high profile health and education programs increased rapidly, overall the spending on these programs increased by only 0.3 percentage points of GDP over the past two years, an amount so modest that it does not yet appear to have led to a reduction in the precautionary demand for savings on the part of China's households. Finally, on the fiscal front the government has yet to institute a corporate dividend tax and, since the design of the program has not been revealed, it is not clear that it will contribute to economic rebalancing when it is levied.

Similarly, RMB appreciation has been so modest (indeed appropriately measured the currency may have depreciated) that exchange rate policy has not contributed to reducing China's growing external surplus. Moreover, the substantial undervaluation of the currency continues to limit the independence of monetary policy, effectively precluding the higher real domestic interest rates that are needed to reduce the implicit subsidy to investment. Indeed, recent increases in nominal interest rates on corporate loans have been less than the price increases faced by corporates, so the real corporate borrowing rate has declined and is now very low in real terms.²⁹ Thus the government depends mainly on administrative intervention by the central bank to control the growth of bank lending. Equally important, the real interest rate on corporate bank deposits is increasingly negative, almost insuring that state-owned companies reinvest all of their retained earnings, even when the projects are not expected to be profitable.

Finally, government imposed interest rates on savings deposits provide ever more penurious real returns to households, depressing the rate of growth of household disposable income compared to what would occur in a more liberalized financial environment.

²⁹ Effective May 19, 2007, the central bank raised the benchmark rate on a one-year corporate loan by 18 basis points to 6.57%. The corporate goods price index in May 2007 rose 5.1% over a year ago, making the real lending rate faced by corporate borrowers only 1.5%, an extraordinarily low rate in an economy growing at 11%.

All of these factors suggest that China's transition toward more consumption-driven growth will require more vigorous government action in all three policy domains—fiscal, exchange rate and financial.

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