The Travails of Current Macroeconomic and Exchange Rate Management in China:

The Complications of Switching to a New Growth Engine

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Abstract

Just when China's leaders receive conflicting signals of "overheating" and "below-potential growth", they encounter tremendous external pressure to revalue the Renminbi (RMB) substantially. Our conclusion is that the major macroeconomic challenges have their roots in China's inadequate marketization and continued discrimination against the domestic private sector. The monopoly state banks intermediate the large volume of savings not only inefficiently but also inadequately. The latter results in aggregate demand expanding slower than supply-side growth, imparting a deflationary tendency to the economy. The present remedy of increased public-directed investments can be a satisfactory solution in the short run, but they are a disaster in the long run because they would follow an increasingly rent-seeking path that is wasteful as in Japan (e.g. wasteful projects that benefit politically-connected companies), and the increased state enterprise investments would convert themselves into nonperforming loans. In partially-reformed China, public-directed investments via the state enterprises tend to veer out of control frequently and overheat the economy.

China's persistent trade surplus is fundamentally linked to the deflation phenomenon because a chronic trade surplus means that national savings is larger than domestic investments, the result of inadequate financial intermediation. China should now expand its investment program to incorporate large import-intensive infrastructure projects as the alternative to the appreciation the RMB, or as an important complement to limited RMB appreciation. The additional construction would create jobs, relieve production bottlenecks, and preserve employment in China's export-oriented sectors. The long-run solution to eradicating the deflation bias and the tendency toward current account surplus lies in establishing an efficient financial intermediation mechanism.

Frequent bank recapitalization is the biggest threat to China's fiscal solvency and macroeconomic stability. Our calculations conclude that the forthcoming second recapitalization since 1997 is the last one that China can afford. Even then, fiscal solvency and macroeconomic management requires that the state continues keeping interest rates artificially low in order to avoid reducing the present fiscal stimulus to accommodate the servicing of the bonds issued for the bank bailout. In short, China faces a difficult tradeoff between the maintenance of fiscal stimulus to keep growth on track and the promotion of financial market development via recapitalizing the state banks, splitting them up and privatising some of them, liberalising the establishment of private financial institutions, improving prudential monitoring and enforcement, and deregulating interest rates.

The entry of Western banks into China's financial markets is not the same thing as the opening of the capital account. China would not be well served by a rapid opening of the capital account because foreign banks could suddenly become conduits for large-scale capital flight, or for rapid swings in short-term lending and repayments, or facilitators of bank runs (in which depositors do not merely switch banks, or switch from domestic banks to domestic currency, but actually switch from domestic deposits to foreign assets). Just as in financial market liberalization, capital account opening should also proceed in stages, because it must be accompanied by sophisticated financial market regulation, something that is clearly not in place at this time.

The state-owned sector and state-controlled companies are still a serious threat to sustained high growth, banking sector solvency, and price stability. Worse, yet, the corruption within state enterprises undermine social stability. The transformation to a private market economy should be accelerated by faster privatization of state enterprises, and the reduction in legal discrimination against private sector activities.

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Section 1: Introduction

The quandary in macroeconomic management that the Chinese government is facing at the present cannot be seen more clearly than in the two newspaper headlines that appeared on two consecutive days in August 2003. On 18 August 2003, an article in the Straits Times of Singapore under the headline of "Hu calls for more work creation as jobless rate rises" reported that the Secretary-General of the Chinese Communist Party, Hu Jin Tao, had called for "stronger measures… [like] fiscal subsidies, tax incentives, insurance subsidies and credit opportunities" to spur economic growth. On 19 August 2003, the South China Morning Post of Hong Kong carried an article headlined "Investments soar amid reluctance to rein in growth" which reported that the Chairman of the State Development and Reform Commission, Ma Kai, had "urged the nation to be wary of overheating and unveiled measures to cut back lending at state-run banks."

Have China's recent macroeconomic policies been too cautious? Or have they been too inflationary? The evidence in favor of the first assessment are the successive negative inflation rates since 1997, and continued weak aggregate demand is suggested by the -0.4 percent inflation rate in the first half of 2003. The case for overheating would appeal to, first, the GDP growth rate in the first quarter of 2003 was 8.9 percent; second, fiscal and monetary stimuli were greatly

ramped up in the March to June period to offset the negative consequences of SARS[1]; three, the price index for intermediate input has risen by 5 percent since the beginning of 2003; and, fourth, inflation has traditionally lagged behind excessive growth by nine to twelve months.

The cost of erring on the overly conservative side is certainly a high one. The official growth target of 7 percent in 2003 could create only 10 million new urban jobs, and there are 24 million urban job-seekers.[2] On top of this, 150 million of China's 500 million rural workforce are "effectively" unemployed – and this is the most conservative estimate![3] The cost of overheating could also be very big because high inflations in the past had sometimes undermined social stability. Furthermore, overheating is many times the symptom that the state credit system has been undermining the economic restructuring objectives by bailing out inefficient state enterprises, and funding investments in sectors with excess capacity.

As if China's macroeconomic managers are not already sufficiently vexed by the confusing signals of "overheating" and "below-potential growth", they now face tremendous political pressures from Japan, Western Europe, and the United States to revalue the Renminbi (RMB) substantially.[4] The current round of external indignation over an undervalued RMB was set off on 1 December 2002 when two senior officials of Japan's ministry of Finance wrote in the Financial Times that "China is exporting deflation…through export growth and a combination of

[1] Employers in SARS-affected areas were also ordered "not to lay off workers"; see "China Tries to Stanch Economic Fallout as Disease, Worry Spread: Emergency Policies Boost Public Spending," Washington Post, 9 May 2003.

[2] If realized, the official urban employment rate would rise from 4 percent at the end of 2002 to 4.2 percent in at the end of 2003. Data are from "Economy not working hard enough," South China Morning Post, 16 August 2003. However, the official data on urban unemployment are well-known for understating the problem. When the official urban unemployment rate was 3.6 percent in June 2002, a Chinese Academy of Social Studies report estimated the actual urban unemployment rate to be 7 percent, and Liu Wei of Beijing University estimated it to be 14.6 percent. See "China jobless figures enter danger zone," Straits Times, 15th June 2002.

[3] "Budget and job woes threaten stability," South China Morning Post, 19 December 2002.

[4] For example, "Snow calls on Beijing to let currency float," Financial Times, 2 September 2003.

price deflation and an exchange rate pegged to the dollar," and they asked China "to allow the currency to appreciate." (Kuroda and Kawai, 2002). This clarion call to mobilize international opinion for action on the RMB appears to have succeeded. By mid-2003, South Korea, Western Europe, and the United States have joined Japan in urging an appreciation of the RMB, probably in response to the adamant charges levied by their domestic industries about unfair competition from cheap Chinese imports.[5] How China will respond to this foreign clamor for RMB revaluation will, not surprisingly, depend on its diagnosis of the current macroeconomic situation. The Chinese leaders are more likely to agree quickly to making the RMB much more expensive, if they are convinced that the economy is overheated; and unlikely to go beyond the immediate introduction of a minor trading band around the current RMB-US$ exchange rate if they conclude that deflation is a more plausible threat to China's economic growth.

In assessing the two contradictory desired stances of macroeconomic policies, the relevant analytical issue for an economist is whether China is already at the "natural" rate of unemployment. An output growth rate that pushes the actual unemployment rate above the natural unemployment rate would not be unsustainable but would also risk generating a high inflation rate. The point is that, at any moment in time, there is a maximum value on the sustainable output growth rate that is determined by the existing material and institutional conditions of the economy (and of the outside world). So unless the higher growth rate desired by the policymaker is below the "natural" growth rate, more expansionary macroeconomic policies will not deliver that desired higher growth rate.

The operational difficulty for macroeconomic management is that the natural growth rate of an economy is not immutable over time. For example, a rise in the rate of technological

[5] See, for example, "Behind the Debate over China's Currency," Barrons, 28 July, 2003; "U.S. Job Losses Blamed on China's Currency," The New York Times, 26 August 2003; and "Economic ministers discuss Chinese currency," Pacific Business News, 23 July 2003.

innovation would increase the natural growth rate, while the steady convergence of a formerly autarkic developing country to the frontier of modern science would cause a steady decline in the natural growth rate. Hence, because of the latter phenomenon of growth slowdown upon economic maturation, it is not so straightforward to claim that China's annualized growth rate of 8.2 percent in the first half of 2003 is below the natural output growth rate despite the twin facts, one, that the 2003 growth state is more than a percentage point below the 9.4 percent average growth rate of the 1979-2002 period; and, two, that the inflation rate of -0.4 percent in the first half of 2003 is substantially below the 5.5 percent average of the 1979-2002 period.[6] One needs a more compelling argument against the alternative explanation that the lower 2003 growth rate simply reflects a lower natural output growth rate, and that slightly negative inflation is compatible with being on the natural growth path.

To anticipate the analysis of this paper, we will highlight here five of our conclusions. First, while it is important to manipulate aggregate demand via monetary-fiscal policies to keep the actual unemployment rate close to the natural unemployment rate, China is in the fortunate position where it can implement other economic policies that will move the natural unemployment rate downward, i.e. increase the natural output growth rate. To use a production analogy, the biggest gain comes not only from keeping an engine running at peak efficiency but also from having the engine with the largest capacity. In short, the most important economic task for China is to adopt the best economic growth engine that world economic history has identified: a market economy where competitive private enterprises constitute the norm, and where the state focuses mainly on the provision of public goods and social insurance. The case

[6] The inflation rate is calculated from the retail price index (RPI). The average inflation rate according to the consumer price index (CPI) (available from 1985) is 0.6 percent for the first of 2003 and 7.7 percent for the 1985-2002 period. CPI is broader than RPI because it also covers services and housing. The 2003 GDP growth rate is from "National economy faces a string of challenges," China Daily, 26 August 2003.

for making this type of market economy the new growth engine is obvious when one recognizes that China's remarkable growth in the post-1978 period has come from the deregulation that has allowed Chinese economic institutions to converge to those of private market economies, especially of the East Asian variety.[7]

Second, many of the major macroeconomic challenges facing the Chinese government have their roots in China's inadequate marketization and continued discrimination against the domestic private sector. Because of the bureaucratic incentives within the state-controlled banks which monopolize the financial system, the large volume of savings is not only inefficiently but also inadequately intermediated into investment (with the private component of investment especially deprived of bank loans). The important consequence of inadequate intermediation is a level of aggregate demand that expands slower than the natural output growth rate. The state has thereby responded to the deflationary tendency by undertaking massive public investments to soak up the excess savings in the banks. While increased public-directed investments can be a satisfactory solution in the short run, they are a disaster in the long run. The point is that an efficient banking system is an indispensable component of the new growth engine that China needs to put in place.

Third, China's persistent trade surplus is fundamentally linked to the deflation phenomenon, and successful solution of one will mean successful solution of the other. A chronic trade surplus means that national savings is chronically larger than domestic investments, which is exactly the malaise of inadequate financial intermediation. An alternative to revaluing the RMB would therefore be increasing the level of domestic investment, especially targeting investment projects which require large amounts of imported capital equipment. It is

[7] This interpretation of China's economic performance after 1978 is elaborated in Woo (1999) and Woo (2001).

hard to over-emphasize that it is extremely anomalous for a developing economy like China to be exporting capital to the rest of the world – the counterpart of a current account surplus. There just has to be something fundamentally flawed when capital-shortage China is investing abroad just like capital-abundant Japan.

Fourth, frequent bank recapitalization is the biggest threat to China's fiscal solvency and macroeconomic stability. The state banking system now needs to be recapitalized for the second time since 1997, and our calculations conclude that this second recapitalization is the last one that China can afford. Even then, fiscal solvency and macroeconomic management requires that the state continues keeping interest rates artificially low in order to avoid reducing the present fiscal stimulus to accommodate the servicing of the bonds issued for the bank bailout. In short, China faces a difficult tradeoff between the maintenance of fiscal stimulus to keep growth on track and the promotion of financial market development via bank recapitalization and interest rate deregulation.

Fifth, the state-owned sector and state-controlled companies are still a serious threat to sustained high growth, banking sector solvency, and price stability. Worse, yet, the corruption within state enterprises undermine social stability. The switch to the new growth engine necessitates that China continues the privatization of non-defense-related state enterprises that are not natural monopolies, and the reduction in legal discrimination against private sector activities.

The organization of the paper is as follows. Sections 2 and 3 identify the factors behind the macroeconomic performance in the period since 1997. Section 4 discusses the working of the dysfunctional banking system, and Section 5 analyses the issue of fiscal solvency. Section 6 examines the impact of the SOE sector on the macroeconomic stability. Section 7 presents our final observations.

Section 2: A Slower Growth Phase, and the Attempts at Macroeconomic Stimulation

Our theoretical prior is that the partially-reformed Chinese economy entered into a slower growth phase near the end of the 1990s, having largely exhausted the growth potential created by the significant economic deregulation and internationalization. This hunch is in line with the growth data in Table 1. The average annual growth rate in the 1997-2002 period is 9.4 percent, and every growth rate in the 1997-2002 subperiod is below 9.4 percent. This extended period of below-average growth is unprecedented in the market reform period. When we compared the mean growth rate of the 1979-1996 subperiod (9.92 percent) with the mean growth rate of the 1997-2002 subperiod (7.83 percent), we found the difference between them to be statistically significant. The t-statistic is 2.52.

The analytically difficult question is whether the lower growth rates in the 1997-2002 subperiod reflected inadequate growth in aggregate demand or a reduction in the growth potential of aggregate supply. The fact that there was a statistically significant downward shift in the inflation rate between the two subperiods -- the t-statistic is 5.66 – with price changes being negative in the 1997-2002 subperiod, raises the possibility that inadequate demand had contributed to the lower growth rates in the second subperiod. This implication follows because, in the absence of a drop in aggregate demand growth, a fall in supply growth would have produced an outcome of lower growth-cum-higher inflation (i.e. stagflation) rather than the observed outcome of lower growth-cum-deflation. In total, the evidence in Table 1 suggest that the natural output growth rate at present is likely to be higher than 7.8 percent.

Our explanation for the lower growth-cum-deflation phenomenon in the 1997-2002 subperiod is that there was not only a slowdown in supply-side growth but also a slowdown in

aggregate demand growth. In the next sector, we will develop the argument that China's dysfunctional banking system has created a deflationary bias in the economy.

In thinking about the growth of aggregate supply, there is little justification for the belief that there is a positive relationship between the actual growth rate and the inflation rate for all values of the growth rate. It is more likely that, if a positive relationship exists at all within any short time period, it is limited to a limited range of growth rates clustered around the natural growth rate, say, half a percentage point on each side of the natural growth rate.[8] Our estimate is that the natural output growth rate in 2003, as permitted by China's material conditions and institutional structure, is 8 percent. Our estimate is higher than the 7.5 percent in Huang (2003), and the official growth target of 7 percent; and is at the high end of the 7 to 8 percent range in Yu (2003). We also estimate that, in the absence of substantial reforms to enable the rapid emergence of a dynamic domestic private sector, the natural growth rate would decline to 7.5 percent at the end of the decade as the catching-up process proceeds further. However, if the needed comprehensive reforms are in place, then the natural growth rate at the end of decade would be 8.5 percent.

Our hypothesis that China has entered into a slower growth phase slower is consistent with the employment data reported in Table 2. The average annual employment growth in the industrial sector was 2.8 percent during the 1992-1997 period, with a minimum of 2.1 percent in 1997. The employment growth rate fell significantly after 1997: 0.3 percent in 1998, -1.1 percent in 1999, -1.2 percent in 2000, and 0.4 percent in 2001. The employment situation in the manufacturing component of the industrial had actually turned bad earlier in 1996.

[8] Graphing the growth-inflation relationship, with the inflation rate on the y-axis, the relationship is a vertical line at each endpoint of the range. This does not mean that the positive portion of the graph could be exploitable for macrostabilisation, changes in expectations could shift it up and down very quickly.

Manufacturing employment growth was negative throughout the 1996-2000 period, with a particularly large decline of 13.5 percent in 1998.

Price deflation appeared in the Retail Price Index (RPI) in October 1997, and in the Consumer Price Index (CPI) in February 1998. When it became apparent by the middle of 1998 that the economy was slowing down significantly, the government began to implement monetary and fiscal measures to boost aggregate demand. The government's increasing vigorous efforts at economic stimulation are summarized in Figures 1 and 2, and Table 3. The interest rate has been reduced eight times in less then six years, with the latest rate cut on 21 February 2001, which brought the 1-year deposit rate to 1.98 percent and the 1-year lending rate to 2.34 percent – see Figure 1. However, money growth rates followed a declining trend in 2001. The central bank then began not only to increase reserves more aggressively but also to lean even more on the state banks to extend credit.

The annualized (year-on-year, yoy) growth rate of fixed asset investment of the state sector was kept above 15 percent from July 1998 to July 1999 period, and then lowered as exports to the other East Asian economics recovered, see Figure 2. Fiscal stimulus was renewed in 2001. States spending on capital construction jumped from Rmb209.5 billion in 2000 to Rmb251.8 billion in 2001, which kept the annualized growth rate of state sector fixed asset investment above 15 percent for 11 of the 12 months in 2001. When the CPI slipped again into negative growth rates falling in November 2001 (reaching -1.3 percent in April 2002), the Chinese government increased the intensity of the fiscal stimulus e.g. the growth rate of state sector fixed asset investment was above 23 percent in the January 2002 to November 2002 period, and was 17 percent in December 2002. Apart from investment in capital construction, the government also implemented several pay rises in this period. The result of this jump in

government spending is that the fiscal deficit has increased substantially from 1.1 percent of GDP in 1998 to 1.9 percent in 1999, 2.5 percent in 2000, 2.7 percent in 2001, and 2.9 percent in 2002, see Table 3.[9] Most government economists, e.g. Jia (2002), believe that the investment using funds raised through treasury bond issuance contributed about 2 percentage points to GDP growth each year in the 1999-2002 period.

With the encouragement of the central bank, especially with the onset of SARS in early 2003, the state banks expanded their loans greatly, especially to the real estate sector, and money growth went from 16.8 percent in 2002:4Q to reach 20.0 percent in 2003:2Q. The combination of additional fiscal and monetary stimulus to offset the deleterious effects of SARS on aggregate demand caused the rate of fixed asset investment to jump from 21.6 percent in 2002:4Q to 32.4 percent in 2003:1Q and 31.7 percent in 2003:2Q. The unfortunate feature about encouraging SOE investments, as emphasized by Fan and Woo (1996), is that, in a partially-reformed centrally-planned economy, there are many institutional features that motivate SOE investments to veer out of control frequently, and overheat the economy as a byproduct.

Section 3: The Deflationary and Trade Account Consequences of Inadequate Financial Intermediation

At a superficial level, the systemic deflationary pressures that have plagued China since 1997 have their sources in, one, a shrinking money multiplier (a phenomenon that many Chinese economists have called "the liquidity trap"), and, two, a slowing down in the growth of

[9] Citigroup (2003) has projected the budget deficit to be 2.8 percent in 2003. The scale of the fiscal stimulus has evoked comparisons with the New Deal, and provoked catchy headlines in the media, e.g. "China Gambles on Big Projects for its Stability," New York Times, 13 January 2003, and "Public Spending Explodes," Far Eastern Economic Review, 30 January 2003.

consumption (a phenomenon commonly known as "the paradox of thrift").[10] China has tried to boost the domestic economy with successive cuts in interest rates, but the rise in credit creation has been much lower than expected, except for the periods when the central bank leaned heavily upon the banks.[11] The paradox of thrift refers to the low level of private aggregate demand because the private saving rate has been increasing. The saving rate has gone from almost 20 percent of GDP in 1981 to 30 percent in 1988, and then to almost 40 percent in 2001.

At a deeper level, however, both of these phenomena, we suggest, spring from the same cause, which is the absence of adequate financial intermediation in China. The liquidity trap made its appearance in the mid-1990s when Zhu Rongji decreed the removal of the state bank manager if the ratio of non-performing loans in her bank were to go up two years consecutively. As the majority of state enterprises are either in the red or just breaking even, the banks became unwilling to lend money to the state-owned enterprises. Lending more to private enterprises is not really a good option because, one, their legal status is lower than that of state enterprises, and, two, there was no reliable way to assess their balance sheets. The only activity that the banks are happy to allocate their funds to is the purchase of state bonds, i.e. the financing of the government's deficit.[12] The elimination of the liquidity trap requires that the state removes the barriers to lending to the private sector by ending legal discrimination against them, and

[10] Keynes coined both terms. Strictly speaking, the Chinese characterisation of the liquidty trap as a "shrinking money multiplier" does not correspond to Keynes's original meaning. Keynes was referring to the situation where the interest rate would not fall despite the addition of reserves because of the overwhelming dominant expectation held by investors that the interest rate would rise soon. In brief, the difference is "the shrinking money multiplier" versus "the non-falling interest rate."

[11] For example, during the SARS period, the banks faced intense pressure from the central bank to extend credit.

[12] The Chinese government has sought to increase bank lending to private individuals by encouraging banks to establish mortgage loans, which are perceived as less risky because of their seemingly fully collateralized nature. While it is still early to tell, it appears that the enthusiasm for real estate lending in 2002 might have started a speculative bubble in that sector.

establishing uniform accounting and auditing standards that have credible enforcement mechanisms.

In discussions on the rise of the savings rate, a common view is that the rise reflects the uncertainty about the future that many SOE workers feel in the face of widespread privatisation of loss-making SOEs. We find this explanation to be grossly incomplete because there has also been a rise in the rural saving rate even though rural residents have little to fear about the loss of jobs in the state-enterprise sector because none of them are employed there. Based on the work of Liu and Woo (1994) on savings behavior, we conjecture that the desire to invest is an important reason for why the rural sector has increased its savings rate. The most dynamic industrial expansion in China in the 1984-1994 period occurred in the rural areas. Since non-state firms in the rural areas cannot borrow from the bank, the only way they could establish themselves was through self-financing, which required the would-be entrepreneurs to save first. In the very first phase of rural industrialization, the amount of capital that was needed to start a factory workshop was very low. After a decade of rapid industrial growth, the Chinese countryside is saturated with labor-intensive enterprises. As competition among rural enterprises is very fierce at the present, it no longer makes economic sense to invest and open the same type of factory workshop. Rural enterprises must therefore move up to the next stage of value added production in order to be more profitable. This new generation of rural enterprises is much more capital-intensive, and thus requires a much larger amount of startup funds. And rural residents have responded to the higher capital requirements by increasing their saving rates.

Since the phenomenon of investment-motivated saving must also be present within the Chinese urban community the usual pessimism-based explanation for the rise in the urban saving rate is only partially correct. In fact, with the steady relaxation of regulations against the

establishment of private businesses in the rural and urban areas, the amount of investment-motivated savings in China could only have risen more. To skeptics of our investment-motivated savings hypothesis, we want to point out that Jeffrey Williamson (1988), an economic historian, has summed up the historical record of Western Europe and North America as showing that "investment demand seems to have been the driving force behind private saving and accumulation, past and present."[13]

Table 4 reports the investment trends in China in the post-1978 era. Total fixed investment has increased secularly as a proportion of GDP: an annual average of 28.8 percent in 1984-1988, 34.0 percent in 1992-1996, and 36.3 percent in 1997-2001. SOE investment went up in the 1992-96 period (19.8 percent) and then returned to the initial 1984-88 level (18.7 percent). We are of the opinion, however, that the amount of state-directed investment in the 1997-2001 period could be more than three percentage points higher than 18.7 percent of GDP because many of the big SOEs of 1988 had by 1999 converted themselves (or components of themselves) to share-holding companies listed on the stock exchanges – while remaining state-controlled. Furthermore, many SOES have formed joint-venture firms with domestic and foreign companies, with themselves as the controlling shareholders.

Contrary to the secular rise in total investment and the likely secular rise in state-directed investment, rural investment has fallen secularly from 8.2 percent in 1984-88, to 7.7 percent in 1992-96, and then to 7.5 percent in 1997-2001. Our hypothesis is that a major reason for the decline in the rural investment ratio is that the traditional labor-intensive factory is no longer profitable, and rural entrepreneurs have been unable to borrow the money to undertake the more

[13] See Liu and Woo (1994) and Woo and Liu (1995) for a formal model of investment-motivated savings, and for empirical confirmation of this hypothesis.

capital-intensive investments required for the next generation of rural enterprises.[14] The investment-GDP ratio went up at the national level because FDI went up while state investments (through the budget, state-owned enterprises, and state-controlled enterprises) utilised the higher domestic savings fully.

We now turn to show that another outcome of inadequate financial intermediation is a chronic current account surplus. To see this point, consider the following accounting relationship:[15]

(current account surplus) = (government budget surplus)
+ (savings of SOES – investments by SOEs)
+ (savings of the non-state sector – investments of the non-state sector)

The facts for the recent period are that the current account surplus (or, loosely speaking, the trade surplus) is positive, the government budget surplus is negative at an unprecedented level, and SOE savings are less than SOE investments. This means that the savings of the non-state sector must greatly exceed the investments of the non-state sector. As documented earlier, the government has sought to fight the deflation by increasing public works (i.e. running record budget deficits) and encouraging SOE investments to soak up the excess savings. The rise in total investments has not been sufficient to use up the excess savings, however, and this residual excess savings have leaked abroad in the form of an aggregate trade surplus. Inadequate financial intermediation has made China a capital exporting country!

This perverse current account outcome is not new. Taiwan had exactly this problem up to the mid-1980s when all Taiwanese banks were state-owned and were operated according to the civil service regulation that the loan officer had to repay any bad loan that he had approved.

[14] Woo (2000) presents a proposal of how to meet the investment financing needs in rural China.
[15] It is important to note that the above equation applies only to China's total trade surplus not to any bilateral trade surplus between China and that country. The equation in standard textbook notation is:
CA = (T-G) + (S-I)

The result was a massive failure in financial intermediation that caused Taiwan's current account surplus to be 21 percent of GDP in 1986.

China's proclivity to generate persistent current account surpluses has managed to manifest itself only after 1994 because of major policy changes implemented in that year. Before 1994, with the government budget deficit being usually small, the voracious absorption of bank loans by SOEs, in the soft-budget environment, to invest recklessly kept the current account usually negative. In 1994, Zhu Rongji implemented stricter controls on the SOBs to reduce the then 24 percent inflation rate and the explosion of NPLs. This lower growth rate in SOE investments from 1995 onward is the reason why China's built-in propensity toward current account surplus has been revealed only from 1995 onward. The pronounced tendency toward higher current account surpluses is mainly caused by the secular rise in the savings of the nonstate sector for the reasons we identified earlier, e.g. secular rise in the required amount of startup capital, secular improvement in the official attitude toward market capitalism.[16] The reason why China is not producing the gargantuan current account surpluses seen in Taiwan in the mid-1980s is because of its record budget deficit and the still excessive amount of SOE investments.

Obviously, increasing budget deficits and SOE investments to counter deflation and reduce the trade surplus can only be a satisfactory solution in the short-run. In the long-run, the increased public investments could follow an increasingly rent-seeking path that is wasteful as in Japan (e.g building a 2nd big bridge to a lowly-populated island to benefit a politically-connected construction company), and the increased SOE investments could convert themselves

[16] Of course, just as the current account outcome is the product of the three terms in the equation, multi-variable causation also applies to the savings outcome, e.g. demographic features, expected future income growth. Our discussion has concentrated on how one of these variables, the type of financial intermediation mechanism, can affect the savings rate.

into nonperforming loans at the SOBs. The right solution to the problem of excess saving is not for the government to absorb it by increasing its budget deficit but to establish an improved mechanism for coordinating private savings and private investments. This solution is correct regardless of the veracity of our hypothesis about investment-motivated savings. We will argue later in the paper that the formation of domestic private banks, and the entry of foreign banks will correct the problem of inadequate financial intermediation, and eradicate the deflationary tendencies created by the liquidity trap and the paradox of thrift. But first, we look at the present state of China's banking system.

Section 4: The Banking System as a Sinkhole

China's banks are in undeniably serious financial straits. According to the People's Bank of China (PBOC), the proportion of non-performing loans (NPLs) of the four big state-owned banks (SOBs) is presently about 26 percent, which is 2 percentage points lower than a year ago. However, the recently revealed scandal about improper loans to a Shanghai developer by the Hong Kong branch of the Bank of China suggests that there are probably still undiscovered black holes in the banks' books. Table 5 presents estimates by Citigroup (2002) that put NPLs to be 35 percent of outstanding loans at the four big SOBs at the beginning of 2002, and the average capital adequacy ratio (CAR) of these four banks to be 5.0 percent.

The bank reform efforts of the past several years have failed. The proportion of NPLs has come down from its record high of 48 percent in 1998, but this reduction was achieved mainly by the transfer of the NPLs to the state-owned asset management corporations (AMCs). The major portion of the transferred NPLs still needs to be disposed and is thus still the

responsibility of the People's Bank of China or the Ministry of Finance.[17] Worse, most of the problem SOEs remain clients of the parent banks and continue to create new NPLs. What has facilitated the creation of new NPLs is the intermittent pressure on the banks from the government to expand investment credit to combat deflation, and to expand social stability loans to reduce firm closures. This may be an important reason why the quality of banking assets has deteriorated rapidly during the past years, causing the capital adequacy ratio to fall to 5 percent in early 2002 from the 8-plus percent achieved in late 1998 after the recapitalization of the banks.

The reason why we ended the last paragraph on a tentative note is because it is possible that a large part of the post-1998 NPLs may actually be pre-1998 NPLs that were not recognised as such during the 1998 recapitalisation. At that time, the SOBs might not have wanted to reveal the actual NPL situation because this would have exposed previous official NPL estimates to have been wildly inaccurate. In any case, the state banks are now in need of another round of recapitalization.

In this situation of a fragile banking system, China has committed itself to opening up the banking system completely within five years of joining the World Trade Organisation (WTO), which it did in December 2001. Foreign banks could conduct transactions in foreign currencies from the beginning of WTO membership, conduct transactions with the local corporate sector in Renminbi after two years, and conduct transactions with local households in local currencies after five years. Although foreign banks are likely to compete only in the coastal cities, at least in the initial period, the pressure on domestic banks can be high as the big four banks extract

[17] It appears that the AMCs have started by concentrating on the "NPLs with the best prospect for recovery", and that the "average cash-recovery rate" on the small amount processed by June 2002 is 21 percent. This recovery rate is expected to drop substantially when the more difficult loans are processed. See "On the Road to Ruin," Far Eastern Economic Review, 14 November 2002.

about 95 perccent of their profits from about half a dozen coastal cities (Shanghai, Beijing, Xiamen, Shenzhen, Guangzhou, and Tianjin). Because there is no depositor insurance in China, the obvious question is whether depositors will believe that these foreign banks will drive the SOBs into open bankruptcy, and hence rush to withdraw their savings from the SOBs, setting in motion the vicious downward spiral of credit contraction, leading to business failures, rendering sound financial institutions insolvent, and contracting credit further.

Our reading is that even if pressures on the state banks do occur through depositor withdrawals, there is no need for a full-blown crisis, since the central bank will be able to issue currency to the state banks to meet the withdrawals. This expansion of high power money cannot be easily translated into a loss of foreign reserves because capital controls, which we support, remain in place and are likely to do so for the forseeable future. The resulting expansion of high power money will also not have much impact on inflation because this is mainly a shift out of bank deposits into cash, or from some banks to others, and not a shift into goods. In fact, in the present deflationary atmosphere, a run from bank deposits to goods is a macroeconomically stabilising development! Simply put, the government has the technical ability to accommodate shifts in bank deposit preferences, even a modest bank run, without risking exchange rate collapse or a runaway inflation

However, the fact that the government can prevent a bank run from causing a financial meltdown is not good enough. If the banking system is plagued by frequent bank runs, it's role as a financial intermediary will be greatly reduced, and economic growth could suffer significantly. The real issue is not whether depositor shifts, or a bank run, could be accommodated but how to prevent a banking crisis from occurring in the first place. Because depositors have the incentive to withdraw their funds as long as the banks are seen to be

insolvent, the prevention of banks requires that the government keep the banks adequately capitalised at all times.

Another reason why the banks deserve recapitalisation is that this will lower the lending rate, and hence spur capital formation. To see how NPLs raise the lending rate, we note that the cash-flow constraint that a bank (regardless of solvency) must meet in the absence of state subsidies, of operating costs, and of a required reserve requirement is given by:

$r_D D = r_L [D\text{-}NPL]$

r_D = deposit rate

r_L = lending rate

D = amount of deposit

This means that if NPL equals one-third of deposits, then the lending rate has to be at least 50 percent higher than the deposit rate. The important implication, however, is that a new bank (domestic or foreign) can undercut the lending rate of the existing SOB because it will not have any NPLs on it book. Since the government had recapitalised the banks in 1998, and needs to do so again now, the important question is whether there are technical and political obstacles that can prevent China from implementing another round of bank recapitalization. Or, to put it differently, how many more rounds of bank recapitalization can China afford without generating a fiscal crisis?

Section 5: How Serious is the Threat of Fiscal Insolvency?

For China, the prolonged use of loose fiscal policy carries two major risks. The first risk is low economic efficiency of the state investments, especially of many of the infrastructure projects implemented in the last four years. Almost all of these projects were implemented by

the SOEs in a rush, with some of the projects were approved even before the feasibility reports were completed. In 1998 and 1999 there were frequent reports about the collapse of bridges and roads that were built recently. This risk of a rise in fiscal inefficiency has been confirmed by an internal study of the Ministry of Finance which found that the amount of investment required to create one additional unit of GDP has increased significantly in recent years; Gao (2002).

The second, and, possibly, more serious, risk to fiscal management is fiscal sustainability. The proactive fiscal policy contributes to fiscal risks in two ways — it directly increases both fiscal deficits and public debts, and indirectly increases the amount of NPLs by influencing banking lending decisions. A higher debt-GDP ratio means more debt servicing in future periods, and this could require expenditure cuts in order to prevent an upward spiral of the debt-GDP ratio, a development that convince the financial markets that the state is resorting to Ponzi scheme to finance its deficits, and cause a shutoff of credit to the state.

The simple fact is that fiscal sustainability lies at the heart of whether a banking crisis would actually occur. As long as the state is perceived to be able and willing to bail out the SOBs, depositors would retain their confidence in the SOBs regardless of the actual state of their balance sheets. The stock of publicly-acknowledged government debt comes to only 16 percent of GDP, and so it is usual to hear official assurances that the current fiscal deficits of less than 3 percent of GDP do not pose a problem for debt servicing by the state. However, the analytically correct measure of public debt should be the consolidated debt of the state sector, which would include at least some part of the contingent liabilities (e.g., foreign debts of SOEs and SOBs, and unfunded pension schemes in the SOE sector) that the state might have to assume responsibility for when the state-owned units default on their financial obligations. We should note that if an analyst counts NPLs as contingent liabilities, then she is really computing what the public debt

will be after one more round of bank recapitalization, i.e. the second bank recapitalization since 1997. According to Fan (2003), the consolidated public debt at the end of 2001 was 72 percent of GDP; and according to Citibank (2002), see Table 6, it could be as high as 115 percent. So is China's present debt-GDP ratio too low or too high?

To answer this question, we note that the central government debt-GDP ratios in Italy, Sweden and the United States were, respectively, 117.6 percent, 70.8 percent, and 50.5 percent in 1995.[18] So if China undertakes its second bank recapitalization since 1997, its public debt will still be within the range seen in advanced OECD countries that are not experiencing fiscal crises. However, there are two important points to be made to show that this finding is not an optimistic one.

First, the forthcoming recapitalization of China's banks appears to be the last *major* one that the government could implement in the short-term without risking the stability of the domestic financial markets and its credit standing in the international financial markets. A third recapitalization (since 1997) will push the debt-GDP ratio to over 150 percent, well above the OECD norm.

Second, if China recapitalizes the SOBs a second time, then it will have to compromise the expansionary fiscal policy that has been keeping GDP growth above 7 percent since 1997. This is because China raises much less state revenue, as a share of GDP, than the OECD countries, and hence has a much lower capacity to service its public debt. The revenue-GDP ratio was 16.2 percent for China in 2001, 30 percent for Italy in 1995, 38 percent for Sweden in 1995, and 21 percent for the U.S. in 1996.[19] The additional debt service from the second bank

[18] The US ratio is for 1996. Ratios were constructed from the IMF's International Financial Statistics.
[19] The revenue-GDP ratio for China is from Deutsche Bank (2002) which estimated that it will rise to 16.4 percent in 2002 and 16.6 percent in 2003. Debt to GDP and revenue-GDP ratios for other countries are from the IMF database.

recapitalization will be about 1.5 to 2.5 percent of GDP.[20] If China increases tax collection or reduces infrastructure spending to cover this increased debt service, then this second recapitalization of the SOBs will reduce the fiscal stimulus that has been keeping the GDP growth rate above 7 percent. Between these two options, expenditure reduction cannot be considered the less likely outcome because China's experience in the reform era is that frequent changes to the tax system have not been able to raise revenue significantly for a sustained period. The reason for the low revenue-GDP ratio could be because increasing tax collection is as much a political challenge as it is an administrative challenge.

If the issue of fiscal sustainability is viewed from the broader picture of debt dynamics, one might be tempted to be more optimistic about the present situation, and dismiss the existence of a tradeoff between bank recapitalisation and fiscal stimulus as stated in the preceding paragraph. Such an optimistic assessment would be based on the fact that China's annual trend growth in the next decade and a half is likely to be at least 7 percent, and so the high debt-GDP ratio of 115 percent of today would be reduced over time by the high rate of output growth. There is, thus, no need to cut back on the fiscal stimulus in order to service the additional debt from the new round of bank recapitalisation, China could just borrow more to cover the additional debt service, and wait for the economy to "grow" out of its debt.

To state the above argument more formally, the optimism is based on the evolution of the debt-GDP ratio as given by:

$$d(\ln[\text{Debt/GDP}]) / dt = r + p + b - y \qquad \text{where}$$

r = real interest rate on government debt

p = primary fiscal deficit rate

= [state expenditure excluding debt service – state revenue] / GDP

[20] This assumes a bond rate of 4 to 6 percent – an assumption discussed in the next paragraph.

b = NPL creation rate

= [change in NPL in SOB] / GDP

y = trend growth rate of real GDP

For convenience, we assume y to be 8 percent, and p to be 2 percent. (According to Deutsche Bank, 2003, p was 1.8 percent in 2001 and 2.2 percent in 2002, and is likely to be 2.1 percent in 2003.) One seemingly plausible estimate of the real interest rate (r) is 4 percent, which is obtained by combining the facts that the government bond rate on 25 March 2003 was 2.65 percent, and that the inflation rate was about negative 1 percent. If we now add the unrealistic assumption of b = 0 to this contrived example, we see that y exceeds the sum of r and p by 2 percentage points, which means that the Debt-GDP ratio will decline over time.

However, this safety margin of 2 percentage point for China's debt situation is based on the patently wrong assumption of b = 0. The fact that China must now undertake another recapitalisation after 1998 to get rid of NPLs worth 35 percent of GDP suggests that b = 7 percent! Only if we make the assumption that the SOBs will be able to reduce the annual NPL creation rate (b) to 2 percent of GDP after this second recapitalisation, can we then obtain the optimistic conclusion that China can simply grow out of its debt without having to face the tradeoff between bank recapitalisation and fiscal stimulus.

It is important to note, however, that this optimistic conclusion is also dependent on two other highly unrealistic assumptions:

1. that there will not be another round of bank recapitalisation in the future – an assumption about state banks that has been falsified not only by international experiences but also by China's own experience since 1998; and

2. that China can promote the development of its financial sector without freeing the presently state-set interest rates.

Because the real interest rate of 4 percent used in the above paragraph is the product of interest rate ceilings, we think that the shadow interest rate is likely to be substantially higher. As China is a capital shortage country, the real rate of return on physical capital in China must be higher than in the United States, which suggests that it is likely to be over 15 percent. So if there were an efficient government bond market in China today, the lower bound of the real government bond rate in China could be at least 6 percent.[21] This 2 percentage point rise in the real interest rate is made more plausible by the fact that the state would have to issue new bank recapitalisation bonds that amount to 40 percent of GDP. In short, under interest rate liberalisation and with b = 2 percent, the primary fiscal deficit (p) would have to be cut from 2 percent to zero, i.e. the fiscal stimulus would have to be eliminated in order for the Debt-GDP ratio not to spiral uncontrollably upward.

As international experiences show interest rate liberalisation to be indispensable for the deepening the sophistication of financial markets, we really see no reason to be assured about the sustainability of China's fiscal situation. The lesson that we come away from this debt dynamics exercise is that we have to be very cautious about the validity of the benign scenario about China's fiscal situation. We see that even with the optimistic assumption of the NPL creation rate equaling 2 percent of GDP, China has no margin of safety to ensure fiscal solvency – and that remaining on this knife-edge situation requires a tradeoff between maintaining its fiscal stimulus to reduce unemployment and liberalising interest rates to promote financial sector development.

[21] According to Solow (1991), the stylised fact for the real interest rate in the United States is that it is 5 to 6 percent.

In summary, China's consolidated debt-GDP ratio will be relatively high by international standards after a second bank recapitalization, while its revenue-GDP ratio will remain relatively low. The greatest threat to the stability of China's financial market is fiscal sustainability, and the biggest threat to fiscal sustainability is successive rounds of bank recapitalization. This precarious outcome is a systemic feature of the current banking system, a relic from the era where central planning was the preferred engine of economic growth. Of course, we cannot attribute the creation of NPLs entirely to the SOBs, their chief customers, the SOEs, deserve an equal share of the blame. The fact is that without solving the SOE problem, the problem of NPLs cannot be solved.[22]

Section 6: Macroeconomic and Social Instability from the State Enterprise Sector

We must emphasize that the inflationary problem generated by the traditionally biggest macroeconomic destabilizer – the SOE sector – still exists. If anything, the SOE sector in 2003 has not only become a source of potentially bigger macroeconomic instability, it has also emerged as a source of socio-political instability. To see the origin of these negative developments, we review the Fan and Woo (1996) arguement that the reform strategy for the SOE sector during the 1978-1993 period was inherently inflationary.[23]

The crux of the 1978-93 SOE reform strategy was to transfer decision-making power from the industrial bureaux to the state enterprises. The increased operational autonomy of the SOEs reduced the ability of the industrial bureaux to monitor the financial situation within the SOEs, and hence created the incentive for SOEs to greatly increase their demand for investment funds. The reduction in bureaucratic oversight of SOEs in a soft budget environment allowed the

[22] See Wen (2003) for a recent analysis on the joint reform of the SOBs and SOEs.
[23] See Huang, Woo, and Duncan (1999) for an account of the failure of SOE reform.

SOEs to use creative accounting to privatise profits from good investment projects, and to receive state subsidies to cover losses from bad investment projects. Until about 1996, the SOEs were generally able to satisfy their large appetite for investment because the local governments, in the interest of local development, inevitably lobbied the local branches of the state banks to grant the SOEs' applications for investment loans. The evidence overwhelmingly show that the local bank branches, at least until 1995, were unable to resist the demand for easy money.[24]

The losses at SOEs exploded after 1992, when mother Russia officially went capitalist, because many Chinese SOE managers saw the same fate for China in the future, and concluded that this was their last chance to steal. This is why SOE losses skyrocketed even though GDP grew in the range of 10 to 14 percent annually in the 1992-95 period. By 1995, it was common to summarise the SOE situation as one-third of them losing money, and another one-third making no money. From the vantage point of 2003, it seems that continued inefficiency, and *de facto* asset-stripping and embezzlement of firm profits by managers and workers are the primary causes for the general decline in SOE profits, with the latter being the more important. The devolution of financial decision-making power to the SOEs, and the steady reduction in discrimination against the private sector have made it increasingly easy for the managers to transfer state assets to themselves. It is hence, perhaps, only natural that of the 327 cases of embezzlement, bribery and misuse of public funds that were tried in Beijing in 1999, "76 percent took place in SOEs."[25]

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[24] The institutional reforms of the central bank and the state banks implemented in July 1993 as part of an austerity campaign have not been successful in changing things. Chen Yuan (1996), Deputy Governor of the central bank, reported that "the enthusiasm for economic growth in some localities is so strong that it is very difficult to stop completely excessive investment financed through forced bank credit" (emphasis added).

[25] "Judicial Attention to SOEs Pledged," China Daily, February 19, 2000.

The increasing public outrage over the inequity of the informal privatisation of the SOE sector is well captured in the book by He Qinglian who wrote that the SOE reform has amounted to:

> "a process in which power-holders and their hangers-on plundered public wealth. The primary target of their plunder was state property that had been accumulated from forty years of the people's sweat, and their primary means of plunder was political power."[26]

The Chinese leadership had, by 1994, recognized the increasingly serious economic and political problems created by the principal-agent problem innate in the decentralization reforms of Lange-inspired market socialism, and it announced that the clarification of property rights of SOEs would be added into its SOE reform program. The Communist Party of China (CPC) publicly committed itself in July 1997 to convert most of the SOEs to publicly traded shareholding corporations -- a form of industrial organisation that originated in capitalist economies. The 1994-1997 decisions to address the loss-making SOE problem more decisively are the reasons why the employment growth rate in the industrial sector (in Table 2) fell from 2.1 percent in 1997 to 0.3 percent in 1998, and then went negative in the following years. (The restructuring of the state manufacturing industries had occurred even earlier, in 1996.)

The state's decision in 1997 to accelerate diversification of the ownership structure of the SOEs has to be recognised to be a bold move because the experiences with mass privatization in Eastern Europe and the former Soviet Union (EEFSU) show that the task is an extremely difficult one and that the outcomes have consistently fallen below initial expectations. For example, in Russia, the "loans-for-shares" privatization transferred the country's enormous mineral wealth to a group of oligarchs, and the weak administrative and legal structures allowed

[26] He Qinglian, Zhongguo de Xianjing, (China's Pitfall), Mingjing Chubanshe, Hong Kong. The translated quote is from Liu Binyan and Perry Link, "China: The Great Backward?" The New York Review of Books, October 8, 1998, pp. 19.

many managers to take effective control of the privatized firms and loot them instead of improving their operations. Furthermore, the EEFSU experiences warn that *mass* privatization is an exceedingly dangerous business politically, no matter how it is done, be it outsider privatization or insider privatization. This is because the mass privatization of SOEs generates so much rent that massive corruption has not been avoided, and the resulting corruption inevitably delegitimises the government, e.g. Vaclav Klaus in the Czech Republic and Boris Yeltsin in Russia.

Despite the mediocre to poor privatisation outcomes in EEFSU, privatisation has been going forward in China, albeit with occasional stops, for two main reasons. The first reason comes from John Nellis (1999) who points out that "governments that botch privatization are equally likely to botch the management of state-owned firms". The answer is not to avoid privatizations but to implement more careful privatizations: governments in transition economies should "push ahead, more slowly, with case-by-case and tender privatizations, in cooperation with the international assistance community, in hopes of producing some success stories that will lead by example."

The second reason lies in that the delay of privatization can be costly to China's government politically. Stealing by managers does occur during privatization and creates a social backlash against the government, but the maintenance of the status quo has become increasingly difficult because SOE managers in China know from the EEFSU experience that they are in an endgame situation. The widespread spontaneous privatization by SOE managers could create grave social instability.

Our opinion is that the solution to the SOE problem in China is not privatisation *per se*, but a transparent, legal privatisation process that society at large can accept, at the minimum, as

tolerably equitable. Because an adequate privatisation program must compensate the retired and layoff workers, permit takeover by core investors, and respect the rights of minority shareholders, it is important that legal reforms be carried out simultaneously. Only with a transparent, equitable privatisation process that is overseen by an adequate legal framework, would China be likely to avoid a state-created Russian-style *kleptoklatura* that would fuel social dissatisfaction.

Recently, there has been some questioning on whether the case for privatisation has been overstated.[27] When Zhu Rongji was designated the new premier in 1997, he announced that he would solve the SOE problem in three years. In 2000, he declared victory on the SOE front when the profits of the industrial SOEs leaped from 53 billion yuan in 1998 to 241 billion in 2000. In a careful study, Zhou and Wang (2002) quantified the sources of the financial turnaround, and found that:

- the lower interest rate in 2000 increased profits by 52 billion yuan (28 percent of the increase in SOE profits);
- the higher oil prices boosted overall SOE profits by 79 billion yuan because almost all oil companies are state-owned (42 percent of the increase);[28] and
- the conversion of the bank loans of SOEs into equities held by state asset management companies raised profits by 10 billion yuan (5 percent of the increase).

About 75 percent of the increase in the profits of industrial SOEs in the 1998-2000 period was not due to actions taken within these enterprises but to external factors. When Zhou and Wang (2002) calculated the profit rate after deducting the profits from the more favorable external environment, they found that it had increased from 0.7 percent in 1998 to 1.2 percent in

[27] See Nolan and Wang (1999) for a recent assertion of a turnaround in SOE performance,.
[28] This estimate has taken into account the additional production cost of the non-oil SOEs.

2000 for the SOE sector, and from 2.8 percent to 4.8 percent for the non-SOE sector. Despite the recent good news on SOE profitability, the fact remains that the SOE sector still lags considerably behind the non-SOE sector in efficiency.

To sum up, while the recent rise in profits surely gives some breathing space, the capacity of SOEs to "dissipate rents" through high payments to managers and workers, if not illegal transfer of assets, should remain clearly in the policy makers' minds. Thus, any gains could well be squandered, if not reversed, in a relatively short period of time. It is hence important for China to replace the present uncontrolled (and uncontrollable) process of asset-stripping in the SOE sector with transparent and equitable privatisation in order to improve macroeconomic stability and to defuse socio-political instability.

Section 7: Conclusion

We have argued that China's dysfunctional financial system has imparted a deflationary bias to the economy and made China a capital exporting country by constraining the growth of aggregate demand to be less than the growth of aggregate supply. The government has been actively trying to neutralise deflation through an aggressive fiscal policy. We recommend that it should now expand its investment program to incorporate large import-intensive infrastructure projects so that the trade surplus could be reduced as well. This move would be a better alternative to the appreciation the RMB as suggested by China's foreign friends. The additional infrastructure construction would create jobs, relieve production bottlenecks, and, on top of that, preserve employment in China's export-oriented sectors. However, the most efficient solution is for private investment rather than public investment to recycle the pool of private savings back

into the economy. The key to eradicating the deflation bias and the tendency toward current account surplus lies in establishing an efficient financial intermediation mechanism.

If the Chinese government decides to keep the SOBs as the dominant financial intermediation mechanism, then we think that there is really little to be gained by recapitalizing the SOBs. This suggests that one possibly effective way to slow down the pace of NPL creation in an SOB-dominated financial system and keep the fiscal situation sustainable is to keep the NPLs on the books of the SOBs, and, as suggested by Fan Gang (2003), "the financial status of these loans should be constantly watched and openly discussed" in the public media.

One must note, however, that in order for Fan Gang's suggestion to work, it is necessary that the foreign banks (which will no longer face more restrictions than Chinese banks by 2008), for some reasons, will not expand aggressively out of the big coastal cities to blanket the rest of the country with branches in a short period of time. If the foreign banks do so, then their lower costs from the absence of nonperforming loans will allow them to charge lower lending rates than the SOBs. This will eliminate the SOBs because WTO regulations make it illegal for the government to subsidise the SOBs against foreign competition. Our guess is that Fan Gang's method can work for about seven to ten years because we think that only HSBC and Citibank are likely to actively expand their banking network in China in the next decade, and even then mostly in the major coastal provinces.

The most important priority for financial sector reform is the appearance and growth of competitive <u>domestic</u> private banks. As China is required by its WTO accession agreement to allow foreign banks to compete against its SOBs on an equal basis by 2007, it would be akin to self-loathing not to allow the formation of truly private banks of domestic origin. There is no reason to favor foreign private banks over domestic private banks, and no reason why China

should not allow its best financial minds compete with, and achieve the same glorious success of, the best foreign financial minds. We therefore recommend that, right after the recapitalisation of the big four state banks, at least two of them be broken into several regional banks, and that the majority of these regional banks be privatized.[29] At the same time, the laws on the establishment of new banks should be loosened, and interest rates be deregulated. However, it is most crucial that financial sector liberalization proceeds no faster than the development of the financial regulatory ability of the state. Even then, the danger of substituting financial crash for financial repression is still a real one. A modern financial system requires a modern system of financial supervision and prudential regulation for its proper functioning.

It would be a good idea to sell a few of the regional state banks to foreign banks. This will facilitate the transfer of modern banking technology to Chinese banks. The more local staff the foreign bankers train, the larger is the pool of future managers for Chinese-owned banks. An accelerated process of promoting the growth of sound domestic private financial institutions and allowing the entry of foreign financial institutions would certainly shorten the time it would take for Shanghai it to assume its rightful place among the major international financial centers, and to contribute to more efficient intermediation of the world's savings.

We should mention that entry of Western banks into China's financial markets is not the same thing as liberalization of the capital account in the balance of payments. We do not believe that China would be well served by a rapid opening of the capital account, since that could subject China to rapid swings of short-term capital in the same manner that has whipsawed the economies of Southeast Asia and Latin America. Just as in financial market liberalization,

[29] Partial recapitalisation is likely to occur soon, and it is likely that the target would be the reduction of the NPL ratio from 35 percent to 15 percent. The cost is estimated to be range from 700 million yuan to 1 trillion yuan (7 to 10 percent of GDP) – see "Massive bailout proposed for banks," South China Morning Post, 26 August 2003.

capital account opening should also proceed gradually and in stages, because it must be accompanied by sophisticated financial market regulation, something that is clearly not in place at this time. The fact is that foreign banks could suddenly become conduits for large-scale capital flight, or for rapid swings in short-term lending and repayments, or facilitators of bank runs (in which depositors do not merely switch banks, or switch from domestic banks to domestic currency, but actually switch from domestic deposits to foreign assets).

We must stress that, beside successive rounds of bank capitalisation, there are other shocks that would undermine the fiscal sustainability of the state. One such shock would be an AIDS pandemic that would send state spending on public health soaring, and another would be massive construction to offset major ecological disasters and significant climactic changes (e.g. water shortage in northern provinces, alternative energy systems to traditional methods of burning coal). We note that the fiscal burden aside, these two examples are new macroeconomic challenges that the proven policies of China's past economic managers cannot solve. The SARS epidemic is an important reminder that macroeconomic stability depends on more than just keeping focus on the traditional shocks (e.g. changes in sales taxes) to the aggregate macroeconomic accounts like the state budget deficit and the trade account balance. The fact that the economic costs of SARS had been greatly magnified by an inadequate public health system and by structural weaknesses in information dissemination within China reveals that China's new leaders should take a more comprehensive view about the nature of economic growth and about the implications of existing social-political controls for macroeconomic management.

We end this paper by pointing out that there can be no greater confirmation of China's determination to make the private sector its new growth engine than by the tenacity in which it

pursued and achieved WTO membership. WTO is expressly an organization limited to private market economies, and it requires that the economic institutions of its members converge within a specified period to some broadly defined norms (which are compatible with the main forms of market capitalism). The challenge to China's new leaders is the proper management of this internationally supervised process of institutional convergence when China has been experiencing low or negative employment growth in the industrial sector in the four years leading up to WTO accession.[30] The fiscal burden of installing the new economic growth engine is a heavy one, and our analysis shows that China can just afford it. The absence of a safety margin in fiscal management highlights the importance of competent economic management, which we are confident of its existence in China; but then the absence of a safety margin also highlights the importance of continued good luck on dimensions like normal weather and favorable external security, which we can only hope for. While the many reform tasks ahead are challenging, we take heart in that during the 1979-2002 period, some almost as difficult challenges had been faced and overcome. History certainly justifies cautious optimism on China's success in moving the drive shaft of its economic engine from the public sector to the private sector.

[30] Recent insightful discussions on the conditions for meeting this challenge successfully, and on the impact of WTO accession on the Chinese economy are Lu, Wen and Zhou (2003), Song (2002a), Song (2002b), and Yu (2003).

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Table 1: Output Growth and Inflation Performance in China, 1979-2003

	Gross Domestic Product (GDP)	Retail Price Index (RPI)	Consumer Price Index (CPI)
	(Rate of change, in percent)		
1979	7.6	2.0	NA
1980	7.8	6.0	NA
1981	5.2	2.4	NA
1982	9.1	1.9	NA
1983	10.9	1.5	NA
1984	15.2	2.8	NA
1985	13.5	8.8	9.3
1986	8.8	6.0	6.5
1987	11.6	7.3	7.3
1988	11.3	18.5	18.8
1989	4.1	17.8	18.0
1990	3.8	2.1	3.1
1991	9.2	2.9	3.4
1992	14.2	5.4	6.4
1993	13.5	13.2	14.7
1994	12.6	21.7	24.1
1995	10.5	14.8	17.1
1996	9.6	6.1	8.3
1997	8.8	0.8	2.8
1998	7.8	-2.6	-0.8
1999	7.1	-3.0	-1.4
2000	8.0	-1.5	0.4
2001	7.3	-0.8	0.7
2002	8.0	-1.3	-0.8
1st half of 2003	8.2	-0.4	0.6
average 1979-2002	9.40	5.53	NA
average 1979-1996	9.92	7.84	NA
average 1997-2002	7.83	-1.39	0.16
variance 1979-1996	11.239	42.412	NA
variance 1997-2002	0.348	1.846	2.307
t-statistic for difference in the means of 1979-1996 and 1997-2002	2.521	5.661	

Source: China Statistical Yearbook, 2001 and 2002 editions

Table 3. Growing Fiscal Spending

	Fiscal revenue (Rmb billion)	Fiscal expenditure (Rmb billion)	Fiscal Balance (Rmb billion)	*Share of GDP (%)*	Spending on capital construction (Rmb billion)	*Share of GDP (%)*
1997	865.1	923.4	-58.2	*-0.7*	102.0	*1.4*
1998	987.6	1079.8	-92.2	*-1.1*	138.8	*1.8*
1999	1144.4	1318.8	-174.4	*-1.9*	211.7	*2.6*
2000	1339.5	1588.7	-249.1	*-2.5*	209.5	*2.4*
2001	1637.1	1884.4	-247.3	*-2.7*	251.8	*2.6*
2002	1891.4	2201.2	-309.8	*-2.9*		
2003			-319.8	*-2.8*		

Source: Citigroup

Table 4: Investment Trends by Ownership

investment as percent of GDP
investment refers to fixed asset investment

	Total	Rural	SOE
1981	19.8	5.1	13.7
1982	23.2	6.2	16.0
1983	24.1	7.0	16.0
1984	25.6	7.7	16.5
1985	28.4	7.6	18.7
1986	29.6	8.0	20.4
1987	30.4	8.9	19.2
1988	30.1	8.9	18.5
(June 4th Tian An Men Disruption, 1989-1991)			
1992	29.5	7.5	19.8
1993	36.0	8.0	22.1
1994	36.4	7.5	20.6
1995	34.2	7.5	18.6
1996	33.8	7.9	17.7
1997	33.5	7.7	17.6
1998	36.3	7.5	19.6
1999	36.4	7.5	19.4
2000	36.8	7.5	18.5
2001	38.8	7.5	18.4
average 1984-1988	28.8	8.2	18.7
average 1992-1996	34.0	7.7	19.8
average 1997-2001	36.3	7.5	18.7

1984 was the year that the central government gave the clear signal that it had no ideological objection to the formation of rural enterprises

Rural = rural collectives and rural individuals

SOE = state-owned units only, does not include state-controlled units listed as under various types of joint-owned units (e.g. share-holding units, joint-venture units)

Source: China Statistics Yearbook,

Table 5. Rising Fragility of China's Banking Sector

	End-1996	End-1998	Beginning-2002
Proportions of NPLs (%)			
Big four banks	40.0	48.0	35.0
Ten joint-stock banks	—	13.5	15.5
Average CAR (%)			
Big four banks	4.4	>8.0	5.0

Notes: NPLs: nonperforming loans; CAR: capital adequacy ratio. Proportion of non-performing loans for the four major banks for 1996 and 1998 are re-estimated based on new information made available at the beginning of 2001. The proportion for 2001 excluded the Rmb1.4 trillion transferred to the Asset Management Companies in the previous year.
Source: Citigroup (2002) estimates.

Table 6. Contingent Liabilities in China, End of 2001

	RMB billion	% of GDP
Accumulated public debts	1,550	16.2
Special T-bonds in 1998 for recapitalization	270	2.8
Estimated costs for bank restructuring	4,500	46.9
Estimated costs for social security funds	2,500	26.1
Municipal government contingent debt	700	7.3
External debts	1,500	15.6
Total	11,020	114.9

Note: This is an updated estimation based on new information available on both gaps in social security funds and municipal government contingent debts that the central government is the guarantor for. These were estimated based on communication with government economists.
Source: Citigroup (2002) estimates.

Table 2: Employment in China's Industries, 1978-2001

	Employment Level		Employment Share		Growth in Employment	
	Secondary Industry	Manufacturing Sector	Secondary Industry	Manufacturing Sector	Secondary Industry	Manufacturing Sector
	(in millions)		(percent of total employment)		(percent per year)	
1978	69.5	53.3	17.3	13.3		
1988	121.5	86.5	22.4	15.9	5.8*	5.0*
1989	119.8	85.5	21.6	15.4	-1.4	-1.2
1990	138.6	86.2	21.4	13.3	15.7	0.9
1991	140.2	88.4	21.4	13.5	1.1	2.5
1992	143.5	91.1	21.7	13.8	2.4	3.0
1993	149.6	93.0	22.4	13.9	4.2	2.1
1994	153.1	96.1	22.7	14.3	2.3	3.4
1995	156.5	98.0	23.0	14.4	2.2	2.0
1996	162.0	97.6	23.5	14.2	3.5	-0.4
1997	165.5	96.1	23.7	13.8	2.1	-1.5
1998	166.0	83.2	23.5	11.8	0.3	-13.5
1999	164.2	81.1	23.0	11.4	-1.1	-2.5
2000	162.2	80.4	22.5	11.2	-1.2	-0.8
2001	162.84	80.8	22.3	11.1	0.4	0.5

* Annual compound growth rate between 1978 and 1988

Source: China Statistical Yearbook, 1990 to 2001 data from 2002 edition, and earlier data from 2001 edition
2002 and 2003 GDP growth rates are from Citigroup (2003)

Figure 1: Credit Conditions (Money Growth and Interest Rates, %)

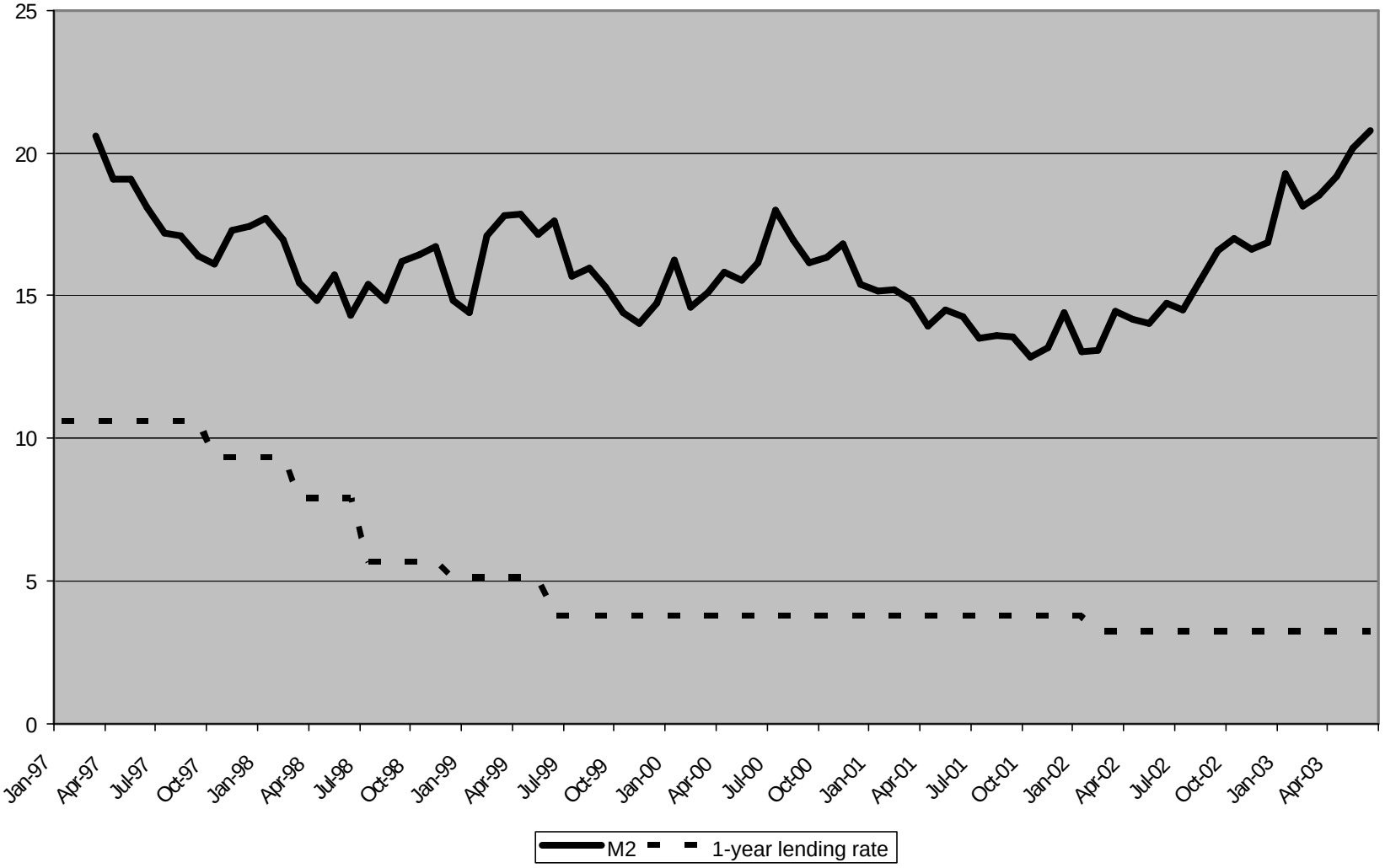

Figure 2: Consumtion and Investment Growth (yoy, percent)