China: Confronting Restructuring and Stability

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March 1999

Part 1: Introduction

China has been the world's star performer in economic growth for the last two decades. China registered an average annual growth rate of 9.7 percent in the 1978-99 period. However, the growth rates for 1996-99 are not only below the average of the period, they have also declined monotonically from 9.6 percent in 1996 to 7.1 percent in 1999. Naturally, many questions and concerns have arisen about this four-year deviation from the average. How much of the deviation has been due to trend slowdown, how much to the internal economic cycle, and how much to the external shock from the Asian financial crisis? Furthermore, what could be done to offset the decline, and what are the long-term implications of these counter-measures?

In the public pronouncements of Chinese officials, the usual explanation for the slowdown was a drop in consumption and the stagnation of exports caused by the Asian financial crisis. Large-scale infrastructure investment programs were started in 1998 and 1999, and a third round of infrastructure spending is planned for 2000. The rationale is straightforward: infrastructure investment lifts aggregate demand to maintain full capacity usage, and alleviates production bottlenecks to ease inflationary pressures.

The above diagnosis and cure have been rejected by a number of economists. In the opinion of Thomas Rawski (1999):

> "This diagnosis is mistaken and the policy misconstrued. Weakness in the economy, which pre-dates the Asian crisis of 1997/98 runs much deeper than China's leaders appear to believe. The difficulties are structural rather than cyclical. Short-term pump-priming exacerbates structural problems and undercuts long-term reform objectives."

Nicholas Lardy (1998), while not offering an explanation for the slowdown, also deemed China's reflation program to be a mistake:

> "China's leadership has made its short-term growth objective its highest priority. Longer-term structural reform of state-owned banks and enterprises is being postponed. Ironically, even if the program increases the rate of growth, ultimately, the costs of postponed reforms will be even greater, meaning it likely will fail to alleviate social unrest."

We agree with some elements in each of the above analyses but we differ in emphasis, and, sometimes also, in conclusions. To anticipate the analysis in this paper, we argue that:

(a) the structural flaws in China's economy in 1995, if left uncorrected, would surely cause growth to slow down in the future, say within a decade, but these structural flaws were not responsible for the significant slowdown in 1996-99;

(b) the slowdown in 1996-97 was largely the result of the austerity program that Zhu Rongji had implemented since mid-1993 to simultaneously wring inflationary pressures out of the economy and to restructure the economy;

(c) the further slowdown in 1998-99 reflected the export decline caused by the Asian financial crisis; and

(d) the reflation program of 1998-99 did not represent a wavering of commitment to restructuring; its emphasis on infrastructure investment (as opposed to a generalized increase in investment) was a sensible responsible to a temporary external shock.

Thomas Rawski and Nicholas Lardy are correct that radical restructuring of the state enterprise sector and the state banks system is absolutely crucial to avoiding a drastic drop in the trend growth rate in the future. The maintenance of the 1996 status of the state enterprises and

state banks is not a viable option in the long run because the economy will simply not be able to support the growing burden from these two sectors.

The Chinese view that under-consumption (high saving) has made macroeconomic management more difficult is correct, a point that we will develop later, but we do not see larger state spending, even if it is in infrastructure, to be the optimum policy response. The correct response is restructuring not stabilization; there should be financial restructuring to create financial institutions that would quickly channel the additional saving to investments with the highest rates of return.

Our general view is that the short-run costs of economic restructuring may have been overstated. Restructuring state-owned enterprises (SOEs) could worsen short-term growth while improving long-term growth prospects; but restructuring state-owned banks could improve both short-term and long-term growth. Financial restructuring is a win-win reform activity because it will eliminate the liquidity trap that now exists in credit creation, and neutralize the short-run deflationary effects of higher saving. Finally, the macroeconomic record suggests the interesting possibility that a clear commitment to a restructuring strategy based on promoting the convergence of China's economic institutions to the norms of modern market economies improves the short-term tradeoff between growth and inflation.

This paper is organized as follows. Part 2 presents the case for economic restructuring. Part 3 analyzes the macroeconomic record. Part 4 evaluates the post-1997 reflation package. Part 5 takes up the question of the susceptibility of China to the type of financial crisis that had hit Asia in 1997-98. Parts 6 examines the issue of under-consumption and the need for financial restructuring, especially in the rural sector if China's high growth is to be prolonged. Part 7 discusses the issue for enterprise structuring. Part 8 contains brief concluding remarks.

Part 2: The Restructuring Imperative

The successful completion of the bilateral US-China negotiations in November 1999 over the conditions of China's entry into the World Trade Organization (WTO) marks a watershed on many fronts for China. First and foremost, China's admission into WTO marks an important improvement in the economic security of China. Trade and foreign investment have constituted an important engine of growth since 1978. The requirement for annual renewal by the U.S. Congress of China's normal trading relationship with the United States made China's economic growth vulnerable to the vagaries of American domestic politics. Through WTO membership, this engine of growth could no longer be unilaterally shut off by the United States without the action being a major violation of international law.

WTO membership also marks a watershed in China's public recognition about the primary source of its impressive growth in the last two decades. The WTO is an international economic organization that specifies and enforces broadly similar economic policy regimes on its membership. China's willingness to join such an institution reflects more than a desire to protect itself from potential blackmail by the United States, it also reflects China's realization that the active ingredient in Deng Xiaoping's recipe for conjuring up growth was the convergence of China's economic institutions to the economic institutions of modern capitalist economies, particularly of East Asian capitalist economies.

At the early stages of China's reform when most of the intelligentsia did not know the full extent of the economic achievements of their capitalist neighbors, and when most of the top leaders were ideologically committed to Stalinist-style communism, it was important for the survival of the reformist faction of that time that the changes to China's economic institutions

were comfortingly gradual, conveniently located in areas far from Beijing, and cloaked in the chauvinistic rhetoric of experimentation to discover new institutional forms that are optimal for China's socialist system and particular economic circumstances. After twenty years of evolution in economic institutions, of rotation in political leadership, and of tectonic change in the political fortune of the communist parties in Eastern Europe and the former Soviet Union, the only organized opposition today to the continued convergence of China's economic institutions to international forms comes form a small group of sentimental Stalinists like Deng Liqun.[1] The social and political landscape in China has changed so much that the political leadership now incurs only minimal ideological liability when they introduce more capitalist incentives (e.g. differentiated pay, leveraged buy-out, stock options for managers) and capitalist tools (e.g. joint-stock company, bankruptcy law, unemployment insurance). The leadership is hence confident that its explicit embrace of capitalist institutions under WTO auspices would be seen by the general Chinese public (and the Chinese elite) as a step forward in the reform process rather than as surrender of China's sovereignty in economic experimentation.[2]

It must be underscored that WTO membership will involve considerable costs to China. China has agreed to reduce its industrial tariffs from an average of 24.6 percent to 9.4 percent by 2005, and its agricultural tariffs from an average of 31.5 percent to 14.5 percent by 2004. China has also agreed to liberalize trade in many services, including telecommunications, insurance and banking. Compliance with WTO rules will create substantial dislocation in China, albeit for the sake of a better future. China is a natural food-importer and a natural factory-oriented society

[1] For recent warnings from this faction against perceived suicide by the Communist Party, see "Elder warns on economic change," South China Morning Post, January 13, 2000, and "Leftists make late bid to slow reforms," South China Morning Post, February 10, 2000.

[2] This de facto public recognition by the government that the *deus ex machina* of China's impressive growth since 1978 is the convergence of its economic institutions to those of market economies will unfortunately not end the academic debate on this issue. Many China specialists have waxed eloquently about how China's experimentation has created economic institutions that are optimally suited for transition economies in general; see Sachs and Woo

given its low land-man ratio. The agricultural sector employs over 332 million people, which is over two-third of the rural labor force. The bulk of China's state-owned sector survives only because of various forms of subsidies and import barriers. Both sets of these instruments contravene WTO regulations, and this sector employs over forty percent of the urban labor force. The agricultural sector and the state sector together employed 60 percent of the total labor force in 1998. Conservatively, a fifth of China's workers may have to change jobs, and this could be a politically destabilizing process if not handled adeptly, and if external shocks were to slow down economic growth.

The tradeoff between stability and restructuring that is so starkly brought to the forefront by China's (forthcoming) admission into WTO is not a new tradeoff. China's WTO membership has really accentuated an existing dilemma and not introduced a new one. The government has always realized that the soft budget constraint of the inefficient state-owned enterprise (SOE) sector is a constant threat to price stability, and the diversion of resources to keep this sector afloat is a drag on economic growth. But serious restructuring of SOEs means much more than facing higher urban unemployment, it also means confronting the politically powerful industrial-military complex and the industrial-bureaucratic complex. Economic rents now pose a bigger obstacle to restructuring than ideological sentimentality, and, unlike the latter, it is not something that the mere passing of time will resolve.

Luckily for China, the job of restructuring had been made easier because China's economic structure could allow growth to occur without restructuring. This is because China in 1978, was still an undeveloped economy dominated by self-subsistence peasant agriculture unlike the urbanized Central European and Russian economies in 1989 which had an overabundance of heavy industries. This meant that the introduction of market forces caused

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(forthcoming) for a survey of this debate.

economic development in China but economic restructuring in Poland and Russia, which translated, respectively, into output growth and output decline.[3]

The movement of Chinese labor from low-productivity agriculture to higher-productivity industry, and from the poor inland provinces to the richer coastal provinces produced an average annual growth rate of 10 percent in the 1978-95 period. The Chinese state sector certainly did not wither away in this period; it employed 18.6 percent of the workforce in 1978 and 18.0 percent in 1995, there were 38 million more state workers in 1995 than in 1978.[4] There was reallocation of labor from agriculture to industry but not reallocation of labor from state to non-state enterprises. China in 1978 was thence very different from Russia in 1991, extensive growth was still possible in China whereas it had run its course in Russia.[5]

Since China was in the fortunate situation of being able to postpone most of the pain of restructuring, it was quite understandable that China did so. The result is that after two decades of "reform and opening," the job of economic restructuring is far from done. Among the many daunting tasks left are:

- a government sector that is still too large (despite a recent cut in the size of the central bureaucracy), too intrusive, and susceptible to corruption;
- a state-owned enterprise (SOE) system that has proved itself resistant to numerous efforts to increase its efficiency and profitability;

[3] This argument is developed in Sachs and Woo (1994).
[4] The 18.0 percent for 1995 is calculated from the China Statistical Yearbook 1996 because the total workforce data from 1990 onward was revised upward in the China Statistical Yearbook of the succeeding years by increasing the size of the rural workforce. The revised data is inconsistent across time, the growth in labor force between 1989 and 1990 is now 15.5 percent (!), while the old data shows an increase of 2.5 percent. Using the revised data, the SOEs employed 17 percent of total labor force.
[5] Easterley and Fischer (1994) showed that extensive growth came to a quicker end in Russia than would be in capitalist market economies because the elasticity of substitution between capital and labor in Russia was much lower.

- a state-dominated financial system where the banks lack the inability to assess the economic merits of proposed projects, and, worse, have shied away from lending to non-state enterprises, the most dynamic component of the economy; and
- inadequate institutional infrastructure to allow smooth running of a market economy; for example, an efficient commercial court system, speedy bankruptcy procedures, independent mechanisms to mediate labor conflict, uniform accounting standards, and social safety nets are really not yet in place.

It was only after the ascent of Zhu Rongji to the prime ministership in early 1998 that a decisive program of restructuring was implemented. The size of the central government was cut by a third, and the process of privatizing many small and medium enterprises was speeded up. Twenty million workers left the payroll of state-owned units in 1998 compared to two million in 1997. This represented an 18 percent reduction in state employment in one year![6]

Now that China is entering WTO, it can no longer postpone the required restructuring of the inefficient components of its economy. However, the restructuring job was made more difficult in the last two and a half years because of negative external shocks. The Asian financial crisis caused Chinese exports to East and Southeast Asia to decline tremendously, and Chinese exports to North America and Western Europe to face increased competition from the Asia countries whose currencies had fallen in value against the Renminbi (RMB). Foreign direct investments amounted to $40 billion in 1999, down from $45 million in 1998. The result was a GDP growth rate of 7.8 percent in 1998 and 7.1 percent in 1999, despite the government's vigorous attempts to reflate the economy since mid-1998.

[6] This is such a large shift that it raises the discomforting thought that some of the shift may be a mere change in employment classification without change in work conditions; an issue that we cannot go into here.

Part 3: The Macroeconomic Situation

Figure 1 summarizes the growth and inflation record since 1978 when China embarked on the first steps toward a market economy. There have been two episodes of high inflation, 1988-89 and 1993-95, where the inflation rate exceeded both 10 percent. It is interesting that the output cost of wringing out inflation were very different in both episodes. The drop in inflation from 18.8 percent in 1988 to 3.1 percent in 1990 was accompanied by a 7 percentage point drop in the growth rate; whereas the drop in inflation from 24.1 percent in 1994 to 2.8 percent in 1997 saw less than a 4 percentage point drop in the growth rate.

What accounted for the drastically more favorable tradeoff between growth and inflation in the second episode? In statistical analysis not reported here, we found that the differences in the inflation and growth performance across the two episodes could not be systemically linked to differences in the credit polices that started and then ended the two high inflations. My hypothesis for the different tradeoffs in these two episodes is that consumers" confidence and investors' confidence about China's future were very different in the two stabilization programs. The 1989-90 stabilization occurred amid widespread doubt about whether the convergence toward a market economy would continue, if not reversed. Following the unfortunate Tianamen tragedy in June 1989, economic policymaking returned to the hands of the central planners, and numerous announcements were made about reining in capitalist tendencies. The implementation of the 1994-97 stabilization, in contrast, occurred after the 14th Party Congress in 1992 had pledged to build “a socialist market economy with Chinese characteristics.” This denial of a universal norm for socialism was correctly read as renewed commitment by the Communist Party toward convergence to a market economy.

Our hypothesis is that this difference in anticipation about the future direction of China's economic policy had very different effects on the behavior of consumers and investors. The heightened confidence in a prosperous future was responsible in large a part for why fixed capital formation contributed over 2 percentage points to GDP growth in 1996-97 compared to the negative 1.7 percentage points in 1989-90; and why consumption spending contributed an average 4.5 percentage points to growth in 1996-97 versus 1 percentage point in 1989-90; see Table 1.

Since inflation in 1996 was down to 8.3 percent from 24.2 percent in 1994, and the 1996 growth rate of 9.5 percent almost about equaled the average 10 percent growth rate of the 1978-95 period, one could say that the Chinese stabilisation program that started in mid-1993 had achieved soft-landing in 1996. Some observers have used this reasoning to described the continuation of tight macroeconomic policies until early 1998 to be a case of "macroeconomic policy overkill." While the precipitous plunge in money (M1) growth from an inflationary 43 percent in 1993 to 20 percent in 1996 was desirable, the further drop to 10 percent in 1998:2Q was an overkill, as evidenced by the fall in the level of retail prices since October 1997.[7]

We do not dispute the macroeconomic consequences of the tight monetary policies and the tight controls over investment spending before mid-1998, but we note that these restrictive policies had succeeded in forcing considerable restructuring in the inefficient state-owned enterprise (SOE) sector. Because most loss-making SOEs did not receive their accustomed allotments of credit to continue production (a large portion of which went straight into inventory), the default outcome was that many were taken over by new owners[8] who reorganised the firms and changed the output mix. Our point is that a temporary slowdown in growth is

[7] Except in August and September 1998 when the heavy flooding disrupted supplies in several heavily-populated parts of the country.

many times necessary in order to force resources to move to a new growth path that would lead to a more competitive economy in the future. We have to recognise in the so-called "macroeconomic policy overkill" the audacity of the top Chinese leadership which has chosen dislocating reforms which would produce sustained dynamic growth in the future over Brezhnev-style maintenance of the comfortable status quo which ensures a dismal future.

The "macroeconomic policy overkill" from 1997:1Q to 1998:2Q, in short, reflected a deliberate decision to accept growth rates that were lower than the 10 percent average growth rate of the 1978-95 period in order to ensure an acceptable rate of economic restructuring and to moderate the boom-bust cycles of the last two decades. The implicit growth range that policymakers appear to think is compatible with achieving the restructuring and stabilisation objectives seems to be about 7.0 percent to 8.0 percent. When the Asian financial crisis hit in 1998, causing China's exports to fall, and hence rendering growth lower than intended, it was only natural that the government undertook stimulation of domestic demand to reflate the economy.

Part 4: Responding to the Post-1997 Deflation

The government responded to the onset of price deflation in 1997:4Q by cutting the average lending rate from 10.1 percent to 8.6 percent. However, the anticipated surge in credit expansion did not occur. This is largely because of the newfound reluctance of the state commercial banks to extend more credit to its traditional clients, the SOEs -- especially the loss-making SOEs – a "liquidity trap" phenomenon that we will discuss later.

By early 1998, in the wake of the collapse of several important Pacific Asian economies, Chinese policymakers recognised that stronger reflation was required to offset the coming

[8] In many cases, the new owners were employees of the firms.

collapse in external demand. Furthermore, the SOE reform program announced at the 15th Party Congress in September 1997 was beginning to take bite and firms would soon begin to shed excess workers. So, stronger reflation was also desirable in order to induce the establishment of new urban enterprises to soak up the newly released SOE workers.

The reflation program sought to boost aggregate demand by trying to:

(a) increase investment by approving faster the backlog of investment applications;

(b) increase government spending;

(c) loosen monetary policy; and

(d) stimulate private spending through housing reform.

Faster Approval of Investment Applications

The State Planning Commission was literally put on an over-time schedule in early 1998 to speed up the approval of investment projects. "Increased economic openness" was a fortuitous byproduct of this measure. Approval was given to a number of large foreign projects that had been held up for several years because of concern either about the possible domination of these particular lines of business by foreign firms or about the possible competition that they might provide to domestic firms of national strategic importance.

One unexpected check on approval acceleration as a reflation tool was that many local governments had not bothered to turn in local investment plans for 1998 because of the across-the border rejection of local investment plans since the earnest implementation of the stabilisation program in 1994. The greatest obstacle to the effectiveness of investment approval as an economic stimulus is that approval does not necessarily translate into realization. The translation of approval of investment into realization of investment is usually low in times of

declining aggregate demand. Hence, not surprising, many foreign and domestic firms postponed the actual investment until sustained economic recovery seems imminent. Partly, because of the low aggregate demand in China and abroad, but mostly because of the panic in international credit markets, actual FDI was US$40 billion in 1999, 10 percent down from US$45 billion in 1998 despite the "increased economic openness" noted above.[9]

Expansionary Fiscal Policy

In July 1998, the government announced the issuance of RMB 100 billion in bonds to finance new infrastructure investment by the central and local governments. (It seems that these bonds had been purchased mainly by state banks.) This announcement was quickly followed by new spending plans on telecommunications, railways, and roads. As the economy continued to slow steadily throughout 1999, a new fiscal stimulus package of RMB 60 billion was implemented in August 1999. In March 2000, the government announced that it would soon issue RMB 100 billion of bonds to finance additional infrastructure investment, especially in the interior provinces.[10]

A natural question raised by the recent expansionary fiscal policy is whether the level of public debt in China is still at a level that would not be too heavy a burden in the future. The issue is what should be counted as "public debt" when so much of the economy is still state owned. If public debt is defined to be the stock of government bonds that has been issued to finance budget deficits, (and held by both domestic and foreign agents), then the public debt-GDP ratio was 7.3 percent of GDP in 1996 and 8.1 percent in 1997.

[9] "Foreign capital off the rails," South China Morning Post, February 16, 2000.
[10] "Zhu pledges to keep cash flowing," South China Morning Post, March 6, 2000.

It has been argued, however, that since the government is the guarantor of the state banks, the nonperforming loans of the state banks ought to be counted as public debt. Estimates of the extent of nonperforming loans range from 20 percent to 50 percent of total bank loans.[11] If we take the NPL ratio to be 33 percent, then the broader definition of public debt would put the "broader public debt"-GDP ratio at 37.0 percent of GDP in 1996 and 41.1 percent in 1997.

What about the debt of SOEs and other state institutions (for example, the regional trusts and investment companies, TICs)? The government could be construed as being responsible for these bad debts just as they were construed to be responsible for the bad debts held by the banks. Since the bulk of the domestic borrowing of SOEs and state institutions is from the state banks, the inclusion of nonperforming loans of the state banks in the broader definition of public debt has already taken into account the bad debts of SOEs and state institutions that are owed to domestic agents.

Foreign debts of SOEs and other state institutions may deserve different treatment from their domestic debts because of the government's great concern about China's continued access to international financial markets at favorable interest rates. In order to arrive at the "broadest" definition of public debt, we take into account all the bad debts that SOEs and other state institutions could potentially owe to foreigners. We constructed the "maximum" public debt as the sum of the broader public debt plus the entire foreign debt of SOEs and public institutions. The "maximum public debt"-GDP ratio was 50.1 percent of GDP in 1996 and 55.1 percent in 1997.[12]

[11] This range reflects our selection of credible estimates (e.g. a missed interest payment does not necessarily mean that the loan is bad), so this range does not encompass all estimates that have been reported in the press. For example, Bloomburg News has reported that some analysts believed bad loans to be 70 percent of bad loans, New York Times, "China Hopes to Sell Bad Loans at Discount," January 5, 1999.

[12] The terms "broader public debt" and "maximum public debt" are from Fan (1998), he differs from my calculations in that he assumes a NPL ratio of 25 percent.

Is a debt-GDP ratio of 55.1 percent too low or too high? Compared with the Italian, Swedish and U.S. situations where central government debt (after deducting intragovernmental debt) to GDP ratios were, respectively, 117.6 percent in 1995, 70.8 percent in 1995, and 50.5 percent in 1996, it might appear that there is still substantial room for the Chinese government to increase its borrowing to finance its expansionary fiscal policy without causing serious debt problems in the future. However, such conclusion would be overly optimistic. This is because China raises much less state revenue (as a share of GDP) than these other countries, and hence has a much lower capacity to service its public debt. The revenue-GDP ratio was 11 percent for China in 1995, 30 percent for Italy in 1995, 38 percent for Sweden in 1995, and 21 percent for the U.S. in 1996. The point is that until China increases its tax collection, there is a real tradeoff between restructuring the state financial sector and increasing infrastructure investment to stimulate the economy. And it is important to note that increasing tax collection is as much a political challenge as it is an administrative challenge.

Easier Monetary Policy

The People's Bank of China has cut interest rates several times since price deflation became obvious. For example, the bank lending rate has been reduced steadily from 10.1 percent in September 1997 to 5.9 percent in September 1999. Furthermore, the bank reserve ratio has been lowered twice; from 13 percent to 8 percent in March 1998 and then to 6 percent in November 1999. However, the money (M1) growth rate continued its downward course from 25 percent in 1997:3Q and 1997:3Q to 13 percent in 1998:1Q, and then to 10 percent in 1998:2Q, prompting some Chinese economists to be alike their Japanese colleagues in postulating the existence of liquidity traps.

This reluctance by banks to extend credit has its origin in the determined efforts of Zhu Rongji to improve the balance sheets of the state banks and to promote restructuring in the SOE sector since he took over as economic czar in mid-1993. By the end of 1997, the twin facts that Zhu Rongji would be promoted to become the Prime Minister in 1998 and that he had peremptorily dismissed bank managers when the proportion of NPLs in their banks had gone up had instilled a new sense of prudent lending in the entire state bank system. Until the typical bank manager faced personally severe consequences from an increase in the ratio of NPLs, he never had to respond to the knowledge that the demand for credit by bankrupt SOEs was always high because they really do not expect to repay any of their debts. The loss-making SOEs were engaging in the gamble of the desperate; new loans offered the only chance of a lucky investment that would pull them out of their seemingly hopeless financial straits. This new behavior by bank managers is the reason why despite additional reductions in interest rates and required reserve ratios by the central bank, money growth continued to drop in line with the decline in GDP growth.

This slowdown in loans to the SOEs has unfortunately not been replaced by an increase in loans to non-state enterprises, the primary engine of growth in China's economy. The state banks are reluctant to lend to the non-state enterprises, partly because the latter's non-standard accounting makes risk assessments difficult. More importantly, a banker knows that while a NPL to an SOE is financially undesirable, a NPL to a private enterprise is more than that, it is also politically undesirable. The banker feared that the NPL to a private firm could result in him being accused afterward of working with capitalists to embezzle the state. Thus, we have the present situation where the loans that state banks are most willing to make are infrastructure loans guaranteed by the central government.

It was only after the central bank implicitly assured the banks in mid-1998 that new NPLs incurred in support of SOEs that were producing saleable goods would be overlooked that money growth increased to 14 percent in 1998:3Q. But then caution reasserted itself as bank managers were rightly skeptical about the credibility of the government that the new NPLs would not count against them in the future. The result was that money growth, after the 14 percent spurt in 1998:3Q, declined steadily to 11.3 percent in 1999:3Q.

Hence, the practical short-run solution to this "liquidity trap" is for the government to undertake new infrastructure spending financed by the state backs (and ultimately by new reserves from the central bank). However, a larger sustained increase in credit is possible only if the state commercial banks would use the new deposits (new reserves) to extend new loans, i.e. only if banks act according to the standard "money multiplier" process. As the banks' willingness to lend depends now on finding truly economically viable projects, the government has sought to create new safe lending opportunities to the banks by announcing housing reforms, including privatisation of the housing stock. The hope is that the banks would then expand mortgage lending on the basis that the household debt would be fully (and, presumably, also safely) backed by a marketable asset, and hence boost aggregate demand.

Housing Reform as a Short-Run Stimulus

The majority of the urban population has, until very recently, lived in virtually free housing supplied by their employers.[13] In early 1998, the government announced that SOEs and other state institutions would stop providing free housing after July 1 and that the housing stock

[13] Of course, housing and other subsidies are in fact largely paid for by the employees themselves; this is why their take-home pay is so low.

would be privatised.[14] To compensate for the loss of free housing, and to encourage their workers to buy the houses that they are presently staying in, many local governments are giving subsidized mortgages to civil servants. By the end of 2000, government workers had purchased 60 percent of the public housing stock.[15] The marketization of housing is now in full swing, marking another significant milestone on the way to a market economy. The marketization of housing will enhance labor mobility and free the SOEs to focus on production and distribution of goods.

The China Macroeconomic Analysis (1998:3Q issue) estimated that, with a functioning mortgage system in place, the marketization of housing would increase the annual demand for housing by 20 to 30 percent. Since housing investment is presently about 4.3 percent of GDP, the housing reform would increase GDP growth by 1 percentage point.[16]

However, in our assessment, the short-run result of the housing reform was a decrease in aggregate demand even though the new steady-state level of housing demand under the market regime is higher than the old steady-state level of housing demand under the entitlement regime. First, the demand for new residential construction by SOEs stopped abruptly on July 1, 1998, and because it takes time for private agencies to appear to intermediate between the builders and the millions of disparate buyers, the immediate impact was more likely to have been a drop in housing demand than an increase.

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[14] The practical method of privatizing the housing stock is to offer the houses to the existing tenants at prices which approximate the present discounted value of the stream of low rent payments. By giving the existing tenants the right of first refusal, this method makes explicit whatever existing inequality there is in housing allocation. This method does not create new inequalities.

[15] "Civil Servants own 60% of public housing," The Straits Times, February 24, 2000.

[16] The Minister of Construction has claimed that the housing reform contributed 1.5 to 2 percentage points to the 1999 growth rate; see "Civil Servants own 60% of public housing," The Straits Times, February 24, 2000. The construction of housing might contributed this amount, but the relevant question is whether the housing reform had actually increased the amount of construction without housing. We doubt this claim for the reasons given in the paragraphs below.

Second, the mortgage system is not yet in place. The banks need time to build up its expertise in mortgage lending, and the certification/registration system of house ownership is usually not standardized province-wide. More importantly, at the moment, only the richest 5 to 10 percent of the urban population can qualify for mortgage loans; and these well-to-do folks are likely to have already acquired the most of the housing that they want.

Results of the Reflation Package

The reflation package has worked much better than expected by most observers. When the negative effects of the Asian financial crisis started hitting in early 1998, and slowing China's GDP growth, most observers steadily revised their forecasts of 1998 growth downward. For example, the Economist Intelligence Unit's (EIU) Country Report on China predicted a 1998 growth rate of 7.3 percent in the 1998:1Q issue, 6.7 percent in the 1998:2Q issue, and then 6.1 percent in the 1998:3Q issue. The credit spurt and investment splurge in the last half of 1998 disappointed all these forecasts by lifting GDP growth to 7.6 percent in 1998:3Q and 9.6 percent in 1998:4Q rate to produce an annual growth rate of 7.8 percent for 1998. The decomposition of aggregate demand in Table 1 shows that fixed capital formation added 4.5 percent points to the 1998 growth rate.

However, given the widespread expectation that the Asian financial crisis was a long-lasting crisis, and the skepticism that China would be able to undertake sustained fiscal stimulus, the EIU continued to predict low growth rates for 1999 despite the falsification of its gloomy forecasts for 1998. The 1999:3Q issue predicted a 1999 growth rate of 6.7 percent. The actual 1999 growth rate turned out to be 7.1 percent, partly due to the additional fiscal and monetary

stimulus in the last quarter, and partly to the rapid recovery of exports in response to the end of the Asian financial crisis.

It must be mentioned that a number of observers believe that the official growth numbers are wrong and that actual growth in 1998 was between 3 to 5 percent. The basis of this skepticism is the low usage of electricity, the low volume of goods being transported, and the continued fall in the level of retail prices. The well-known Chinese economist, Mao Yushi, was quoted as saying that: "The GDP figure is still dubious… There must be some local government trying to please the central government by reporting inflated statistics."[17] There is credibility in Mao Yushi's statements because Premier Zhu had criticized provincial leaders in early December for each reporting a provincial growth rate greater than 10 percent in the first half of 1998 when the national growth rate was only 7.2 percent.[18]

The 1999 growth rate of 7.1 percent, low as it is, also deserves skepticism for the same reasons. First, only twice provinces, Shanxi and Sichuan, have reported growth rates below 7.1 percent. Second, the sum of all individually reported provincial GDP exceeded the official national GDP by 7 percent.[19]

In Woo (1998), we had found that the annual GDP growth rate in the 1985-93 period could have been overstated, on the average, by as much as 2 percentage points; and, after taking various factors into account, we had suggested a downward correction of about 1 percentage point. The overstatement is less serious however, when the inflation rate is low. In light of our work, the negative inflation, and the skepticism expressed in the two preceding paragraphs, we think that the actual GDP growth rate could plausibly be about 7 percent in 1998 and around 6.5 percent in 1999.

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[17] "China just misses 8 percent growth rate," South China Morning Post, December 30, 1998, updated at 2:43 p.m.
[18] "China admits to cooking the books: editorial," Agence France Presse, December 23, 1998, 4:31 p.m.

Table 2 compares exports in each quarter to its level in the same quarter of the previous year. It shows that the negative effects from the Asian financial crisis reached their peak in the 1998:3Q to 1999:2Q. With the recovery of the Asian crisis economies in 1999, China's exports leaped to $54 billion in 1999:3Q. Since the Asian crisis countries are expected to continue their economic expansion in 2000, China now has more room to undertake continued restructuring.

Table 2: Export Earnings (fob, in US$ million)

	Q1	Q2	Q3	Q4	***year total***
1996	28,249	35,803	39,979	47,166	*151,197*
1997	35,585	45,360	48,173	53,759	*182,877*
1998	40,072	46,488	47,190	49,839	*183,589*
1999	37,290	45,727	54,201	na	na

Part 5: Susceptibility of China to a Financial Crisis

The Asian financial crisis was typified by (a) a collapse of the exchange rate because of heavy capital outflow, and (b) a collapse of the domestic financial system causing a shortage of working capital that, in turn, caused output to collapse. So how vulnerable is China to a meltdown scenario of this type?

A dramatic speculative attack on the RMB can be ruled out simply because the RMB is not convertible for capital account transactions in financial assets. It is difficult for a person to borrow RMB from a Chinese bank to buy US dollars to speculate against the exchange rate because the purchase of US dollars requires documentation to prove that the transaction is trade-related.

Capital outflow by foreign private agents has not occurred because most of the foreign private investments in China are foreign direct investments, and there is very little short-term

[19] "Beijing has $546b chasm in key data," South China Morning Post, February 29, 2000.

foreign debt. At the end of 1999, short-term foreign debt was less than 20 percent of the total foreign debt of US$168 billion. The fact that China also had US$155 billion in foreign exchange reserves made defense of the exchange rate feasible even if all short-term foreign debts had been recalled.

Furthermore, foreign participation in the Chinese stock markets is limited to transaction in B-shares. Only foreigners can own B-shares, and B-shares are denominated in US dollars and transacted using US dollars. In short, an abrupt withdrawal by foreigners from the Chinese stock markets can affect the value of the yuan-dominated A-shares (that only Chinese can own) only if their withdrawal would cause Chinese speculators to revise their expectations of future Chinese growth downward.

Of course, capital flight can occur through channels like over-invoicing of imports and under-invoicing of exports. A successful speculative attack on the RMB via large and pervasive mis-invoicing is theoretically possible, but difficult to prove because the paper trial would point to trade imbalance rather than portfolio adjustment being the cause of the exchange rate collapse. An exchange rate collapse from mis-invoicing of trade requires that the government be rigidly commited to current account convertibility, but this is not credible. Any government like China that has in place a comprehensive administrative system that processes every import application to buy foreign exchange (in order to prevent capital movements) can be easily tempted to defend the exchange rate by delaying approvals of import applications. So imports could be compressed to a significant degree whenever a trade deficit threatens to materialise.

We turn now to the issue of whether China's banking system would collapse spectacularly as in the countries experiencing the Asian financial crisis. To a first approximation, when the won, baht, and rupiah went into free fall, many Korean, Thai and Indonesian banks

were rendered insolvent through a combination of the following channels: the sudden increase in the value (measured in domestic currency) of their foreign liabilties; the default on bank loans by domestic corporation bankrupted by the soaring of their external debts; and the default on bank loans by exporters who could not get short-term credit from their foreign suppliers of inputs. Many of the Korean, Thai and Indonesian banks were already financially fragile before their collapse because of undercapitalisation, and because of considerable NPLs that had been hidden by accounting gimmicks. And the exchange rate shock pushed these fragile banks over.

Much alarm has been raised in recent months about the amount of NPLs in China's banking system, with estimate for NPLs ranging from 20 to 50 percent of total bank loans. It has even been raised as a serious possibility several times, that a run by depositors is almost inevitable, causing a banking collapse that would trigger a general output decline.

We find the likelihood of either a bank run or a collapse of the banking system to be minimal. Admittedly, there have been bank runs in China since 1978, e.g. in 1988. But these bank runs were motivated by aniticpations of high inflation caused by imminent lifting of price controls, and not by anticipations of bank failures. Whenever the government began indexing interest payments to the inflation rate, the bank runs reversed themselves. In the present time of falling prices, inflation-induced bank runs will not occur.

It is true that there is no depositor insurance in China but this in itself is unlikely to cause a bank run induced by fear over the large amount of NPLs. This is because all but one of the banks are state-owned and the government has repeatedly pledged to honor all deposits in the state banks. This pledge is credible because the government is in a position to make good its promise. As pointed out earlier, the government can easily borrow to cover the NPLs; and

assuming an NPL ratio of 33 percent, the borrowing would raise the public debt-GDP ratio to just 40 percent. Alternatively, the government could always raise taxes to cover the NPLs.

Even if a bank run does occur, there need not be a collapse in bank credit because the central bank could just 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 are in place. This 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, and not a shift into goods.

Simply put, even if the state banks are truly insolvent as has been alleged, and even if the insolvency does induce bank runs, a collapse in bank credit does not have to follow. It is well within the technical ability of the government to accommodate the bank runs, and it is also well within the financial ability of the government to recapitalise the state banks. Furthermore, these two government actions would not cause much damage (if any) to the economy, like lower growth and higher inflation.

While China can prevent the NPLs of the state banks from maiming the payments system and crippling production, we recognise that the NPLs have imposed real costs on the economy. With NPLs accounting for a third of total bank loans (our estimate), bank loans accounting for about a fifth of fixed investments since 1985, and fixed investments at about 35 percent of GDP, this means that about 2.3 percent of GDP has been wasted annually in the last decade. Moreover, since most of the bank loans are extended to SOEs with little going to the more efficient non-state sector, the performing loans are not in investments with the highest rates of return. In short, the productive capacity of the economy could be higher than what it is.

Of course, we also recognise tha the NPL problem might be even worse at the non-bank financial institutions (NBFIs) like the regional trust and investment companies (TICs).[20] However, because NBFIs consitute only a small part of the national credit system, their failure is not capable of bringing down the payments system. The biggest dangers from the collapse of NBFIs are social instability (especially when the base of NBFIs is small depositors), and reduction in foreign credit.

In the 1998 closure of the financial arm of the Guangdong International Trust and Investment Company (GITIC), the central government assumed responsibility for all properly-registered foreign debt. Since trade-related credit with maturity of less than three months and foreign debts of GITIC's branch in Hong Kong did not require official registration, it is likely that a very substantial amount of GITIC's foreign debt will not be assumed by the Chinese government. In October 1999, GTIC's liquidation committee reported that, after rejecting illegal contingent guarantees issued by GITIC, the total liabilities had been reduced from US$4.7 billion to the range of US$1.7 billion to US$2.7 billion. The value of recoverable assets was put at US$0.9 billion.[21]

As discussed earlier, this assumption of all the properly-registered debt of state institutions and SOEs would raise the public debt-GDP ratio to 55 percent – still a very low level when compared with the public debt-GDP ratios of most Western European countries. As a general principle, the government's decision to let NBFIs fail is important to reducing the moral hazard problem inherent in supervision of the financial sector. Both domestic depositors and foreign creditors have to be encouraged to assess and mange risks better.

[20] According to the Far Eastern Economic Review ("Tic Fever: China's shaky trust and investment houses start to fall," October 22, 1998), "most of the country's 243 Tics are on the rocks." Lardy (1998b) reported the claim that 50 percent of the assets of the non-bank financial sector was not performing.
[21] "Illegal Gitic deals delay payout," South China Morning Post, October 23, 1999.

As things stand at the beginning of 2000, it looks unlikely that China will soon succumb to a financial crisis marked by bank runs, capital flight, a severe shortage of working capital, and a deep recession.

Part 6: The Importance of Financial Intermediation for Stabilization and Growth

Part A of Table 3 shows that total household consumption has declined steadily as a proportion of GDP. It dropped from an average of 52 percent in 1979-1983 to 46 percent in 1994-98. However, this fall in consumption is not seen in all sectors. While rural consumption fell from 33 percent of GDP in 1979-83 to 23 percent in 1994-98, urban consumption rose from 19 percent to 23 percent. But since the share of population living in urban areas has gone up from 20 percent in 1979-83 to 30 percent in 1994-98, it is not surprising that urban consumption has risen relative to GDP, while rural consumption has fallen. The important analytical issue is whether urban consumption did increase relative to GDP, once the demographic shift has been controlled for.

Part B of Table 2 presents a decomposition of the change in rural and urban consumption behavior after taking the rural-urban movements into account. The decomposition follows from:

Equation (1): $(C_i/GDP) = [L_i/L] * [(C_i/L_i)/(GDP/L)]$

where C_i = consumption in sector i

L_i = population in sector i

L = total population

The decomposition in Equation (1) can be described as:

(consumption in sector i as share of GDP)

= (share of population living in sector i) * (normalized per capita consumption in sector i)

Taking differences, Equation (1) becomes:

Equation (2): $$\Delta(C_i/GDP) = [(C_i/L_i / (GDP/L)]*\Delta [L_i/L] + [L_i/L]*\Delta[(C_i/L_i)/(GDP/L)] + [\Delta (L_i/L)]*[\Delta\{(C_i/L_i)/(GDP/L)\}]$$

The decomposition in Equation (2) can be described as:

Percentage point change in (consumption in sector i as share of GDP)

= Percentage point contribution from the shift in the share of population in sector i

+ Percentage point contribution from the shift in normalized consumption in sector i

+ Percentage point contribution from interaction of the two shifts

We note that the normalized per capita consumption in sector i can in turn be decomposed into:

$[(C_i/L_i)/(GDP/L)] = (C_i/Y_i) * [(Y_i/L_i)/(GDP/L)]$

(C_i/Y_i) = average propensity to consume in sector i

$[(Y_i/L_i)/(GDP/L)]$ = [(per capita income in sector i)/(per capita GDP)]

= normalized per capita income in sector i

We now have a natural definition of chronic under-consumption, it means a secularly declining average propensity to consume.

Since per capita income in China's urban sector has risen faster than per capita GDP over the entire reform period, normalized consumption in urban sector would increase if average

propensity to consume in urban sector has remained unchanged. A drop in normalized consumption in the urban sector could only mean that the average propensity to consume among urban residents has gone down, i.e. that there is chronic under-consumption in the urban sector.

A drop in normalized consumption in the rural sector is more ambiguous, it would be consistent with a drop or a rise in the average propensity to consume of rural dwellers because growth in per capita income in rural areas has lagged behind growth in per capita GDP.

Part B of Table 3 shows that there is unambiguous chronic under-consumption in urban China, and that this is also likely to be the case in rural China. There has been a downshift of 3 percentage points in the normalized consumption of urban residents between Period 1 (1979-83) to Period 4 (1994-98), and a downward shift of 6.7 percent points in the normalized consumption of rural residents. This much bigger downward shift in rural normalized consumption suggests that the rural average propensity to consume has also fallen.

Keynes pointed out in his paradox of thrift that a rise in the saving rate could, in the short run, depress aggregate demand, and cause the economy to produce below capacity. Only if financial markets were informationally perfect, would the increased saving be translated instantaneously into investments, and the level of aggregate demand be maintained. The paradox of thrift is based on coordination failure between savers and investors, and the minimization of its occurrence requires highly sophisticated financial intermediation. In a centrally planned economy, the paradox of thrift would not exist because the planner controls both the amount of saving and the amount of investment; but then, for well-known reasons, a large portion of the saving would be wasted on value-subtracting projects.

China's marginally reformed financial system contains the worst aspects of the preceding two financial systems: the coordination failure of the market financial system, and the allocation

irrationality of the command financial system. China's high saving rate is actually also partly a reflection of this serious problem in financial intermediation. The steady liberalization of the economy has steadily increased the number and range of profitable investment opportunities. But because of the refusal of the state banks to lend to private entrepreneurs to enable them to reap these high rates of return, the private entrepreneurs have to engage in self-financing, and this requires high saving to accumulate the required threshold amount of capital.[22] In short, the convergence of financial intermediation in China to the level of financial sophistication in the United States would lower China's saving rate as well as ensure the full employment of saving and allocate it to the most profitable projects.

Most of the attention on China's financial sector has focused on its urban banks. This neglect of rural financial intermediation is most unfortunate because rural enterprises (popularly known as township and village enterprises, TVEs) have constituted the main engine of China's economic growth since 1984.[23] It has been clear since the 15th Party Congress in September 1997 that China has decided to sharply reduce the importance of state-owned enterprises (SOEs) by accelerating the diversity of ownership forms. The amendment of the constitution in March 1999 to accord private ownership the same legal status as state ownership is a logical development from the 1997 policy decision. Implicitly, TVEs are expected to become an even more important engine of growth in the future.

In Woo (1999), we argued that this expectation of continued high TVE growth may be unrealistic however, given recent investment trends. TVE investment in the 1990s has declined relative to both GDP and total fixed investment, in a period in which total investment went from 30 percent of GDP in 1987 to 33 percent in 1997.

[22] A formal model and testing of this argument is in Liu and Woo (1994).
[23] The industrial output alone from rural enterprises accounted for about 31 percent of the increase in GDP between

Table 4: Investment and Output by Ownership Forms

	Fixed Investment as % of GDP		Share of Fixed Investment, %		Share of Industrial Output, %	
	1987	1997	1987	1997	1987	1997
All Ownership Forms	30.4	33.4	100.0	100.0	100.0	100.0
SOEs	19.2	17.5	63.1	52.5	59.7	25.5
TVEs	8.9	7.7	29.1	23.0	32.5	47.6

So far, the TVEs have increased their output share not only without getting any of the investment share released by the shrinking SOE sector but doing so with a decreased investment share, from 29 percent in 1987 to 23 percent in 1997. This is unlikely to be a sustainable situation. It is hard to see how the TVEs could move up the value-added chain in production without significant capital investments in the near future. So, if China's market capitals continue not to allocate sufficient investment funds to the most dynamic sector of the economy, China's high growth rate is probably not going to continue in the medium run.

The Agricultural Bank of China (ABC) was established in 1955 to provide financial services to the rural sector, and channel funds for the grain procurement purchases. Small-scale collectively-owned rural credit cooperatives (RCCs, *Nongcun Xindai Hezuoshe*) were started in the early 1950s, under the supervision of ABC, to be the primary financial institutions serving the rural areas. RCCs operate an extensive network of branches, savings deposit offices, and credit stations in market towns and remote areas. The number of RCC units rose from 389,726 in 1981 to 421,582 in 1984, and then fell steadily to 365,492 in 1995.[24] We want to highlight

1984 and 1993; calculated from Woo (1998).

[24] The number of RCC units is the number of RCCs plus the number of branches, saving deposit offices and credit stations.

this decline in the number of RCC units after 1984 because this decline means a decrease in the effort to mobilize rural saving, and a decrease in the access of the rural community to investment financing.

In our opinion, the primary reason for the drop in TVE investment (as a share of GDP and as a share of total domestic investments) is that TVEs suffer from two big disadvantages in investment financing. The first disadvantage suffered by TVEs is that the still heavily-regulated financial system is directing too much of the investment funds to the SOE sector, thus starving the TVEs sector of investment funds. The second major disadvantage of the TVEs in raising capital is that, because of political discrimination against private ownership, many TVEs generally have vague, collective forms of property rights that cannot attract market-driven investment funds.

The deregulation of financial intermediation will allow the appearance of new small-scale local financial institutions that will mobilize local savings to finance local TVE investments. Our expectation is based on the impressive growth of folk finance (*minjian rongzhi*) since 1978 despite the absence of legal recognition and legal protection. According to Liu (1992), folk finance was the source of the development of TVEs in Wenzhou city in Zhejiang Province:

> "Ninety-five per cent of the total capital needed by the local private sector has been supplied by "underground" private financial organizations, such as money clubs, specialized financial households and money shops ..."[25]

It cannot be over-emphasized that financial deregulation has to be accompanied by the introduction of adequate banking supervision and of prudential standards that comply with

[25] The competition from the new rural financial institutions is likely to force the ABC-RCC system is improve its operations. This expectation is again based on Wenzhou's experience: "In order to compete with [the new folk finance institutions]... , as early as 1980 a local collective credit union, without informing the superior authority, abandoned for the first time the fixed interest rate and adopted a floating interest rate which fluctuated in accordance with market demand but remained within the upper limit set by the state. Despite the dubious legality of the floating interest rate, the local state bank branches and all the credit unions in Wenzhou had already adopted it before the central state officially ratified it in 1984." Liu (1992).

international norms. The rash of banking crises in Eastern Europe in the early 1990s and in East and Southeast Asia recently should serve as warnings of financial deregulation without adequate improvement in the government's ability to monitor the activities of the financial institutions. Besides deregulating rural financial intermediation, it is also important that the property rights of rural enterprises are clearly defined, protected legally, and freely tradable like the property rights of shareholding firms. The present trend of restructuring TVEs into shareholding cooperatives by dividing their assets among the workers (sometimes, among the original inhabitants of the community) is a natural convergence to an enterprise form which, international experiences have shown, assures investors that managers would have the incentives to maximize profits in a prudent manner.

Part 8: The Many Disappointments of State Enterprise Reform

When China started its SOE reform two decades ago, it followed the principles of market socialism to motivate the SOE manager to maximize profits. The state entered into a profit-sharing arrangement with the firm, and gave increasing operational autonomy to the manager. The official conclusion is that the decentralization of decision-making to the firms has failed to improve their performance.

> "The current problems of SOEs are: excessive investments in fixed assets with very low return rates, resulting in the sinking of large amounts of capital; and a low sales-to-production ratio, giving rise to mounting inventories. The end result is that the state has to inject an increasing amount of working capital through the banking sector into the state enterprises." (Vice-Premier Zhu Rongji, 1996)[26]

[26] "Guo you qiye sheng hua gaige ke burong huan," (No time shall be lost in further reforming state owned enterprises), speech at the 4th meeting of the 8th People's Congress, People's Daily, Overseas Edition, March 11, 1996.

> "The situation as regards the economic efficiency of [state] enterprises has remained very grim ... And the prominent feature is the great increase in the volume and size of losses" (Vice-Premier Wu Bangguo, 1996)[27]

There has been a steady increase in SOE losses since additional decision-making powers were given to SOE managers in 1985.[28] The three most commonly cited reasons for this development are: the emergence of competition from the non-state enterprises, the failure of the SOEs to improve their efficiency, and embezzlement by SOE personnel.

The competition explanation is perhaps the weakest explanation because the profit rates of SOEs in the sectors of industry that experienced little entry by non-SOEs showed the same dramatic drop as the profit rates of SOEs in sectors with heavy penetration by non-SOEs. Fan and Woo (1996) compared the SOE profit rate and the proportion of output sold by SOEs in different sectors of industry in 1989 and 1992. In four of the five cases where the degree of SOE domination was unchanged, the profit rates were lower in 1992, e.g. the profit rate of the tobacco industry dropped 82 percentage points, and that of petroleum refining dropped 13 percentage pints. The 1992 profit rates were lower in six of the seven cases where the degree of SOE domination had declined by less than five percentage points.

The failure-to-improve explanation has generated a heated debate in the academic literature. There is a wide range of total factor productivity (TFP) estimates, going from large negative to large positive, and they could be due to a whole array of factors like the possibility of Potemkin data sets, the functional form, the estimation method, and the choice of price

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[27] "Losses of State-Owned Industries Pose Problems for China's Leaders," The Washington Post, November 3, 1996.
[28] Recent evidence suggest that past reports on SOE losses (e.g. two-third of SOEs make zero or negative profits) may be understated. A national audit of 100 SOEs in 1999 found that eighty-one falsified their books, and sixty-nine reported profits that did not exist; and an audit of the Industrial and Commercial Bank of China and the China Construction Bank found that accounting abuses involving RMB 400 billion, of which RMB 200 billion was overstatement of assets. ("China: Finance ministry reveals widespread accounting fraud," Financial Times, December 24, 1999.) In January 2000, auditors in Hebei caught 67 SOEs covering up losses of RMB 600 million ("Beijing moving to improve quality of statistics," South China Morning Post, February 29, 2000)

deflators.[29] Our reading of the evidence is that any improvements in TFP was minor, and, most likely, temporary.

The attribution of China's SOE losses to embezzlement of profits and asset-stripping by employees (managers and workers) is reminiscent of the relentless escalation of SOE losses during the decentralizing reforms in pre-1990 Eastern Europe. With the end of the central plan and the devolution of financial decision-making power to the SOEs, the key source of information to the industrial bureaus regarding the SOEs were reports submitted by the SOEs themselves. This reduction in the monitoring ability of the state in a situation of continued soft-budget constraint meant that there was little incentive for state-enterprise managers to resist wage demands because their future promotion to larger SOEs was determined in part by the increases in workers' welfare during their tenure. The reduction in the state's monitoring ability combined with the steady reduction in discrimination against the private sector also made it easier for the managers to transfer state assets to themselves.[30]

Besides creating a fiscal crisis for the state, the "disappearing profits" at the SOEs have also contributed to social instability. The increasing public outrage over the inequity of the informal privatization of the SOE sector is well captured in a recent 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 mean of plunder was political power.[31]

There can be little doubt that the Chinese leadership recognizes the increasingly serious economic and political problems created by the agency problem innate in the decentralizing

[29] For a review of the empirical findings, see Huang, Woo and Duncan (1999).
[30] It is hence not surprising 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" ("Judicial Attention to SOEs Pledged," China Daily, February 19, 2000.)

reforms of market socialism. This is why the debate between the conservative reformers and the liberal reformers has progressed from whether privatization is necessary to the question of the optimal form and amount of privatization. The emerging consensus is that all but the thousand largest SOEs and the defense-related SOEs are to be corporatized, with part of their shares sold to employees and the general public. The preferred privatization method for small and medium-sized SOEs has been employee (insider) privatization. Even for the larger SOEs that are to be corporatized, the state need not be the biggest shareholder.

The thousand largest SOEs will be given preferential financing to develop into business groups (like the Japanese *zaibatsus* and the Korean *chaebols*) that allegedly will enjoy enormous economies of scale. The truth is more prosaic. Given the co-existence of conservative and liberal reformers, any SOE reform package needs to contain a component that appeases each group. The upshot is dual-track SOE reform: state-sponsored conglomerates for the conservative reformers, and publicly-traded joint-stock companies for the liberal reformers. However, in light of the 1997-98 external debt crisis in South Korea caused by imprudent borrowing by the *chaebols*, one should question the wisdom of creating such large state business groups.

We must emphasize that the key to SOE reform is not privatization *per se*, but a transparent, legal privatization process that society at large can accept, at the minimum, as tolerably equitable. Because an adequate privatization 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. Without a transparent, equitable privatization process (overseen by an adequate legal framework), China is likely to repeat the mistakes of the Russian privatization program implemented by Premier

[31] The translated quote is from Liu and Link (1998), pp.19.

Chernomyrdin. Just as the creation of the new *kleptoklatura* in Russia has robbed the Yeltsin government of its political legitimacy, its occurrence in urban China could be socially explosive.

Part 8: Concluding Remarks

We want to highlight one possible negative long-run result from the present reflation package. There is strong evidence that the larger credit growth in the third and fourth quarters of 1998 was achieved only after implicit assurances were given to bank managers that they would not be held responsible if the NPL ratio were to increase. A temporary deviation from the firm policy of cleaning up the balance sheets of the state banks may be defensible in the midst of the Asian financial crisis, but a prolonged deviation would underline the credibility of the commitment to reform the state banks and mean a return to the traditional socialist boom-bust cycle.

The long-term answer to the NPL problem goes beyond punishing bank managers who experienced increases in the NPL ratio, the long-term answer lies in changing both the supply-side and the demand-side of the credit market. Many changes are required on both sides of the credit market, and the most fundamental changes include the transformation of the state banks and the SOEs into shareholding corporations to make profit-maximisation their primary objective, the establishment of a modern legal framework to promote transparency and reduce transaction costs, and the creation of a prudential regulatory body to reduce excessive risk-taking by banks.

The above complex institutional changes that are necessary in order to address the NPL problem adequately illustrate that most of China's economic problems cannot be individually addressed, success depends on systemic reform. This brings us to the basic point that while

President Jiang and Premier Zhu deserve much credit for their competent handling of the current macroeconomic problems so far, their position in Chinese history will depend more on their success in addressing the many and varied long-term development challenges facing China. These challenges include the slowdown in agricultural productivity growth, the decline in job creation in the rural enterprise sector, the acceleration of losses by state-owned enterprises (SOEs), the relentless growth in nonperforming loans (NPLs) at the state banks, the inability of the legal system to meet the demands of an increasing sophisticated economy, and the inadequacy of social safety nets to cope with the temporary dislocations that are characteristic of a fast-growing economy. The ability of China to maintain its international competitiveness after the Asian financial crisis is over is conditional upon the resolution of the above problems.

China's forthcoming accession into WTO reveals recognition by the top leaders that convergence of China's economic institutions to the institutional norms of modern market economies offers China the only chance to achieve sustained high growth, and, more importantly, commitment by the top leaders to make sure that convergence will occur.

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Figure 1: Growth and Inflation in China, 1978-1999

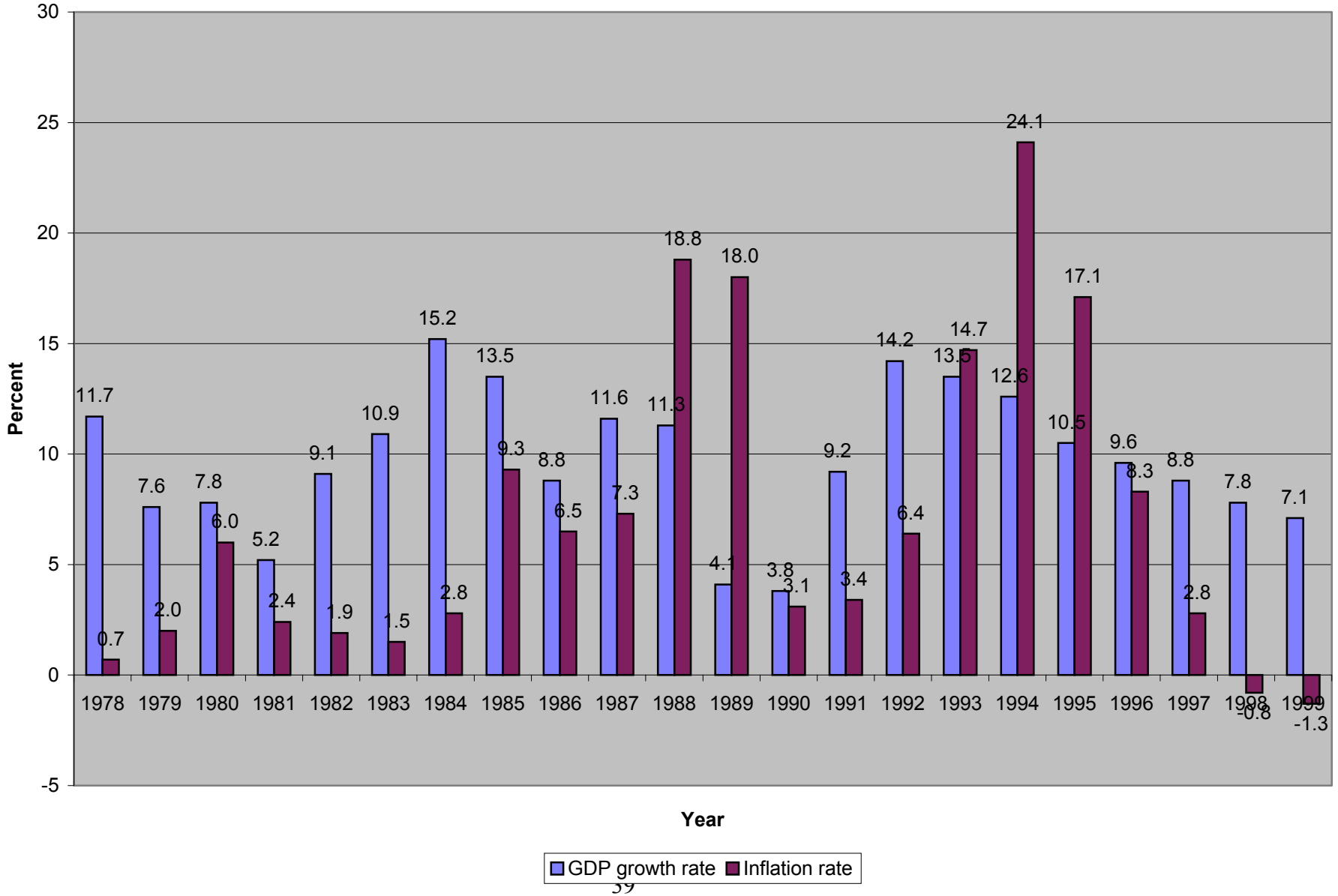

Table 1: Sources of Aggregate Demand in China in Reform Period, 1978-1998

	Annual GDP growth rate	*Rural household consumption*	*Urban household consumption*	*Government consumption*	*Fixed capital formation*	*Change in inventory*	*Net exports*	*Total household consumption*
Part A: Percentage Point Contribution to GDP Growth Rate by Each Expenditure Category								
1979-98	9.8	2.4	2.3	1.2	3.3	0.3	0.2	4.7
1988	11.3	3.1	4.1	0.4	3.2	1.7	-1.2	7.2
1989	4.1	0.7	1.3	1.1	-4.0	5.2	-0.1	2.0
1990	3.8	-0.8	0.7	0.4	0.5	-1.0	4.0	-0.1
1991	9.2	0.9	2.2	2.2	4.7	-1.3	0.4	3.2
1992	14.2	2.5	4.0	2.1	8.8	-1.6	-1.7	6.5
1993	13.5	0.5	2.9	1.3	10.5	1.5	-3.3	3.4
1994	12.6	2.1	2.7	1.4	3.0	-0.1	3.5	4.7
1995	10.5	2.9	3.4	-0.2	2.2	1.6	0.5	6.3
1996	9.6	3.7	1.9	1.2	2.7	-0.4	0.6	5.5
1997	8.8	1.3	2.2	1.2	2.4	-0.4	2.0	3.6
1998	7.8	0.6	2.7	1.2	4.5	-1.4	0.3	3.3

Table 3: Consumption Shifts in China in Reform Period, 1978-1998

Part A: Expenditure Category as Proportion of GDP, 1978-1998

		Rural household consumption	*Urban household consumption*	*Government consumption*	*Fixed capital formation*	*Change in inventory*	*Net exports*	*Total household consumption*	Rural share of population
	1978	30.3	18.5	13.3	29.8	8.4	-0.3	48.8	82.1
	1988	30.4	21.5	11.7	31.4	5.9	-1.0	51.9	74.2
	1998	22.1	24.1	11.9	35.3	2.8	3.8	46.2	69.6
Period 1	1979-83	32.6	19.0	14.4	27.6	6.1	0.4	51.6	79.7
Period 2	1984-88	31.9	19.5	13.1	30.7	6.3	-1.5	51.4	75.5
Period 3	1989-93	26.5	22.2	12.9	30.0	7.7	0.7	48.7	73.0
Period 4	1994-98	22.8	23.3	11.9	34.8	4.7	2.6	46.1	70.5

Part B: Decomposing the Change in Consumption-GDP Ratio

	Change in Consumption-GDP Ratio	Percentage Point Change in Consumption-GDP Ratio Due to: (a) Rural-Urban Shift	(b) Consumption Shift	(c) Interaction Effects
	For the Rural Sector			
Change between 1978 and 1998	-8.2	-4.6	-4.2	0.6
Change between Period 1 and 4	-9.7	-3.8	-6.7	0.8
	For the Urban Sector			
Change between 1978 and 1998	5.6	12.9	-4.3	-3.0
Change between Period 1 and 4	4.2	8.7	-3.0	-1.4