The Case of China

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By conventional measures China escaped the most adverse consequences of the Asian financial crisis. More than two full years after the onset of the crisis, China's economic growth, while down somewhat compared with pre-crisis levels, remained the highest in the region. The value of the currency, the *renminbi,* remained fixed at 8.3 vis a vis the U.S. dollar and official foreign exchange reserves expanded by a further US$49.7 billion in the three year period ending December 1999. Foreign direct investment inflows reached a plateau in 1998 and then shrank by 12 percent in 1999. But even in 1999 inflows were US$40 billion, almost certainly the largest of any emerging market economy. Export growth moderated somewhat in 1998 and 1999 but, but unlike other countries in the region, China was able to sustain strong import growth and still maintain a significant positive trade surplus.

The central thesis of this paper is that China avoided the Asian financial crisis primarily because its financial system was relatively closed. Domestic financial liberalization had not yet begun, limiting China's vulnerability to a currency crisis. Yet China remains vulnerable to a domestic banking crisis. Sustaining strong economic growth and avoiding a banking crisis will depend very much on skillful implementation of further financial and other economic reforms. This is because China's pre-crisis financial fundamentals were in many ways considerably worse than other Asian countries drawn into the contagion; its fiscal position is fundamentally weaker; economic growth is decelerating; price deflation is deepening; the balance of payments, particularly the capital account, has deteriorated at a pace and for reasons that are not well understood; and political constraints inhibit the rapid closure and exit of large numbers of money-losing state-owned companies, compounding weakness in the financial sector.

Sidestepping the Asian Crisis

As already indicated, China weathered the first two years of the Asian crisis remarkably well. This is attributable primarily to four factors. First, and perhaps most important, China's currency was not convertible on capital account. Foreigners hold almost no *Renmibi*-denominated financial assets that they might have sold, perhaps setting in train a series of events leading to a significant depreciation of the *Renminbi*. For example, in the domestic equity markets foreigners are allowed to purchase only special foreign currency-denominated shares that are not legally available to domestic investors. If the outlook for the price of these shares declines, foreign portfolio managers can only sell these shares to other foreigners, who also must pay in dollars. Thus even when foreign portfolio managers all run for the exit at the same time, there are no implications for the value of the domestic currency, a situation that contrasts dramatically with that in Southeast Asia in the fall of 1997.

Also, in contrast with the situation elsewhere in the region, domestic and foreign speculators had no way to act on the view that the Chinese currency was overvalued. Legal purchase of foreign exchange is limited to importers, Chinese citizens holding documents authorizing them to travel abroad, enterprises or financial institutions that need foreign exchange to repay a previously approved foreign currency loan, or foreign investors (including those in joint ventures) who wish to repatriate some or all of the domestic currency dividends that have been declared by the firm's board of directors. Thus Chinese citizens that anticipated a declining value of the *renminbi* generally could not convert their domestic currency into foreign currency. Similarly, China's limited foreign exchange futures markets are legally open only to those firms that wish to hedge a documented need to complete a future trade-related transaction that is denominated in foreign currency. That effectively precluded speculators from taking short positions in the domestic currency.

A second factor insulating China from the crisis was its extraordinarily strong balance of payments position in the run up to the crisis. As shown in Table 1, in 1996 and again in 1997, the current account was in surplus. Indeed the current account surplus recorded in 1997, $29.7 billion, was an historic record by a very large margin. Thus, unlike other countries in the region, China did not need to increase its borrowings abroad in order to finance a current account deficit. Moreover, largely because of record level inflows of foreign direct investment, China concurrently was running a large capital account surplus. Indeed the $40 billion capital inflow in 1996 was, by a very wide margin, an all time record. Thus official foreign exchange reserves also grew by record amounts--$31.4 billion and $34.9 billion, respectively, in 1996 and 1997, despite a large adverse errors and omissions entry in the balance of payments in both years.

Table 1: China's Balance of Payments 1996-1998

(billions of U.S. dollars)

	1996	1997	1998
Current Account	7.2	29.7	29.3
Trade account	19.5	46.2	46.6
Capital Account	40.0	23.0	-6.3
Errors and Omissions	-15.6	-17.0	-16.6
Change in Reserves	-31.4	-34.9	-5.1

Notes: Reserve increases are indicated by a negative sign.

Sources: State Statistical Bureau (1997, 627-728); (1998, 92-93). State Administration of Foreign Exchange (1998).

Third, and closely related, compared to several other countries in the region China's official external debt was relatively modest relative to its official holdings of foreign exchange. As shown in Table 2, in 1996, for example, official reserves of $105 billion were the equivalent of 90 percent of external debt, which stood at $116.3 billion. Moreover, the structure of China's external debt was favorable. Loans from foreign governments and international financial institutions accounted for fully one-third of external debt in 1996. These loans have highly concessionary interest and repayment terms. And short-term debt accounted for only 13 percent of external debt. As a result China's reported debt service ratio in the 1990s remained consistently well below 10 percent (State Statistical Bureau 1998, 292).

These figures on the current account and external debt compare quite favorably with several of the countries engulfed in the Asian financial crisis. In Korea, for example, the current account deficit was 4.4 percent of gross domestic product when the crisis struck. The current account deficit in Thailand in 1996 was even higher—7.9 percent of gross domestic product. The comparison on the short-term debt side is also quite favorable to China. On the eve of the Asian financial crisis in June 1997 the ratio of short-term external debt to international reserves had risen to well above 100 percent in South Korea, Indonesia, and Thailand (Council on Foreign Relations 1999, 45). In China, in complete contrast, official reserves were more than 8 times reported short-term external obligations. Even if a significant portion of the difference between officially acknowledged and the independent estimates of China's external obligations, shown in Table 2, is short-term, the coverage ratio is likely to be around three.

Table 2: China's Reserves and External Debt, 1995-1998

(Billions of U.S. dollars)

	1995	1996	1997	1998
Official foreign exchange reserves	73.6	105.0	139.9	145.0
Official external debt	106.6	116.3	130.9	146.0
Of which: commercial loans	52.6	56.9	64.8	68.2
Of which: short-term	11.9	14.1	18.1	17.3
Independent estimates of:				
Total external debt: World Bank	118.1	128.8	146.7	156.1
: IIF	126.4			162.8
: Deutsche Bank				180.0
: JP Morgan		150.3	166.5	158.4
: Moody's	128.5	141.8	159.1	171.3
Commercial loans: BIS	67.1	79.8	90.1	82.7

Sources: Armstrong and Spencer (1999, 53). Bank for International Settlements (1997, statistical annex 2), (1999, 20). JP Morgan (1998, 78), (1999a, 68), (1999b, 56). Moody's Investors Service Global Credit Research (1999, 1). State Statistical Bureau (1998, 292 and 670), (1999, 285 and 626). World Bank (1997, 132), (1999a ,152), (1999c).

A fourth and final factor insulating China from the financial crisis was the continued confidence of households in the financial system, particularly the four largest state-owned banks. Several of China's banks were almost certainly insolvent, but none of them was illiquid. Household savings continued to pour into the banks during the Asian financial crisis, obscuring their insolvency. This huge flow of savings, which added hundreds of billions of *Renminbi* to savings deposits annually, is a function of three factors. First, the national savings rate has increased over the course of the reform era and since 1993 has exceeded 40 percent of gross domestic product, putting China at or near the top of the world's saving league (World Bank 1999a, 72). Second, the share of national savings generated by the household sector has risen dramatically. Third, the absence of alternative financial assets means that, as long as households have confidence in the banking system, they place a disproportionately large share of their financial assets in bank savings deposits. For example, at year-end 1996 households held more than three-quarters of their financial assets in the form of bank savings deposits (Lardy 1998b, 32). Thus banks faced no liquidity problem. If any of these factors were to change banks could face liquidity problems.

Changes in the Financial System

Economic reforms beginning in the late 1970s brought substantial change to China's financial system. Among the most important was an overhaul of the mechanism of financing state-owned enterprises. In the plan era these firms remitted their profits in their entirely to the Ministry of Finance and received budgetary grants that financed both fixed asset investment and a large portion of working capital needs. Beginning in 1983 state budget financing of working capital was drastically curtailed and starting in 1985 the budget also no longer provided fixed asset investment funds for most state-owned enterprises. Thus by the mid-1980s firms began to borrow significant amounts of funds from banks for the first time.

A second important reform was a significant restructuring of financial institutions. China on the eve of reform operated a monobanking system in which one institution, the People's Bank of China, acted simultaneously as China's central bank and the sole deposit taking and lending institution. There appeared to be other financial institutions. But the Bank of China, for example, was subordinate to the People's Bank. Its role was limited primarily to handing foreign exchange and international payments. The Construction Bank was a bank in name only. It did not take deposits or make loans but was responsible for disbursing fixed investment funds for projects included in the state plan and financed through the state budget. Administratively the Construction Bank was subordinate to the Ministry of Finance.

This simple institutional structure began to change once reform was launched in the late 1970s. The Agricultural Bank was established as an independent bank in February 1979 and in March the Bank of China was legally separated from the People's Bank. In October 1979 the Construction Bank was separated from the Ministry of Finance and a few months later it was allowed to begin to take deposits and to make loans, rather than simply serving as a conduit for budgetary funds earmarked for fixed asset investment projects.

The single most important step came in 1983, when the State Council designated the People's Bank as the central bank and created the Industrial and Commercial Bank to take over the deposit-taking and lending functions of the People's Bank. The Industrial and Commercial Bank, which formally began operations in 1984, immediately became China's single largest financial institution. Beginning in the mid-1980s the authorities established a small number of new national level comprehensive banks and a somewhat larger number of new regional commercial banks. Examples of the former include the Bank of Communications, headquartered in Shanghai, and the CITIC Industrial Bank, the banking arm of the state-owned CITIC Group. Examples of the latter include Merchants Bank, headquartered in Guangdong Province, as well as Development Banks in Guangdong, Pudong, and Shenzhen. China also developed an array of nonbank financial institutions such as trust and investment companies, urban credit cooperatives, and finance companies. The system of rural credit cooperatives, which was established in the 1950s, also expanded.

The Shanghai and Shenzhen Stock Exchanges opened in 1990 and 1991, respectively, adding an alternative source of finance for Chinese domestic firms.

The array of changes summarized above are probably best interpreted as financial reform rather than financial liberalization. The underlying structure of the financial system changed less than the institutional changes suggest. In certain important respects China's financial system remained what might be called semi-repressed. The interest rate structure was distorted, banks were subject to excess taxation, and credit was allocated bureaucratically to preferred end users, notably state-owned companies. The preconditions necessary for successful financial liberalization were still lacking. The fiscal system was weak and little progress had been registered in the privatization of state-owned companies. The interpretation that China's financial reforms fell short of liberalization is supported by an analysis of the key features of the Chinese financial system on the eve of the Asian financial crisis.

Interest rate controls

Perhaps the best indicator of the lack of financial liberalization in China in the first two decades of economic reform was the inability of the central bank to liberalize interest rates. During the Asian financial crisis the central bank exercised almost complete control of the full range of interest rates on both deposits and loans. For example, on the deposit side the central bank specified specific interest rates that financial institutions could pay for demand deposits and for 3 month, 6 month, 1 year, 2 year, 3 year, and 5 year time deposits. Banks had absolutely no flexibility to compete for deposits on the basis of the interest rate paid since the rates were all fixed and uniform across all institutions.[1] On the lending side the central bank set separate interest rates that financial institutions could charge for working capital loans of 6 months or less, working capital loans of from 6 months to a year, as well as for fixed asset loans of less than a year, 1 to 3 years, 3 to 5 years, and more than 5 years.

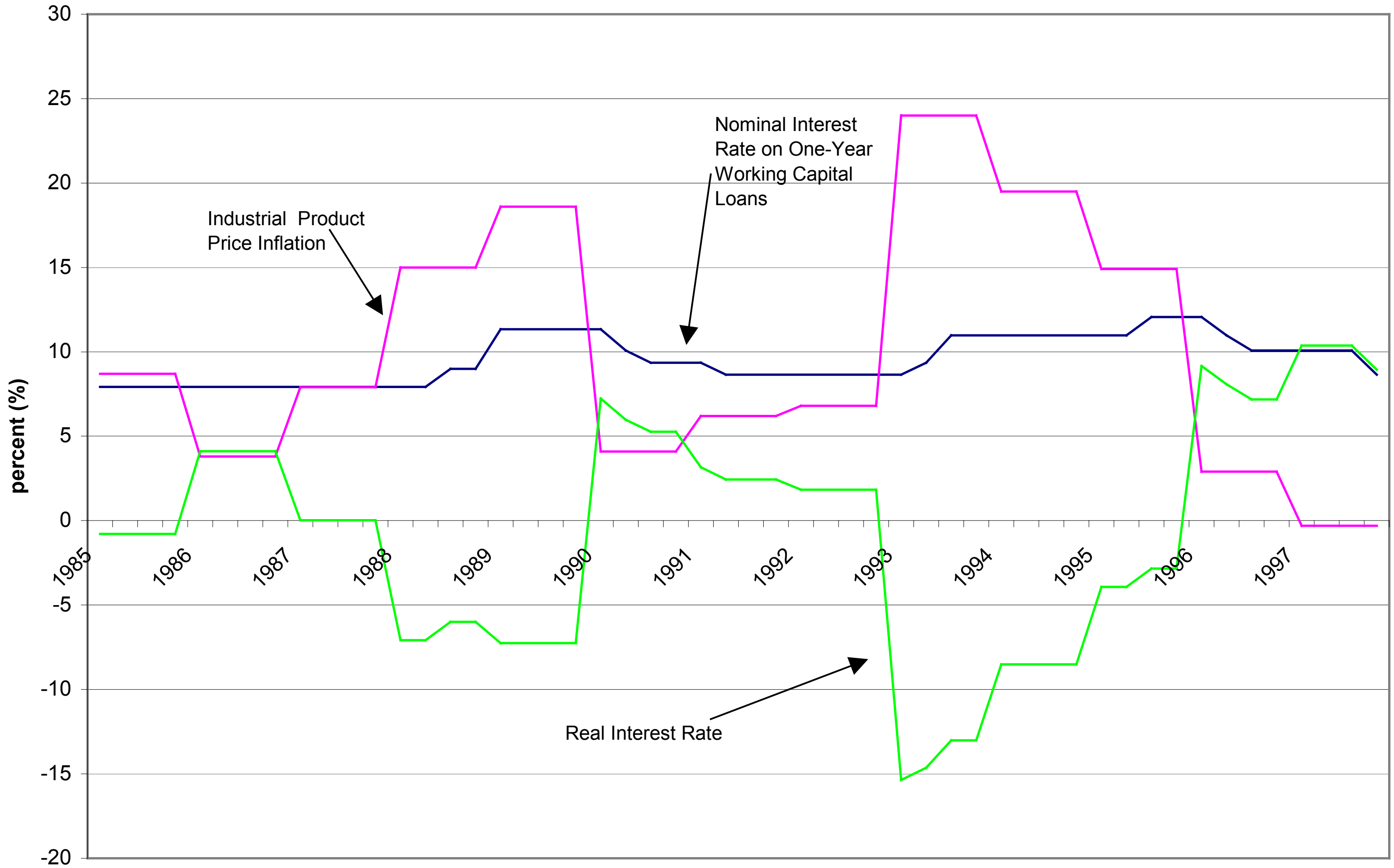
The financial system may be regarded as semi-repressed because of distortions in the interest rate structure. Interest rates, particularly on the lending side, were frequently negative in real terms. During periods of very high inflation in 1988-91 and again in 1993-96 the central bank allowed banks to introduce value guarantee deposits in which the interest rate paid on deposits of three years or more was tied to the rate of increase of prices over the period of the deposit. In principle the central bank guaranteed that the real rate of return on these long-term deposits would not be negative, insulating savers from the effects of inflation and helping to maintain the flow of funds into the banking system. Savers, however, were not insulated from losses on their demand and short-term fixed deposits. The interest rate on these deposits were not indexed and were adjusted upward by much less than price increases during inflationary periods. For example, in 1995, when consumer prices rose 17.1 percent, the interest rate on demand deposits was only 3.15 percent, in effect imposing a substantial inflation tax.

Distortions on the lending side were even greater. In periods of rising inflation the central bank's upward adjustments of the interest rates financial institutions could charge on loans typically lagged far behind inflation, meaning that the real cost of funds to borrowers fell dramatically. As shown in diagram 1, in some periods of extreme inflation the real interest rate charged to borrowers actually became highly negative. This was most obvious in 1993-95 when the real rate of interest, defined to be the difference between the one year working capital loan rate and the rate of inflation of industrial goods prices, fell as low as minus 15 percent. The real lending rate remained negative for three years. The real interest rate financial institutions charged borrowers also was negative in 1988-90.

One corollary of financial repression on the lending side, of course, was excess demand for funds. Excess demand for funds was managed through a system of lending quotas established by the central bank for each of the major financial institutions. The quotas established for each bank a ceiling that limited the magnitude of the increase in the loans outstanding for each bank.

Another corollary of financial repression was a systematic suppression of bank profitability, discussed further below. Particularly during periods of high inflation the

Diagram 1: Chinese Interest Rates - 1985-1997



Sources: Nicholas R. Lardy (1998b, 108), National Bureau of Statistics (1999,305) cost of funds to the banks rose significantly while their lending rates fell to negative levels, placing a huge squeeze on their operating margins.

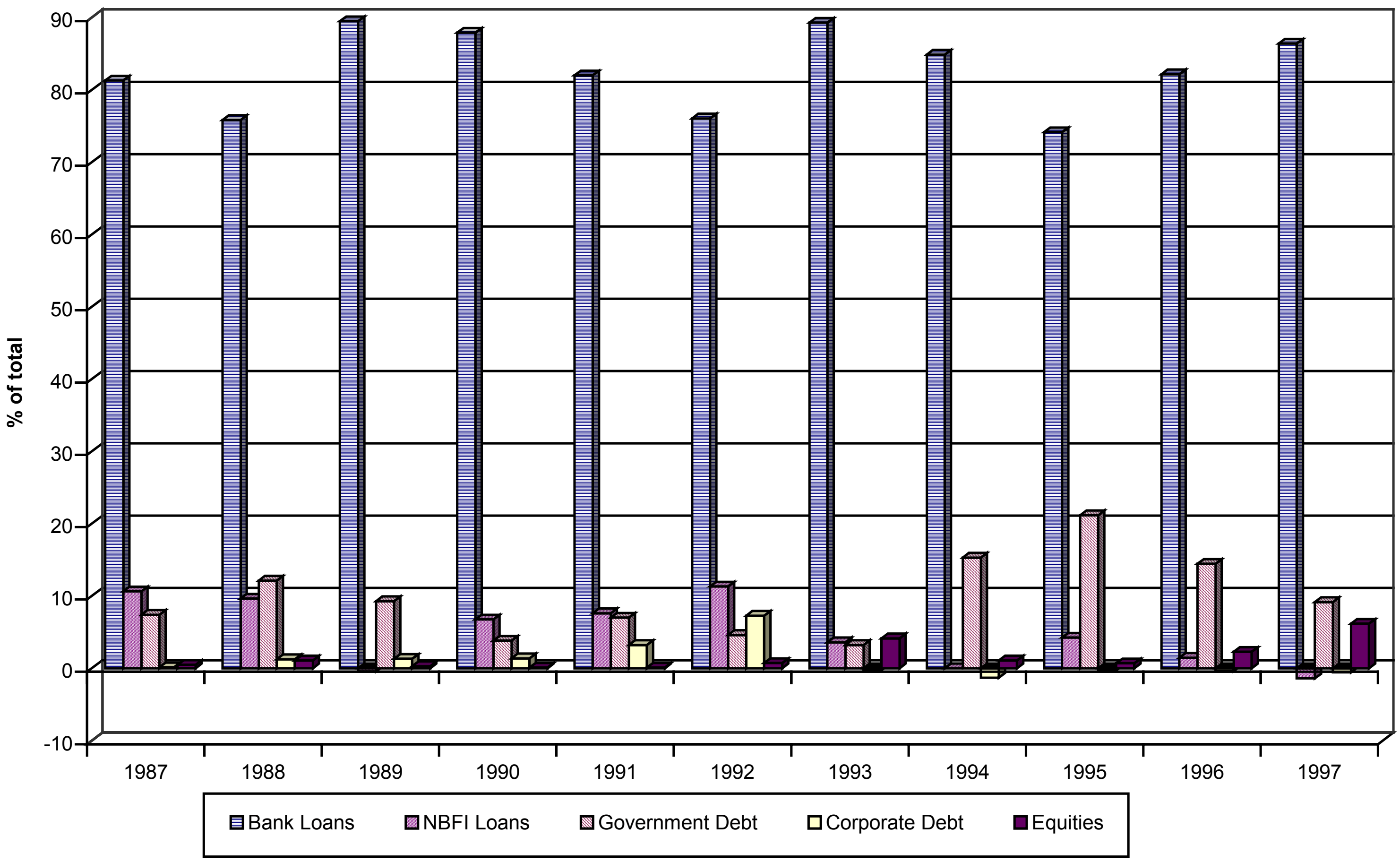
Bank-Dominated Financial System

A second important characteristic is that China's financial system, even by Asian standards, is heavily dominated by state-owned banks. As shown in diagram 2, from 1987 through 1997 banks on average accounted for almost 90 percent of all domestic financial intermediation. Moreover, there is no evidence that the bank share of financial intermediation shrank over this period. The role of nonbank financial institutions, such as trust and investment companies, leasing companies, and finance companies was never large and declined consistently over the decade. Despite the opening of two formal stock exchanges in the early 1990s, the role of capital markets remained unusually small. Equities and corporate debt combined accounted for only 0.7 percent of financial intermediation in 1994-96. This share rose to about 5 percent in 1997, when the value of initial public equity offerings grew dramatically. But, as the value of initial public equity offerings and the net value of corporate bond sales fell in 1998 compared to 1997, the growth in role of capital markets in domestic financial intermediation was not sustained (Chinese Securities Regulatory Commission 1998, 27; 1999, 17).[2]

Moreover, the banking system is characterized by a high degree of concentration. In the mid-1980s the four largest state-owned banks—the Industrial and Commercial Bank, the Bank of China, the China Construction Bank, and the Agricultural Bank of China—accounted for all assets in the national banking system. Although the banks established beginning in the mid-1980s have developed their branch networks and expanded their lending quite rapidly, they still account for a very small percent of the activities of the banking system. By year-end 1995 these new institutions accounted for less than 8 percent of bank assets (Lardy 1998b, 224). Two years later their assets were just over 9 percent of bank assets (Armstrong and Spencer 1999, 59).

The dominance of state-owned banks and the high degree of bank concentration had several unfavorable implications. First, there is insufficient competition in the financial system. Neither capital markets nor the large number of second tier banks created since 1985 are sufficiently strong competitors to stimulate the dominant institutions to become more efficient intermediaries of funds. This lack of competition has contributed to a long-term decline in the rate of return on assets of the banking system, discussed further below. Second, since most bank lending is short-term, some borrowers have sold long-term bonds offshore to finance infrastructure projects, such a toll roads, which have a long payback period. Since these projects typically generate no foreign exchange income to service the external debt, this offshore borrowing involves significant foreign currency risk. Third, the dominance of state-owned banks has meant the flow of resources has gone overwhelmingly to state-owned companies, leaving much of the rest of the economy starved for funds.

Diagram 2: Domestic Financial Intermediation in China by Type

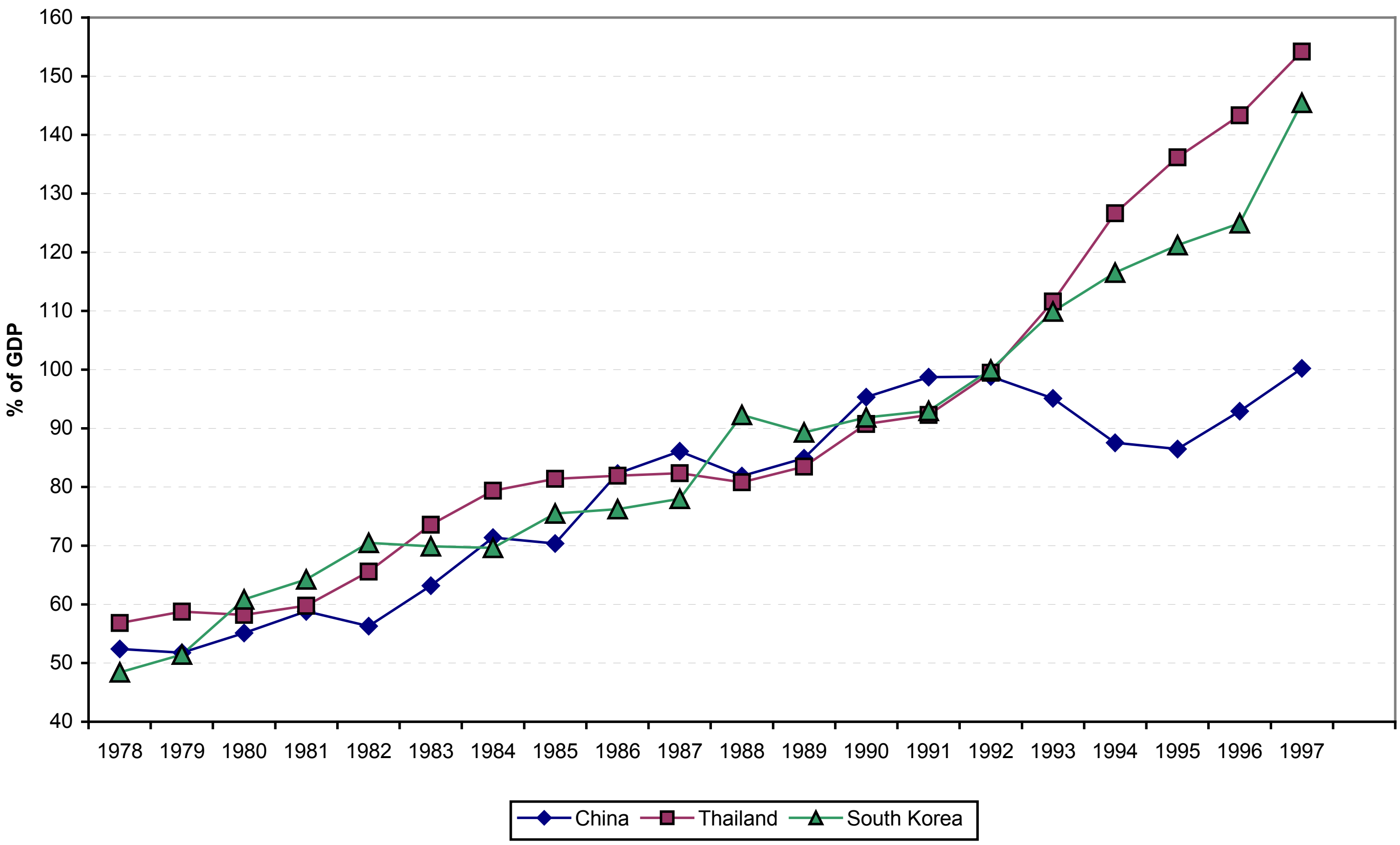


Source: Nicholas R. Lardy (1998a).

Excessive Credit Growth

The third feature of China's precrisis financial system, shared with several other countries in the region, was excessive credit expansion. Credit grew far more rapidly than output. As a result, total loans outstanding from all financial institutions grew from 50 percent of gross domestic product in 1978 to 100 percent of gross domestic product by year-end 1997. As shown in diagram 3, this is a trajectory that shares similarities with the expanding ratio of lending to gross domestic product both in Thailand and in South Korea. As will be discussed below, the underlying cause of this rising ratio were similar—excessive lending for commercial and residential property development and

Diagram 3: Domestic Credit, 1978-1997



excessive investment in manufacturing, reflected in rates of return falling below the cost of funds, and the build-up of high levels of excess capacity over a broad range of sectors.

Weak Financial Performance

A fourth feature of China's precrisis financial system was the weak financial condition of China's financial institutions, particularly the four largest state-owned banks. The reported pretax profits of the four banks as a group grew extremely slowly, indeed in 1997 they were only RMB20.5 billion, exactly the same as in 1988 (Lardy 1998b, 101).[3] But, since the assets of these banks grew enormously over the same period, the rate of return on assets fell by more than four-fifths, from 1.1 percent in 1988 to 0.2 percent in 1997, far below the returns achieved by well-managed banks in other countries. Profits of the four biggest banks fell further in 1998. Profits at the Construction Bank and the Industrial and Commercial Bank of China combined rose by almost RMB 1 billion. But profits at the Bank of China, which in 1997 accounted for almost one-third of the pretax profits for the four banks as a group, plunged by RMB 2.4 billion (Bank of China 1999, 39).[4]

Moreover, since Chinese banks are required to report as income interest that has not been paid, the underlying financial reality is far worse than the banks' reported results.[5] For example, the Construction Bank in the four year period 1993 through 1996 reported after tax profits of RMB11.6 billion. But, taking into account phantom interest income, the bank actually incurred a cumulative loss of RMB22.4 billion. Thus the real rate of return on assets was negative (Li 1998, 33).

In addition, the rules of the Ministry of Finance limit the amount of earnings that can be added to reserves for nonperforming loans. In 1998, for example, provisions for bad loans were limited to 1 percent of outstanding loans at the end of the year, regardless of the actual quality of a bank's loan portfolio. This limitation also results in a significant overstatement of bank profitability.

The large and growing share of loans that are recognized to be nonperforming also reflects the poor performance of banks and other financial institutions. According to People's Bank of China Governor Dai Xianglong and other high ranking economic and banking officials, the share of nonperforming loans of the four largest state-owned banks rose from 20 percent at year-end 1994 to 22 percent at year-end 1995, and then 25 percent at year-end 1997. Moreover, the share of nonperforming loans falling into the most impaired categories expanded significantly (Lardy 1998b, 119, 122, 206 and 280). China's fifth largest bank, the Agricultural Development Bank, also has rapidly growing nonperforming loans. Although it was not created until 1994, 26 percent of its loans were acknowledged to be nonperforming by year-end 1996. In 1997 it reported massive operating losses exceeding RMB15 billion, more than 13 times its capital at year-end 1996 (Chinese Finance and Banking Society 1998, 571) .[6]

Nonbank financial institutions have loan portfolios that on average are even more impaired than those of the banks. Their year-end 1996 nonperforming assets were acknowledged to be 50 percent of their total assets. For example, the nonperforming loans of China's rural credit cooperatives were acknowledged to be 38 percent of their total lending at year-end 1996. Over half of these cooperatives were running in the red, with cumulative losses of more than RMB 14 billion in 1996 (No Author 1998, 38).

Despite a substantial increase in the write-off of bad debt on the balance sheets of the four largest state-owned banks, it appears that the share of nonperforming loans rose further by year-end 1998. For example, the Bank of China increased its write-offs of nonperforming loans by RMB1 billion (or about 25 percent) to reach RMB5.3 billion. But its nonperforming loans expanded by RMB19.2 billion. The total quantity of nonperforming loans reached RMB135 billion or 10.29 percent of the bank's total loan portfolio, up from 9.98 percent in 1997 (Bank of China 1999, 46-47). The share of nonperforming loans in the portfolios of two smaller banks, the Everbright Bank and the Shenzhen Development Bank, also increased sharply in 1998 (Moody's Investors Service 1999, 18).

As in the case of the bank profitability figures, these numbers would be substantially worse if international accounting standards were applied. Chinese data on nonperforming loans historically have been based on the payment status of loans, not an assessment of the ability of the borrower to service the debt. Payment status is a lagging indicator of loan quality and is manipulated by evergreening, through loan rollovers and capitalization of interest.[7]

A third indicator of the weakness of the financial system is sharply declining capital adequacy. The reported net worth of the four largest state-owned banks at year-end 1997 was RMB273.91 billion, only 2.16 percent of assets on an unweighted basis. This represents an enormous deterioration from 1985 when net worth stood at RMB 84.8 billion or 13.2 percent of assets. Moreover, Chinese banks carry on their balance sheets nonperforming loans classified as bad, meaning loans on which the borrower has already gone through bankruptcy and liquidation but on which the lender has not recovered. At year-end 1997 bad loans were 2 percent of all loans, meaning that the four largest state-owned banks as a group almost certainly were insolvent.[8] Only if they could recover almost one hundred percent of the nonperforming loans not classified as bad would they have a positive net worth. [9]

Other major portions of the financial system were also certainly insolvent. For example, the nonperforming loans of the Agricultural Development Bank at year-end 1996 were 12.3 times the bank's capital and those of the system of rural credit cooperative were 4.37 times its capital. On any reasonable estimate of the likely rate of recovery of nonperforming loans, these institutions had a highly negative net worth. Although system wide data is not available, the liquidation of the China Agricultural Development Trust and Investment Company in 1998 and the bankruptcy and likely liquidation of the Guangdong International Trust and Investment Company (GITIC), the Guangzhou International Trust and Investment Company (GZITIC), Guangdong Enterprise, and other trust and investment companies suggests that solvency was a major problem in the trust and investment sector of the financial system as well.

To a substantial degree the weak financial condition of banks and other institutions reflects the policy of financial repression pursued by the central government throughout the reform period. The most obvious mechanism of repression was to require banks to lend almost exclusively to state-owned enterprises at interest rates far below those that would have prevailed in a more liberal financial environment. But the state instituted a number of other policies to insure that banks also became a major direct source of government tax revenue. First, as has already been noted, the Ministry of Finance precluded banks from realistic levels of write-offs of nonperforming loans. Such write-offs would have reduced bank income and thus taxes paid to the Ministry of Finance. Second, the Ministry of Finance required banks to pay taxes on accrued interest, i.e. interest that should have been but was not paid by borrowers. Moreover, even when such interest payments were never forthcoming, the banks were not allowed to go back and restate their earnings and recover taxes that had been paid on phantom income. Finally, and much less well known, banks were required to pay taxes on their gross income from interest and fees, as well as pay income taxes on their operating earnings. This combination meant banks were subject to effective tax rates of about 80 percent (Lardy 1998b, 171). As a consequence of these policies, on the eve of the Asian financial crisis taxes paid by the four largest state-owned banks accounted for about one-sixth of central government revenues.

Weak Supervision and Regulation

A final feature of the financial system worth noting is weak supervision and regulation. Although the People's Bank was transformed to operate solely as a central bank, it assumed the supervisory and regulatory roles of a central bank only gradually. It was established on January 1, 1984, but the State Council did not promulgate the formal regulation outlining the bank's responsibility for supervision of a growing number of banks and other newly emerging financial institutions, such as trust and investment companies and urban credit cooperatives, until 1986. The full legal basis for this role was not established until the National People's Congress passed the Central Bank Law in 1995.

Despite these developments, the ability of the Bank to supervise financial institutions was impaired by political authorities at the local level. Well into the 1990s provincial level officials had a major role in the appointment of the heads of 30 provincial level branch offices of the People's Bank's, as well as more than 2,200 city and county-level offices. These central bank officials were thus vulnerable to importuning by local party officials to extend credit to local branches of state banks that, in turn, would be funneled to support projects sponsored by these officials. At least through mid-1993 about 30 percent of the credit extended by the central bank to the commercial banking system, which was an important source of funds for policy lending, was controlled at the branch level of the People's Bank. Not until mid-1993 was the authority to extend central bank credit to commercial banks centralized at the head office of the People's Bank.

The weak regulatory powers of the central bank are reflected in its inability to enforce the prudential standards promulgated in the Commercial Bank Law, passed by the National People's Congress in 1995. This law requires that the capital adequacy of banks be no lower than 8 percent; the ratio of loans to deposits be under 75 percent; the ratio of liquid assets to liquid liabilities be no lower than 25 percent; and the loans to a bank's largest borrower not exceed 10 percent of the bank's total capital (People's Bank of China Legal Department 1995, article 39).

When the law was passed none of the major commercial banks were in compliance with the capital adequacy standard, the loan to deposit prudential ratio, or the liquidity ratio. None of the banks published data on loan concentration so it is not possible to evaluate their compliance with the restriction on the amount that could be lent to the single largest borrower. Although the Commercial Bank law took effect in July 1995, most Chinese banks were unable to come into compliance with its provisions. For example, the loan to deposit ratio at the Industrial and Commercial Bank has remained consistently well above 80 percent since 1995. More revealingly, in recent years none of the annual reports of the major banks even mentions the prudential standards or their progress in coming into compliance.[10]

At one level the financial reforms outlined above had little effect on the finance of the corporate sector. Most critically, the banking and financial system operated to insure that most investment funds flowed to state-owned companies. At year-end 1997 two-thirds of all short-term loans extended by the financial system went to the state sector.[11] Only 15 percent went to agriculture and township and village enterprises. Foreign funded firms received 3.4 percent of the loans outstanding and loans to the private sector accounted for only 0.7 percent of the total (People's Bank of China 1998, 92). The share of loans flowing to foreign funded and private firms look particularly small in view of the fact that these categories of firms accounted for 13 percent and 18 percent, respectively, of manufacturing output (State Statistical Bureau 1998, 435 and 437). In this critical respect there was little change from the system of budgetary finance of the prereform ear. It too channeled a disproportionately large share of resources to the state sector.

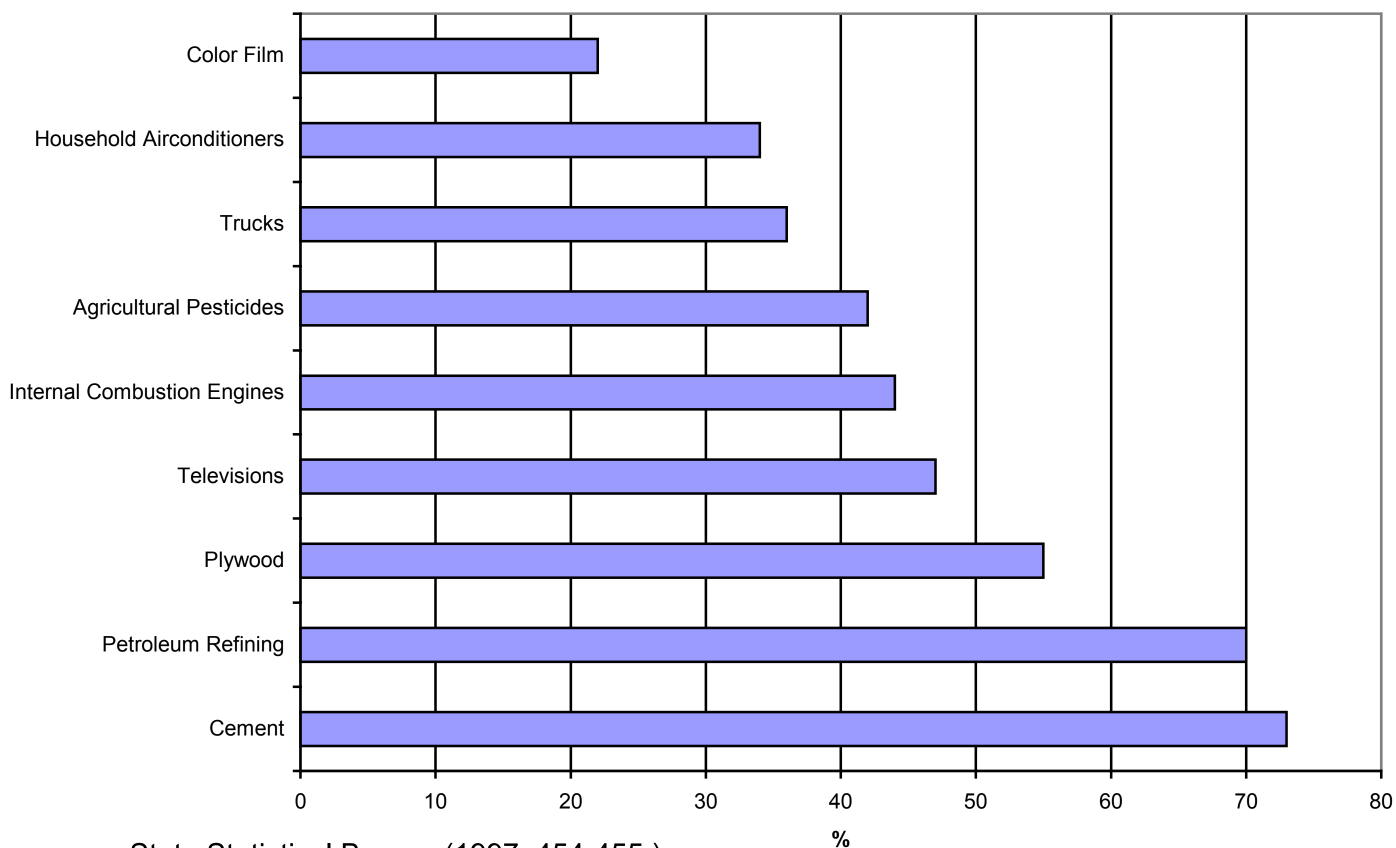
But, because the financial condition of the state sector is poor, the shift from budget to bank finance of state-owned companies had important implications for the stability and viability of the financial system itself. A growing share of state-owned firms are unprofitable. In the manufacturing sector, for example, the share of state-owned companies losing money rose from under 10 percent in 1985 to half by 1998. Reported financial losses grew more than 30 fold, from RMB3.2 billion in 1985 to RMB102.3 billion in 1998 (Lardy 1998b, 35; State Statistical Bureau 1999, 3).[12] Moreover, on average these firms were increasingly highly leveraged. The debt to equity ratio for state-owned manufacturing and commercial companies rose from 122 percent in

1989, a level not dissimilar to that observed for corporates in the United States, to 570 percent in 1995, a level substantially exceeding the leverage of the average Korean chaebol, widely regarded as the most highly geared corporate sector in the world (Lardy 1998b, 41).[13] Daewoo, which was teetering on the edge of bankruptcy in the summer of 1999, had a reported debt to equity ratio of 354 percent at year-end 1998. Its proposed restructuring, which involves the sale of the group's shipbuilding, consumer electronics, personal computer, commercial vehicle, construction, and securities businesses, was expected to yield sufficient cash to reduce the group's debt to equity ratio to 196 percent (Burton 1999, 1).

The explosion of corporate debt relative to equity simply reflects the fact that many Chinese state-owned companies can not cover their costs of production from income from the sale of their output. Liabilities rise relative to equity because firms are not using most of the borrowed funds to finance fixed asset investment but rather to pay wages and taxes and to finance growing inventories of unsold, and frequently unsaleable, goods.

Nonetheless state-owned firms have invested excessively in fixed assets as well. This is reflected in low rates of capacity utilization in many product lines. As shown in diagram 4, by 1995 (the last year in which there was a comprehensive industrial census) low rates of capacity utilization were not limited to a few types of goods but extended across a broad range of consumer products, including durables such as household air conditioners and televisions, and producer goods, for example, internal combustion engines.

Diagram 4: Capacity Utilization in Select Industries in China
(1995)



State Statistical Bureau (1997, 454-455.).

Response to the Asian Crisis

The Asian financial crisis stimulated China's leadership to take more vigorous action to avoid being drawn into the contagion. Some of these steps tightened existing capital controls by more careful monitoring and stricter control of China's foreign currency exposure. The ability of nonfinancial firms and of subsidiaries and affiliates of financial institutions to borrow offshore was curtailed drastically (Lardy 1998b, 208-209). The government also sought to strengthen central bank supervision and regulation, a precondition for the successful operation of a more liberalized and decentralized financial system. The central bank, for example, in 1998 abolished its provincial level branches and replaced them with nine regional, supra-provincial branches. Since the bureaucratic rank of these central bank regional offices is above that of provincial governors and first party secretaries, the hope is that the central bank will be able to insulate local commercial banks from political interference in their lending decisions. According to Premier Zhu Rongji, "the power of provincial governors and mayors to command local bank presidents is abolished as of 1998 (Mingpao 1998)."

In 1998 the People's Bank began to introduce risk-based criteria for classifying loans. The new categories, pass, special mention, substandard, doubtful, and loss, are closer to international standards than the previous system and should provide the central bank with a more accurate basis for judging the quality of the loan portfolios of the commercial banks.

The central bank also began the process of restoring the capital adequacy of the largest state-owned banks. In the late summer of 1998 the People's Bank of China injected RMB270 billion in capital into the largest state-owned banks. In 1999 the

Chinese government created four asset management companies to take over a large portion of the bad debt of each of the major four state-owned banks. The first company, Cinda Asset Management Company, was formally created in April 1999 to take over about RMB 250 billion in nonperforming loans from the China Construction Bank. In the summer of 1999 Huarong, Dongfeng, and Changcheng Asset Management Companies were created to take over nonperforming loans of the Bank of China, the Industrial and Commercial Bank of China and the Agricultural Bank of China, respectively. These asset management companies are issuing bonds to the banks in exchange for nonperforming loans. Since the bonds are implicit obligations of the Ministry of Finance, this process effectively converts what are in effect contingent liabilities of the government into implicit government debt. The exchanges result in an immediate improvement in the balance sheet of each of the banks and, because interest is paid on the bonds, a substantial improvement in each bank's profit and loss statement. The asset management companies are charged with recovering as much as possible from the original borrowers either through liquidation of the borrower's assets, debt-equity swaps, or debt restructuring.

The fiscal implications of China's program to restore its banks to health are substantial. The financing of the four asset management companies is expected to amount to from RMB1.2 trillion to RMB 1.3 trillion or 15 to 16 percent of gross domestic product. In addition there is a substantial accumulation of nonperforming loans in banks other than the big four and in an array of nonbank financial institutions such as trust and investment companies and the system of rural credit cooperatives. The ultimate cost of restoring the health of the financial system might easily amount to 25 percent or more of gross domestic product.

Some have dismissed China's financial problems, arguing that nonperforming loans of state-owned banks and other financial institutions are properly regarded as a contingent liability of the government and that since government debt relative to gross domestic product is low that it can easily be financed once it is converted into an explicit obligation (Fernald and Babson 1999, 20-21; Roach 1998, 12). This judgment seems flawed in at least two respects. First, the sanguine view does not take into account the weaknesses in the present fiscal system. Consolidated government revenues in 1998 were only 12.4 percent of gross domestic product, about half the average share for emerging market economies. Not only are government revenues low, government debt has increased dramatically in recent years. At year-end 1998 the combined value of treasury debt, the debt of other 100 percent government owned entities, such as the State Development Bank, and the RMB 270 billion issued by the central government to partially recapitalize the four large banks in 1998 was 20.5 percent of gross domestic product, almost five times the level of 1993. Interest payments on the treasury portion of this debt in 1998 were RMB 72.3 billion, almost fifteen times those of 1993 (Lardy 1999).

Second, it is not clear that the flow of new bad loans can be ended. It is uncertain whether the government will be able to successfully resolve the bad loans that have already accumulated in the banking system. But it is certain that it will not be able to do so unless the flow of new bad lending is ended quickly. That will not be possible unless the authorities are willing to cut off the flow of new lending to unprofitable enterprises and unless banks face real incentives to adopt a commercial credit culture. To date the regime has simply assumed that a change in regulations and incentives can induce commercial behavior on the part of state-owned banks. This assumption has been challenged by one of China's most distinguished reform economists, Wu Jinglian. Wu and his colleagues at the State Council Development Research Center have proposed that the state publicly list the largest state-owned banks, a step that is a precondition for privatization of banks (Reuters 1999) .

Development of a commercial credit culture would be highly favorable for sustaining a high rate of economic growth. Most importantly it would lead to a significant increase in lending to the private sector, which as noted above has been crowded out of access to funds because of the voracious appetite for credit of state-owned companies. Private firms have become the major source of employment growth in the second half of the 1990s. It is likely that their contribution would increase further once a credit culture develops in the banks.

Conclusion

Although many economic indicators remain positive, China has certainly not fully escaped the risks exposed by the Asian financial crisis. Avoiding a domestic banking crisis will depend most critically on additional reforms in the real sector, an overhaul of the fiscal system that produces badly needed additional government revenues, and the rapid development of a commercial credit culture, without which efforts to restore the banks to financial health may be doomed. Even if new bad lending can be curtailed and commercial lending practices developed, China is at the beginning of what will be a long process of bank restructuring and financial liberalization.

It is important to note that the current environment is unfavorable to bank restructuring and recapitalization. Heavily leveraged corporations are struggling under mountains of debt. If economic growth falls further, a growing share of these firms will be unable to service their debt, adding to an already substantial accumulation of nonperforming loans in the banking system.

The external environment is also becoming increasingly unfavorable to bank restructuring and recapitalization. That has led to a rapid deterioration in China's balance of payments. While it has not been widely noticed, China experienced a dramatic deterioration in its capital account in 1997 and 1998. As reflected in Table 1, a capital account surplus of US$40 billion in 1996 fell to a capital account deficit of US$6.3 billion in 1998. The decline occurred despite a continued strong inflow of foreign direct investment—US$42.4 billion, US$45.4 billion, and US$45.5 billion in 1996, 1997, and 1998, respectively. The deterioration had several causes. First, between 1997 and 1998 portfolio investment swung from a US$6.8 billion inflow to a US$3.7 billion outflow.

That was the biggest single adverse change in the capital account. The decline in 1998 occurred because China issued a relatively small amount of foreign bonds compared to the amount maturing, the number of new foreign-currency denominated issues dropped to a trickle in 1998, and there was a significant increase in Chinese purchases of foreign equity and debt securities. Second, there was an increase of more than US$12 billion in trade credit extended by China to foreign buyers of its goods, which is entered in the balance of payments as a capital outflow.[14] Finally, foreign banks withdrew their loans to China, a reversal of earlier years in which commercial lending increased rapidly. In 1998, according to official data, China net repaid foreign loans amounting to US$3.3 billion.

Because of a strong current account position in 1998, China was still able to add US$5.1 billion to its official holdings of foreign exchange, despite an adverse errors and omissions entry in its accounts of almost US$17 billion. But in 1999 China's positive current account position eroded rapidly. The trade surplus amounted to only US$29.1 billion, compared to US$43.6 in the prior year.[15] The current account surplus in 1999 will be around US$12 billion, well under half of the level of 1998. It is difficult to predict what happened to the capital account in 1999 since, with one exception, information on the capital account is released only once a year and with a lag of six to seven months. The exception is gross foreign direct investment inflows which are reported to have been US$40 billion, off 12 percent compared to 1998. In the wake of the decision in January 1999 to liquidate the Guangdong International Trust and Investment Corporation (GITIC), the likely liquidation of Guangdong Enterprises, and the unfavorable terms that have been offered to creditors of the Guangzhou International

Trust and Investment Corporation (GZITIC), it is likely that international commercial bank lending to China has continued to shrink. As shown in Table 2, BIS reporting banks reduced their exposure to China by US$7.4 billion in 1998. Given the Standard Charter and Hongkong Shanghai Bank's substantial increases in the first half of 1999 in provisions for lending to China, it seems quite likely that new international bank lending has been curtailed and total exposure reduced as maturing loans in some cases are paid off. In short, the capital account deficit of 1998 may have expanded somewhat in 1999. Nonetheless the expansion of the capital account deficit was not sufficiently large to prevent an increase of US$9.7 billion in official holdings of foreign exchange. China's foreign exchange reserves are sufficiently large to finance any likely overall balance of payments deficit for many months. Nonetheless, unless the trends analyzed above are reversed devaluation is increasingly likely. Although devaluation may stimulate export growth and also stimulate demand for import competing industries, especially the hard hit steel, chemical, and shipbuilding sectors, it inevitably would exacerbate the external debt repayment burden of the corporate sector, again adding to the growing problem of nonperforming loans. It also would directly adversely effect banks and other financial institutions since they also have borrowed large amounts of funds offshore.

China's experience in the Asian financial crisis certainly supports the view that premature capital account liberalization increases a country's vulnerability to a currency crisis. Had the capital account been open it seems quite likely that China would have been drawn into the contagion that swept over much of Asia in the second half of 1997. The Chinese authorities understand this lesson. They remain committed to moving toward capital account convertibility, but the timing will be determined by their ability to both rehabilitate domestic financial institutions and strengthen the regulatory and supervisory powers of the central bank.

China's experience also demonstrates the advantage of relying primarily on foreign direct investment as opposed to potentially more volatile sources of foreign funds such as loans, bank deposits, stocks and bonds. The latter are often short-term and easily reversed.

It would be hard to argue, however, that the case of China's supports the desirability of postponing financial liberalization. In certain respects financial liberalization has not yet begun in China. A high degree of financial repression remains, with the central bank continuing to exercise pervasive controls over interest rates on both the deposit taking and lending sides of banking business. Similarly, banks remain subject to confiscatory levels of taxation. The costs of this approach are high. Most obviously intermediation remains quite inefficient, resulting in the continued waste of a large share of national savings. Above all, the current system is not sustainable. It is, in effect, a pyramid scheme that is viable only as long as there is a continued large flow of household savings into the banking system. The sooner more fundamental reforms are undertaken the lower the ultimate costs to depositors will be.

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[1] Prior to October 1997 the central bank had allowed financial institutions some discretion to adjust their interest rates on loans around the officially posted rates. From 1993 through the middle of 1996 the flexibility was 20 percent on the upside, 10 percent on the down side. However, rural and urban credit cooperatives had additional flexibility to raise rates to as much as 60 percent and 30 percent above the posted rates,

respectively. They were each limited to 10 percent flexibility on the down side. Beginning May 1, 1996 general upside flexibility, including that for urban credit cooperatives, was reduced to 10 percent. Rural credit cooperatives could adjust their rates only 40 percent on the upside, 10 percent on the downside. Beginning October 23, 1997 all flexibility was eliminated.

[2] The IPO value of domestic currency equities, including the proceeds of rights offers, fell from RMB85 billion in 1997 to RMB78 billion in 1998. The net issuance of corporate bonds in 1998 was only RMB 6.5 billion, down from RMB 8.5 billion in 1997.

[3] In the interim years pre-tax profits rose to a peak of RMB32.3 billion in 1992.

[4] This figure is on an unconsolidated basis, i.e. includes only the Bank of China. On a consolidated basis the profits of the Bank of China and its wholly-owned subsidiaries declined by RMB5.2 billion in 1998.

[5] The period of time over which banks have to record interest as having been paid when it has not has been reduced in recent years, presumably reducing the degree to which bank earnings have been overstated.

[6] After an extraordinary “non-operating subsidy income” item, the Bank’s profit and loss statement showed pretax losses of only RMB 2.53 billion.

[7] Historically loans have been classified as overdue (not repaid when the term specified in the loan contract expires), doubtful (overdue for more than two years (changed to one year in August 1998) or to a borrower who has ceased operations, regardless of the payment status of the loan), and bad (loans to bankrupt or dead borrowers where the collateral has not been sufficient to cover the principal). Beginning in 1998 the central bank began to introduce a risk-based loan classification system.

[8] Of the four large banks the Bank of China is by far the strongest. Its capital relative to assets and loan loss reserves relative to its loan portfolio are both higher than the other state banks and its ratio of nonperforming loans is significantly lower. In part this is because the Bank of China’s strong international orientation. More than a third of the banks assets are outside of China, primarily in Hong Kong. Profits generated from its overseas businesses account for 90 percent of the banks reported profits in 1998. In contrast the other three major state-owned banks have almost no foreign presence.

[9] Loans comprise an unusually high share of bank assets in China, thus if bad loans equal to 2 percent of all loans were written off, it would absorb a large share of bank capital, which for the four largest banks were equal to 2.16 percent of assets. For example, at year-end 1997 loans comprised two-thirds of all of the assets of the China Construction Bank. Chinese Finance and Banking Society (1998, 560).

[10] The sole exception is that the Bank of China does report on its capital adequacy.

[11] Short-terms or working capital loans accounted for three-quarters of all loans outstanding from the financial system at year-end 1997. No data is available on the distribution of loans for fixed asset investment by ownership of the borrower but these are likely to be even more heavily concentrated on state-owned companies than are working capital loans.

[12] These data are for state-owned manufacturing enterprises with independent financial accounting.

[13] These data almost certainly understate the debt:equity ratios in Chinese state-owned companies. These firms liabilities are understated. For example, the data include only liabilities to banks and other financial institutions and do not include huge net payables that are due to the non-state sector. Assets are almost certainly overstated because of the application of unrealistically low rates of depreciation on fixed assets and the valuation of huge inventories at list price rather than market value. In many cases the latter may approach zero.

[14] Inconsistencies in the presentation of the trade credit figures in the balance of payments in 1998 lead one to question the accuracy of these numbers.

[15] The numbers cited are those released by the Ministry of Foreign Trade and Economic Relations. They differ slightly from the data on the trade account shown in table 1. The data in table 1 originate with the State Administration of Foreign Exchange.

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