

China's Financial System: Two Decades of Gradual Reforms

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Abstract

This study examines China's efforts to transform its financial system to support an emerging market economy. China's first serious financial reforms began in 1984 with the separation of the People's Bank of China from other commercial banks. By 1991 China had moved from a centrally administered monobank system to a diversified financial institutions framework. Other reforms followed such as the ones carried out in 1993. Selected banking indicators are used to investigate the impact of these reforms. We find strongly significant differences between the pre-1993 and post-1993 periods for all indicators except the growth rates of domestic credit and deposits and the foreign liabilities to total deposits ratio. Our results suggest that although the financial reform of 1993 has reduced the risk of an imminent banking crisis, China's financial system is still inadequate and in risk of failing.

Introduction

The stated goal of the Chinese government is to achieve a "socialist market economy," and to that end carry out financial reforms that would transform a planned economy into a market economy. Financial reforms were intended to facilitate and support the fast-growing real sector. China adopted a "gradualist" approach to reforms. Consequently, financial reforms have been slow in the interest of proceeding cautiously in a prudent manner. After almost two decades, China's financial system¹ is still inadequate to sustain a growing economy. China's market reform in the real sector has since outpaced and outgrown China's financial system. Numerous studies over the years have warned of the problems and consequences of carrying out inadequate financial reforms in China (Mehran and Quintyn 1996, Naughton 1998, Business Week 1998, Lardy 1999, Bonin and Huang 2001, Lardy 2001). A 1990 World Bank report found China's banking system rife with problems such as: pervasive linkages between the government's budget financing and policy-lending, inadequate regulation and supervision of the financial sector, lack of autonomy of the People's Bank of China (PBC) and the banks, and insufficient competition (World Bank 1990). More importantly, the report was also concerned with the need for Chinese banks to recapitalize because of their huge bank portfolio losses. Almost ten years later, Dornbusch and Giavazzi (1999) reiterated similar problems by stating that China's banking system is dysfunctional and in need of urgent reform. Dornbusch and Giavazzi echo the ten-year-old World Bank report in finding that there is still no distinction between budgetary functions, bank credit, state enterprise and bank financing. Supervision and regulation of the banking system are still inadequate. Lardy (1999) finds that China's banks still require recapitalization and the PBC still lacks effective autonomy. Furthermore, Lardy cautions that unless China transforms its banking system on a timely basis a domestic banking crisis could occur leading to a sharp foreign direct investment withdrawal.

This paper looks at China's effort to transform its financial system to support an emerging market economy. Part two looks at China's financial reform efforts. Part three investigates the problems associated with those reform efforts, namely with respect to transmission of monetary policy. Part four presents empirical testing of China's effectiveness in carrying out its monetary reforms. Concluding remarks are presented in Part five.

China's Financial Reform Efforts

China's financial system has undergone fundamental changes since the fall of the Bamboo Curtain. Basically, China's financial reforms can be divided into two distinct periods: pre- and post-1993. In 1979, the PBC functions of China's mono-banking system were devolved to three specialized state-owned banks: Agricultural Bank of China, providing banking services for agricultural and rural industrial projects; Bank of China, conducting foreign exchange operations; and People's Construction Bank of China, providing loans for fixed assets investment. In 1984, the PBC was officially designated the central bank and the Industrial and Commercial Bank of China became the fourth specialized state-owned bank (Figure 1). Other financial institutions, insurance companies and investment and trust companies were also established. This early reform created a financial market that allowed regional inter-bank borrowing. Inter-bank loans grew rapidly, reaching \$37.6 billion dollars by 1991. The stock market was established in Shanghai and Shenzhen in 1990 and 1991, respectively. By the end of 1993, there were 4 specialized banks and their many branches, 9 nationwide or regional commercial banks, 12 insurance companies, 87 securities companies, 387 financial trust and investment companies, 11 financial leasing companies, 29 finance companies, 59,000 rural credit cooperatives and 3,900 urban credit cooperatives.

In July 1993, the government instituted a 16-point financial reform program to address macroeconomic imbalance problems stemming from uncoordinated lending, growth in the money supply, and subsequent inflation. The PBC was authorized to conduct domestic monetary policy through open market operations and manipulation of the bank loan rates and the banking system's required reserves, thus functioning more like a central bank. At the same time, the PBC still lacks central bank independence, as it is required to implement the State Council's directives and policies and allocate credit to preferred investments. Three policy banks were created in 1994 to assume the policy-lending functions of the four specialized state-owned banks: the State Development Bank to provide infrastructure financing, the Export-Import Bank for trade financing, and the Agricultural Development Bank for agricultural financing. These policy banks raise funds for directive policy lending through issuance of bonds. The four state-owned banks, in turn, were converted into commercial banks in 1995, under the Commercial Bank Law and Central Bank Law. As commercial banks, they are responsible for their own profits and losses but are also "encouraged" to extend loans to the state-owned enterprises (SOEs) and key projects. This restructured financial system is shown in Figure 2.

In 1998, the growing bank problems pushed the government to implement major reforms to deal with the mounting non-performing loans (NPLs). The reforms consist of recapitalizing the state-owned banks, requiring the banks to adopt international classification of non-performing loans, requiring banks to make loans based on commercial standards, and banning local government influence on bank lending decisions. The new structure resembles the United States Federal Reserve System with nine regional central-bank branches (Tianjin, Shenyang, Shanghai, Nanjing, Jinan, Wuhan, Guangzhou,

Chengdu, and Xian). The new risk-rating system for commercial loans is also based on the one adopted by the Federal Reserve. To deal with the bad loans of the four state-owned banks, four Asset-Management Companies (Huarong, Cinda, Orient and Great Wall) were set up in 1999.

Problems of Financial Reforms

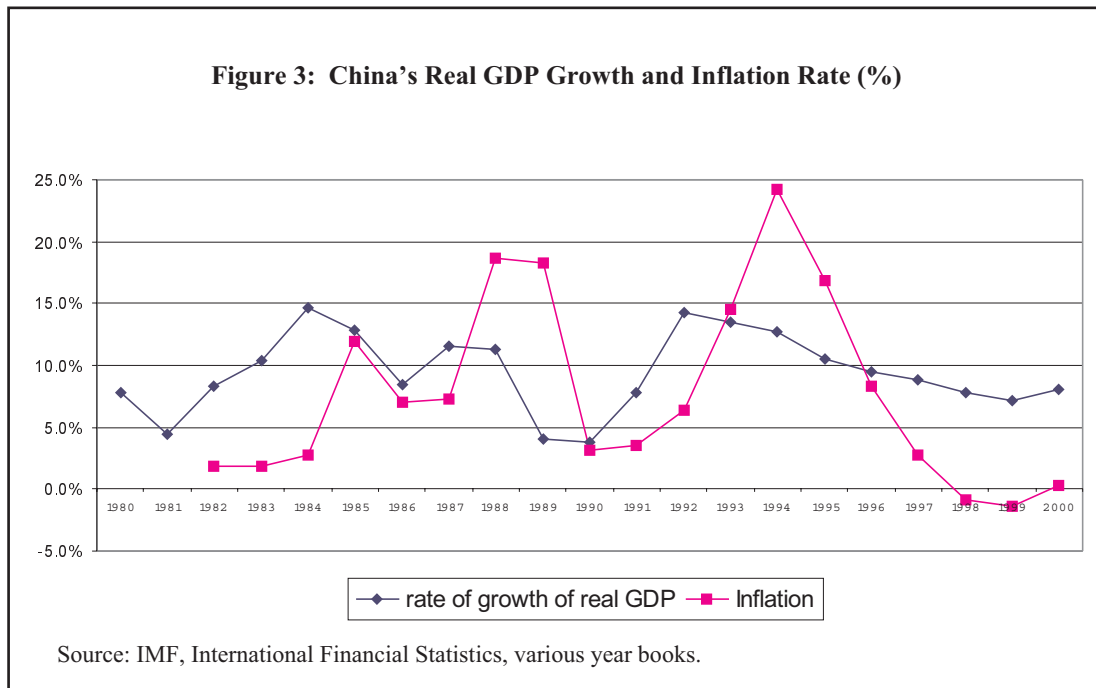
China's early financial reform efforts established a financial framework with a central bank, state-owned commercial banks, and various types of financial institutions coexisting in a loose structure, with the State Council playing a major role in directing the flow and allocation of credit. The initial effort to establish a money market encountered problems when the banks did not borrow to regulate their legal reserves or liquidity needs, but instead borrowed to make loans. This resulted in an unusual phenomenon where the specialized banks had large savings with the central bank totaling 12.6% of the total deposits, but inter-bank borrowing reached \$18.8 billion dollars. Secondly, inter-bank borrowing was used for long term lending. Thirdly, regional differences of as large as one percentage point in the annual interest rate arose reflecting disparities in regional growth. In addition, the PBC's prime rate was powerless in regulating market borrowing.

Other problems soon materialized. Although the stated commitment was to allow greater autonomy and responsibilities to the financial institutions, in practice financial institutions are under the directives of the State Council. The State Council dictates the allocation of capital and the terms of lending to the banking system. Banks were required through administrative orders to issue "policy loans" to finance the deficit of the Ministry of Finance and the losses of the SOEs. It is estimated that 40% of the bank loans to the state enterprises are non-performing loans, mostly irrecoverable, seriously impairing bank profitability. The massive infusion of money supply also caused China to endure one of its bouts of inflation during this transitional period. Between 1986-88, inflation averaged 10.6% annually.

By 1992 China's financial situation had become critical. The People's Bank of China was a central bank in name only. The little control that the head office of the PBC had over its regional branch offices diminished, while the regional branch offices showed greater independence and less accountability. This allowed the regional local governments to exert greater influence and pressure on the local PBC branches to extend "*kwang tze*" (political connections) loans of dubious quality to local financial institutions. The financial institutions in turn were pressured by the local governments to extend unauthorized loans to support local state enterprises and risky and speculative investment in real estate construction to spur regional growth. The additional loans that the central bank injected into the money supply to finance planned investment, together with the unauthorized spending by the local PBC branches and regional governments, exacerbated China's inflation further. By 1993, average annual inflation rose to 14.6%, threatening China's spectacular growth.

The restructuring effort under the 16-point financial reform program attempted to address some of these problems. Greater control of credit and loan expansion was exerted over the banking system, increasing the efficiency of credit allocation decisions. However, the tightening of credit constrained the banks from extending credit to the unprofitable SOEs. The SOEs in turn were unable to meet their debt obligations to their creditors, resulting in a problem called the "triangular debt". By November 1993, the Central Com-

mittee abandoned its austerity program instituted under the new financial reforms and re-instated expansionary policies. The result was rapid inflation with an average annual rate of 24.2% in 1994. China's government has had a tendency to alternate between austerity programs to fight inflation and expansionary programs to avoid unemployment. This "stop-and-go" monetary policy spawned four severe boom-and-bust cycles because the financial channels are disjointed within the financial framework and market financial tools are not in place to effect the fine-tuning of macroeconomic imbalances (Figure 3).



Chinese experts acknowledged that its macro monetary policy is "out of step" with its market economy. Four important factors contributed to the misstep. Firstly, when China began transforming its planned economy to a market economy, it had to replace its planned budget system with an incipient money market. On the supply side, the rapid and extensive monetization of its economy resulted in aggregate savings in state banks growing at an average of 20.7% a year from 1979-88 and an increase in per-capita savings of 33.7%. Households' bank deposits rose from 7% to 38% of the national income between 1978 and 1989. However, on the demand side the credit allocation in China is still dependent on administrative planning.

Secondly, the PBC lacks the authority to effect independent monetary policies without political pressure from the State Council. The PBC is then forced to allocate loan quotas based on the state priority investment, particularly to the unprofitable SOEs. China faces constant conflicts between implementing a restrictive monetary policy and social dissatisfaction from a contracting economy to fight inflation.

Thirdly, the non-state sectors operating mostly under market conditions have expanded much faster than the state-owned sectors. The share of industrial output of the

state-owned enterprises dropped from 78% to 29% between 1978 and 1996. That means that China's continued use of direct policy becomes less and less effective.

Fourthly, the decentralization of the government decision-making responsibilities to regional and local government has increased pressure on the budget and the ability of the government to finance public expenditures. The share of government revenue in the national income fell from 37.2% to 19% between 1978-1988. In 1979, the budget provided 75% of the state sectors' capital investment and in 1988 only 25%. In the same period, the amount of non-budgetary funds (portion distributed by local governments, departments, and enterprises) grew from 31% to 94.8% of fiscal revenue. The current revenue system of allowing local governments to collect and retain tax revenue reduced the central government's ability to implement effective fiscal policies or to counter monetary imbalances when local governments independently pursued expansionary investment to support regional growth regardless of efficiency. The result is that more than 50% of China's financial resources in the economy are beyond direct budgetary control. This situation contributed to the push by the government to encourage banks to finance public investments.

Although the Chinese government views monetary policy as a tool of indirect control, the actual control on monetary credit and other financial variables is still primarily direct, under the purview of the State Council. The exacerbation in the macroeconomic imbalances is an after-the-fact reactive monetary policy, rather than proactive as practiced in most advanced economies. China's gradualist approach to financial reforms has become a hindrance to its development. Bank managers do not practice risk management because it is less "risky" if the loans are politically directed and therefore they are not to blame. Direct control by setting credit upper limits and the interest rates for banks and other financial institutions misallocates funds, particularly to unprofitable SOEs, and is contrary to market discipline. Direct control also leads to the growth of illegitimate inter-enterprise borrowing and lending markets. Chen and Thomas (1999) enumerate the downside of China's gradual reform and Dornbusch and Giavazzi (1999) recommend "a not-too-gradual" approach.

In short, China has the characteristics of a government-permeated financial system. The government owns most of the financial institutions and banks (state, provincial or local) and bank lending is still under government control. In particular, the four specialized banks, accounting for about 70% of the total bank deposits and loans, are required to lend to the unprofitable SOEs. It is estimated that 50% to 70% of the four banks' total loans are non-performing loans (Dornbusch and Giavazzi 1999) or \$212 billion by another estimate (World Socialist Web Site 1999). Bank restructuring may cost between 10 to 20% of GDP (Dornbusch and Giavazzi 1999). Given that the four state commercial banks dominate the financial sector, accounting for 90% of all bank assets or \$1,200 billion in 1999, it is estimated that the government will have to recapitalize the banks with fresh capital and free them of bad loans. It is not surprising that the Chinese banking industry exhibits very low profitability measures. The Bank of China, one of the four state banks, disclosed a 39% non-performing loan to its total loan portfolio and rising in 1999 (Lardy 2001).

Recent attempts of recapitalizing the banks and using the Asset-Management Companies (AMCs) to buy, manage and recover the bad loans, have had very limited effect. The PBC still requires the state-owned banks to extend loans to the SOEs. In addition, the

PBC has repeatedly slashed interest rates to help SOEs pay interest on NPLs and increased the money supply by lowering the capital adequacy requirement. The AMC's loan recovery rate is likely to be extremely low (it is estimated to reach at best 15%) and recent estimates put the cost of restructuring the financial sector as high as 31% of GDP (*ChinaOnline.com* October 25, 2000).

Empirical Analysis

There is widespread fear that China's financial system, especially the banking industry, is in serious trouble (The Economist 1999², Cargill and Parker 2001). The seriousness and immediate need for financial reforms and oversight are patently clear when it was revealed that \$480 million disappeared from the Bank of China raising questions as to China's ability to regulate its financial system (Business Week 2002). How vulnerable is China's banking system to a financial crisis? How effective were the financial reforms implemented in 1993 and thereafter? A series of banking ratios and macroeconomic variables are used in an attempt to measure the impact of those reforms and assess the weakness of China's financial system. It is our hypothesis that there are significant differences between the financial system performance and stability before and after those major reforms. Selected indicators are analyzed and, when possible, tested for the statistical significance of differences between the two periods (groups).

Banking system failures can be loosely divided into three types: macroeconomic, microeconomic (due to poor management) and endemic crisis in a government-permeated banking system. The first one tends to occur in developed countries whereas the other two are more visible in the developing and transition economies. China's government-permeated banking system appears to be a prime candidate for a banking crisis of the last type.

Six indicators are used to identify warning signs of a financial crisis.³ Three macro-type indicators – loan-to-deposit ratio, foreign liabilities-to-deposits, and growth rate of real bank credit – are calculated to help determine whether the banking system is overextending itself. Three other measures – reserves-to-deposits (to measure bank discretion over use of funds), government share of bank lending, and government deficit as a share of GDP – are used to measure the degree of government permeability in the system. In addition, credit from monetary authorities-to-liabilities, credit from monetary authorities-to-deposits, and the rate of growth of deposits for the two periods are also analyzed.

All of the indicators are computed from a time series generated from the IMF International Financial Statistics for the period 1986-2000. Separate data on banking institutions were not available before 1986.⁴ The (annual) values for these indicators are provided in table 1.

Growth in aggregate lending

Aggregate lending measured as (real) domestic credit has been growing at a very irregular pace, ranging from an annual rate of 3.1% in 1994 to 21.4% in 1998 and averaging 13.7% a year. This irregular pattern of growth mirrors the "boom-and-bust" type of growth that has characterized China's post-1978 economic development as explained in Part 2. Sudden falls in the rate of growth, for instance to 6% in 1988 and 3.1% in 1994, were the results of austerity programs adopted by China's monetary authorities to deal

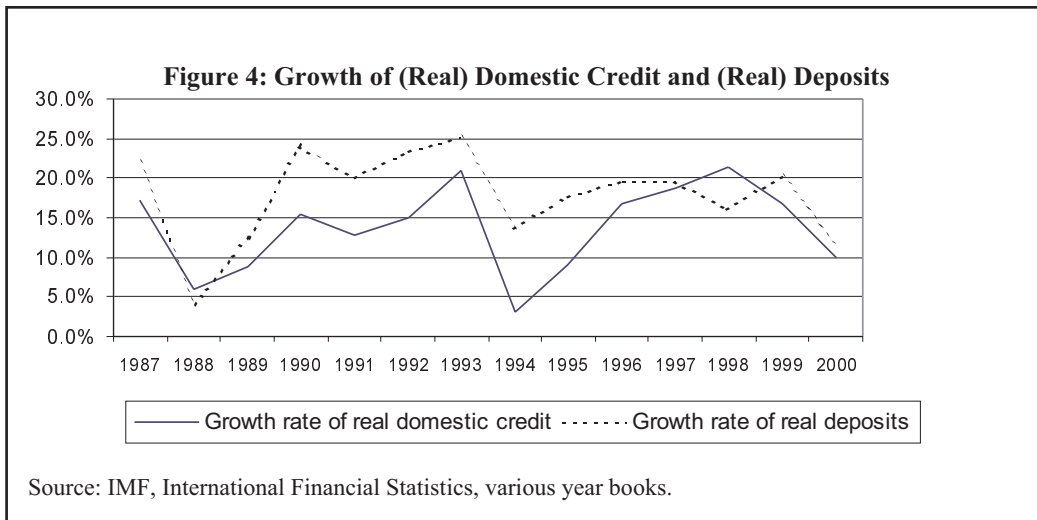
Table 1: Selected Banking Indicators for China 1986-2000 (%)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Aggregate Lending Growth		17.3	6.0	8.7	15.4	12.8	15.0	20.9	3.1	9.1	16.8	18.8	21.4	16.9	10.0
Earning Assets/Deposits	170.9	162.0	163.6	159.0	149.3	140.3	129.8	130.0	121.6	111.1	108.6	108.3	113.1	109.5	110.7
Foreign Liabilities/Deposits	6.6	6.3	6.2	5.9	6.0	7.5	5.9	8.2	10.0	8.3	7.2	6.3	5.1	3.8	3.6
Reserves/Deposits	23.6	19.0	18.4	21.1	23.5	25.0	19.5	21.5	20.3	20.0	21.6	21.3	17.0	15.7	14.0
Claims On Gov't/Earning Assets	...	...	...	...	...	...	...	0.2	1.0	1.9	2.6	1.8	5.0	5.4	5.8
Government Deficit/GDP	0.8	0.5	0.9	1.0	0.8	1.1	1.0	0.9	1.2	1.0	0.8	0.8	1.2	2.1	2.8
Credit Monetary Auth./Liabilities	34.8	30.1	31.1	31.9	29.9	27.7	25.2	24.5	19.9	17.0	17.1	14.6	11.4	7.2	7.1
Credit Monetary Auth./Deposits	56.8	45.8	48.0	49.7	45.2	41.2	35.6	35.1	27.4	22.2	22.2	18.2	13.6	8.1	7.9
Real Deposits Growth	...	22.1	3.9	12.3	24.0	20.0	23.3	25.1	13.6	17.5	19.7	19.6	16.1	20.4	11.4

Source: IMF, *International Financial Statistics*, various yearbooks.

with high rates of inflation, namely 18.7% in 1988 and 24.2% in 1994, and deflate a bubble economy.

The relationship between growth of real domestic credit, our measure for aggregate lending, and the rate of growth of (real) deposits is shown in Figure 4. Deposits include demand, savings, time and other deposits. The rate of growth of (real) deposits ranges from a low of 3.9% in 1988 to a high of 25.1% in 1993. Bank deposits as a percentage of GDP have been steadily rising from 47% in 1986 to 129% in 2000.⁵



Earning assets to deposit ratio

Earning assets, our measure for bank loans, comprise foreign assets, claims on the central government and claims on other sectors, whereas deposits include demand, savings, time and other deposits. This indicator is a measure of the degree to which the banking system is extending itself. High values would suggest a banking system that may be overreaching its resources, whereas low values would suggest an underemployment of the financial resources available to the banking system. In 1986 the ratio was 171%, which is considered very high and a possible indicator of a potential macro type banking crisis, but this ratio has steadily declined over the period of study.

Foreign borrowing

To measure the dependence on foreign borrowing we use the ratio of foreign liabilities to deposits. This measure shows an average value of 6.5%, which is relatively low by international standards, particularly when comparing to other economies in the region.

Bank discretion over funds

To measure the banks' discretion over funds we calculate the share of reserves to deposits. Until recently banks were required to hold 13% of their total deposits at the PBC as required reserves for which they received an 8.28% interest, and an additional 5 to 6% of their deposits as excess reserves (due to the inefficiencies of the interbank money market) for which they got 7.92% (Tambunan 1997). Values range from 14% in 2000 to 25% in

1991 and average 20.1%.⁶ There has been a steady decline since 1996 reflecting lower reserve requirements.

However, the proportion of lending at the banks' discretion is much lower than this ratio indicates. In addition to the reserves, the state owned commercial banks are required to grant loans to the SOEs, and that considerably limits their discretionary use of funds. Of special concern is the enormous size of the "credit from monetary authorities" to the banking institutions. It represents a very large share of the banks' liabilities. Such heavy borrowing from the central bank enhances the control of the central authorities over the banks. Persistent borrowing of 25% or more of the deposits is viewed as a warning sign. It is interesting to note that the relative importance of those flows has been declining over time, from 34.8% in 1986 to 7.1% in 2000.

Government share of bank lending

The ratio used to measure the government share of lending is the ratio of claims on central government to earning assets. That share averages 3%. Government penetration may be larger than this low value appears to indicate, given the lack of transparency of the accounting system in China and the limitations of the data.

Government deficit

A final government indicator is the government deficit in proportion to GDP. A deterioration of this ratio would suggest additional strain on the banking system. The values for this indicator range from 0.5% to 2.8% and average 1.1%.

In order to test the impact of the 1993 financial reform, two periods (1986-1993 and 1994-2000) were considered. Indicator values were calculated and Student's t tests applied to the difference of means (table 2).

The statistical results show strongly significant differences between the pre-1993 and post-1993 period for all indicators except the growth rates of domestic credit and deposits and the foreign liabilities to total deposits ratio. We can therefore conclude that the financial reform of 1993 has had a significant impact on China's banking and financial system. The measure of liquidity, the earning assets-to-deposits ratio, shows a significant improvement with 147.9% for the first period and 111.9% for the second period. In other words the chance for a crisis of the macroeconomic type appears to have been somewhat reduced. As for the government-permeated type of banking failure, the Chinese structural indicators perform rather well. In addition, the reliance on central bank borrowing seems to be declining as well, from 28.6% for the period 1986-1993 to 13.7% for the period 1994-2000. The results also suggest that the financial reform had no impact in the rate of growth of domestic credit, underscoring the limitations of the reform in this area. It is also not surprising that the reform measures did not have a significant impact on the rate of growth of deposits.

Our results are supported by YK Mo (1999) who has indicated that although China's banking system is weak and suffused with problems, it is not in danger of an imminent crisis similar to the Asian crisis. Mo based his conclusions on the reduction in claims against Chinese banks by \$7.4 billion in January-September 1999, suggesting that international lenders are cutting back access to Chinese banks. In addition, China had \$145 billion in foreign exchange reserves at the end of 1998 while the liabilities of the Chinese

Table 2.			
Summary Statistics for Selected Banking Indicators (%)			
Statistics are calculated for each banking indicator using time series data for the two periods. N is the number of observations in each sample.			
Rate of Growth of Real Deposits ^a			
Statistic	1986-1993	1994-2000	Difference of Means t (Equal Variance)
Mean	18.6	16.7	0.608
Standard Deviation	7.7	3.5	
N	8	7	
Aggregate Lending Growth ^a			
Statistic	1986-1993	1994-2000	Difference of Means t (Equal Variance)
Mean	13.7	13.7	-0.005
Standard Deviation	5.1	6.5	
N	8	7	
Earning Assets/Total Deposits			
Statistic	1986-1993	1994-2000	Difference of Means t (Equal Variance)
Mean	147.9	111.9	11.192***
Standard Deviation	16.0	6.2	
N	32	28	
Foreign Liabilities/Total Deposits			
Statistic	1986-1993	1994-2000	Difference of Means t (Equal Variance)
Mean	6.1	6.7	-1.446
Standard Deviation	0.7	2.4	
N	32	28	
Reserves/Total Deposits			
Statistic	1986-1993	1994-2000	Difference of Means t (Equal Variance)
Mean	20.5	17.7	3.683***
Standard Deviation	3.1	2.8	
N	32	28	
Credit from Monetary Authorities/Liabilities			
Statistic	1986-1993	1994-2000	Difference of Means t (Equal Variance)
Mean	28.6	13.7	14.337***
Standard Deviation	3.4	4.6	
N	32	28	
Credit from Monetary Authorities/Deposits			
Statistic	1986-1993	1994-2000	Difference of Means t (Equal Variance)
Mean	42.8	17.5	13.661***
Standard Deviation	7.3	7.0	
N	32	28	
^a based on annual data. Quarterly data were used for all other indicators.			
*** Difference in means: Significant at 1% level.			

banks amounted to \$64.6 billion in September 1998 (in 2000 these figures were \$166 billion and \$49.5 billion respectively). Another factor currently in China's favor is that the renminbi is as yet not fully convertible minimizing the effects on the currency of external shocks. However, China's accession to the WTO (November 2001) will bring increasing pressure for the renminbi to be convertible in the open market, and as a result this safety net could be eliminated.⁷

Given the severity of the problems facing China's financial system to date, it appears that China has been able to maintain its high economic growth rate and stave off an impending domestic banking crisis because of four major intrinsic economic factors: the high captured domestic savings (an average of 40 percent of income is saved), low public debt and negligible domestic debt, the current inconvertibility of the renminbi, and the large foreign exchange reserves. Unless China undertakes serious and timely banking reforms, it remains vulnerable to a domestic banking crisis from the expanding non-performing loans and the increased exposure to future external forces under the WTO regime. Foreign banks will be allowed to engage in local currency businesses with Chinese companies within two years and with individuals within five years. The geographical constraints for foreign banks will also be removed after five years. The competition with the domestic banks will be fierce, with domino effects in the industrial sector and SOEs. The unhealthy links between state-owned banks and SOEs described above will be subject to attacks on two fronts. On one hand, SOEs will be forced to increasingly contend with foreign competitors as new firms penetrate sectors that were previously barred to them. And on the other hand, the state-owned banks that have been lending to these non-performing enterprises will be less able to do so, as they, in turn, are forced to trim their operations and become more efficient themselves in order to compete with the best in the business, from all over the world.

China's vulnerability is evidenced by its first major financial bankruptcy, that of Guandong International Trust and Investment Corporation (Gitic) in 1999 with debts of \$4.5 billion, half of which were foreign debt, and only \$2.9 billion in assets. This was followed a month later by the closing of China's first bank, Hainan Development Bank. Despite the effort to reduce the non-performing loans from 35% of the total loan portfolio in 1999 to 25% in 2000, new bad loans continued to grow reaching 4% of GDP in 2000. China is emerging as a global player, with foreign trade increasing from \$20 billion in the late 1970s to \$475 billion in 2000, and it can ill afford a banking crisis.

Conclusion

It is clear that despite the financial reforms to date, China's financial system is still weak and inadequate. As long as financial and fiscal functions are not distinct and banks lack independence from fiscal budget deficit financing and policy directives, even if a financial framework is in place, they will still be ineffectual in supporting a developing market economy. China's control of the monetary transmission channels may have changed but the basic administrative control and mechanisms have basically remained. The planned distribution of economic resources, particularly credit, is contradictory with the structure and functions of a market economy. An effective financial and monetary policy transmission is crucial to a market economy because China's control over aggregate demand and price level depend to a large extent on the control it can exert over money supply.

Endnotes

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1. Since the state banking system dominates the financial system in the intermediation of funds and since other financial institutions are still in rudimentary development and are not yet important as transmitters of funds, the financial system is used interchangeably with the banking system in this paper.

2. “There is no doubt that China is stuck with a cluster of financial time-bombs. Its state banks are insolvent, and they have few reliable borrowers. The competence of and power of financial supervisors are stretched too thin, while mismanagement and fraud are stripping state assets. The central government has mounting financial liabilities – not least to pay for welfare and for infrastructure meant to sustain growth – but its grip on tax revenues is ever shakier. The bombs are ticking and lately some small ones have gone off.” (*The Economist*, February 13th, 1999).

3. This section borrows the methodology used by (Honohan 1997) and builds on (DaCosta and Foo 1999).

4. Prior to 1985 the data on the central banking operations and commercial banking were consolidated. Beginning in 1993, data on banking institutions also include finance institutions and other banking institutions. Data on the Urban Credit Cooperative Bank and the Agricultural Development Bank are included after 1994, and data on the other two policy banks, the State Development Bank of China and the Export-Import Bank of China are included beginning in 1996.

5. More and more households, particularly in the urban areas, are buying stocks and treasury bonds because of lowered interest rates and taxation of interest income.

6. A compulsory component of more than 25% is considered a high level of government involvement.

7. The renminbi can be exchanged for foreign currency in China’s current account but not in the capital account.

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Figure 1: Chinese Mono-Banking System Structure (Pre-1993 Reform)

