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Documentos Ocasionales
N.º 0502

BANCO DE **ESPAÑA**

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BANCO DE ESPAÑA

(*) All authors are affiliated with Bank of Spain. The opinions expressed are those of the authors and not necessarily those of Bank of Spain. The paper has benefited from input from staff of the Chinese Banking Regulatory Commission, and the Asian Development Bank as well as information from Sayuri Shirai. We also thank participants to the CESifo Conference on Understanding the Chinese economy, in particular from Christa Hainz and Tamara Trinh, and participants to an IMF Seminar where the paper was presented. Remaining errors are, obviously, the authors'. Corresponding author: alicia.garcia-herrero@bde.es.

Documentos Ocasionales. N.º 0502
2005

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ISSN: 1696-2222 (print)
ISSN: 1696-2230 (on line)
Depósito legal:
Imprenta del Banco de España

Abstract

The Chinese banking system, characterized by massive government intervention, poor asset quality and low capitalization, has started a reform process based on three main pillars: (i) bank restructuring, through the cleaning-up of non-performing loans and public capital injections, particularly in the four largest state-owned banks; (ii) financial liberalization, with the gradual flexibilization of quantity and price controls, the opening-up to foreign competition and cautious steps toward capital account liberalization; and (iii) strengthened financial regulation and supervision, coupled with efforts to improve corporate governance and transparency. Although the reform is still ongoing, our preliminary assessment indicates that changes are needed for the reform to be fully successful. Asset quality has improved, particularly in the recapitalized banks, but there is a high risk of a new build-up of non performing loans. Capitalization has increased in the largest banks, as a consequence of the government capital injections, but it generally remains low and profitability has fallen even further. China's huge financing needs, to maintain high economic growth, and its commitment to fully open up its banking system to foreign competition urgently require a more comprehensive and time-bound strategy, with a long-term vision of the desired structure of the Chinese banking system. Bank recapitalization should be completed immediately, not only to ensure bank soundness, but also to increase profitability, which could be affected negatively as competition increases with full financial liberalization. Bank recapitalization, however, needs to be accompanied by a radical improvement in corporate governance, which would clearly be facilitated by a change in the property structure.

Key Words: Chinese financial system, financial reform, bank restructuring, financial liberalization, bank regulation and supervision.

JEL classification: E44, E66, G2, G21.

1 Introduction

China's very high and stable growth in the last few years would seem to indicate that the country is a success in all regards, including finance. This optimistic picture, however, may change if we consider the extremely high domestic saving and investment ratios. In fact, for an average 40% domestic investment to GDP (fully financed by domestic savings), an 8 to 10% growth is not such a high return to investment. This is a very rough indicator of potential misallocation of resources, namely domestic savings, which has been a common feature of closed economies, and even more so of planned ones.

The Chinese authorities are in the process of transforming a planned economy into a market-based one. There are several reasons to believe that this process may have consequences not only for China but also for the rest of the word. First, China has one fourth of the world's population and 12.5% of its GDP measured in terms of purchasing power parity (PPP). Second, its economy is expected to become even larger; for some even the biggest worldwide by 2050 [Wilson and Purushothaman (2003)]. Third, it is one of the main exporters of capital, which is now mainly directed to financing the US current account deficit.

In this study, we concentrate on the banking sector for three reasons. First, it is the most important player of the Chinese financial system, although capital markets are also growing fast. In 2004, bank loans represented 83% of the funds raised by the non-financial sector, while stocks were only 5% and bonds 12% (11% for government bonds and 1% corporate ones). Second, the banking system is the main financer of non profitable state-owned enterprises (SOEs) so that bank reform will have a direct impact on SOEs. Third, the Chinese banking system is so large that the way in which the reform is resolved could have systemic consequences. One can think of several –albeit unlikely– scenarios for such consequences. One is a banking crisis, particularly in the aftermath of capital account liberalization, which could affect capital flows elsewhere in the world. Another one would be that a number of foreign banks gain control of China's largest banks, which rank among the largest in the world. This might induce a reshaping of international banks' position worldwide and, perhaps, even a change in their interest towards other emerging economies.

This paper describes and assesses China's ongoing banking reform as well as the potential impact of remaining measures, so as to draw conclusions and recommendations, which may be of interest for policy makers.

The paper is organized as follows. In Section 2, the structure and evolution of the Chinese banking system is briefly described as well as the main reasons for its poor performance. Section 3 summarizes the main steps taken towards financial reform, distinguishing between bank restructuring, financial liberalization and bank regulation and supervision. Section 4 evaluates the impact of the reform on bank performance so far as well as the potential consequences of remaining steps. Finally, in Section 5, we draw conclusions and policy recommendations based on our evaluation of the reform.

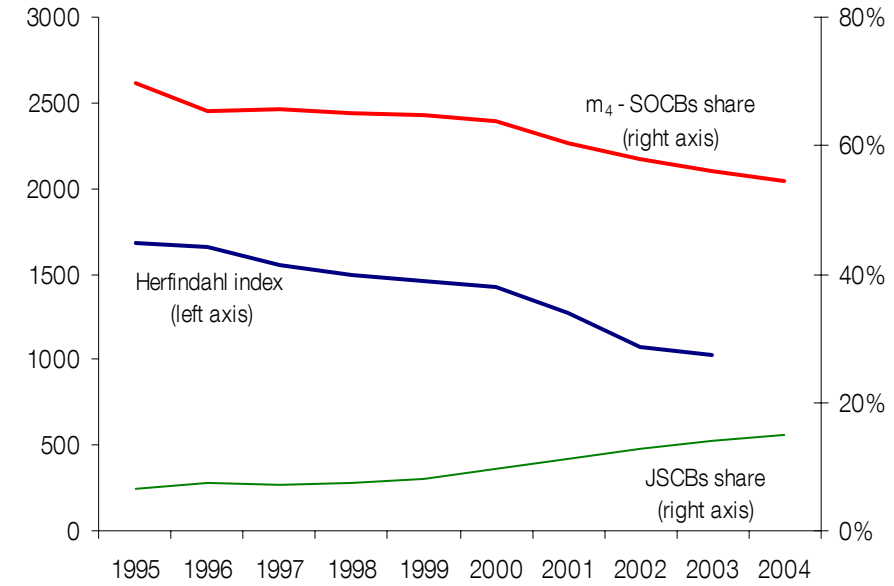
2 The Chinese Bank System

In this section, we review the main features characterizing China's banking system so as to better understand and assess the steps taken to its reform.

The first striking feature is the large size of the banking system not only in relative terms but also in absolute ones. China ranked seventh, worldwide, in terms of bank credit to the private sector as a percentage of GDP (Graph A-1 in Appendix 1) and sixth in terms of bank credit in USD (Graph A-2 in Appendix 1). Furthermore, bank credit continues to growth at a brisk rate, pushed by buoyant economic growth. However, this does not imply a very developed banking system since penetration of banking products is low and bank credit for small and medium size enterprises (SMEs) and households is scarce, 15% and 11% of total loans, respectively, in 2004.

Second, as many transition economies, the Chinese banking system has been dominated by four very large state owned commercial banks (SOCBs), which were created in the 1980s to grant credit to key sectors and are now commercial banks concentrated in corporate lending (appendix 2 offers an overview of the institutional setting of the Chinese banking system and the different types of banks). The remaining banks are relatively small, which explains why the degree of concentration is relatively high when measured in terms of the share of assets of the four largest banks (see m_4 in Chart 1 below) but much lower measured by the Herfindahl index. The relatively low Herfindahl index, however, does not imply strong competition in the banking system, given the oligopolistic behaviour of the SOCBs, the still massive government intervention and the ample room for growth that the strong demand for credit has offered to all banks. A proof of the scarce competition is the relatively high interest margin as a percentage of total assets (1.79% in 2003 as opposed to 1.38% for EU banks). Things seem to be starting to change with the decreasing weight of SOCBs in the banking system (with 73.9% of total assets in 1993 and 54.6% in 2004) and the rising importance of other commercial banks, such as Joint Stock Commercial Banks (JSCBs) and City Commercial Banks (CCBs). The former, partially owned by local governments and SOEs and with a growing share of private ownership (sometimes foreign), now hold 15% of total bank assets, as compared to 4.4% in 1993. CCBs, created by restructuring and merging urban credit cooperatives, are much smaller, with a 5.4% share in 2004 (Table A-1 in Appendix 1 shows the evolution of asset share for each type of institution). This rapid change in asset share is mainly driven by a 30% yearly growth in JSCBs' assets, as opposed to 10% for SOCBs.

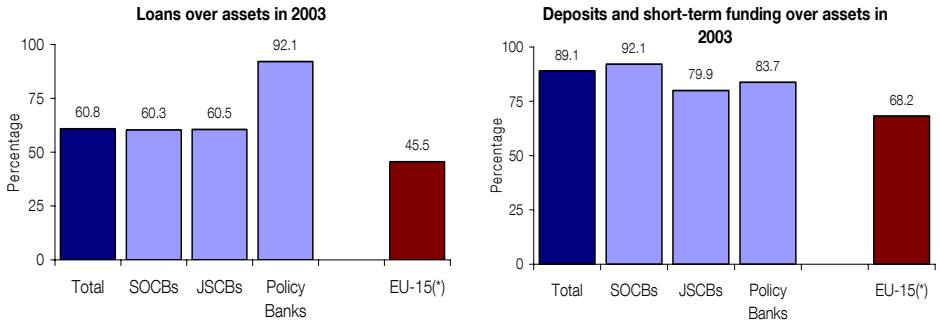
Chart 1. Concentration of Chinese Banking Sector



Notes: m_4 is the share of total assets fot the 4 largest banks (in %).
Herfindahl Index is measured from 0 to 10000
Source: CEIC and Bankscope

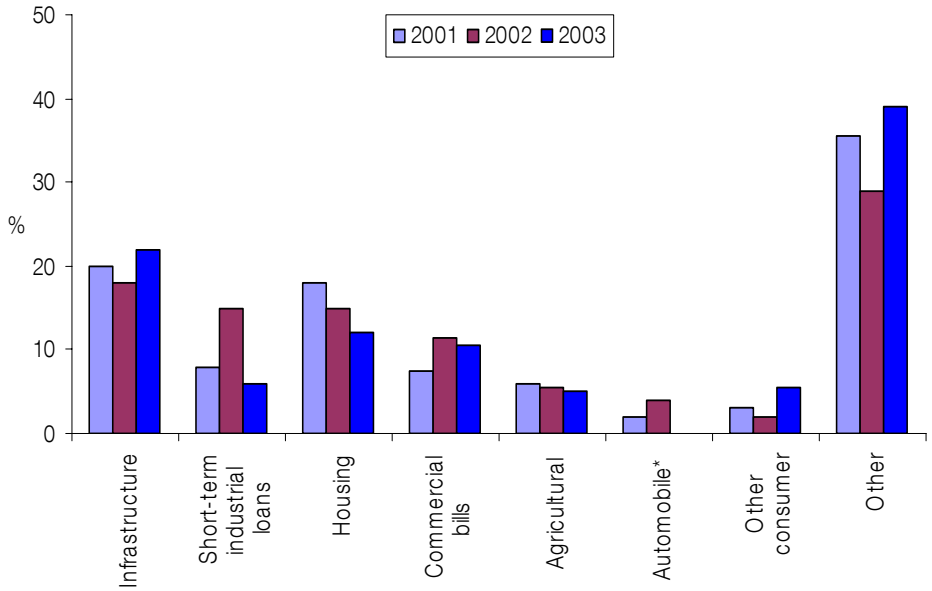
The third characteristic is the rather peculiar structure of the balance sheet, compared to international standards. First, loans are a large part of the assets (60.8% in 2003 as shown in Chart 2 below), the majority of which is granted to the corporate sector (over 85% of total loans and over 85% of profits) and to a large –although decreasing– extent short term. In fact, still nearly 50% of total loans go to finance industrial projects in a revolving manner (Table A-4 in Appendix 1). This is particularly the case of policy banks, created in 1994 as state-owned development banks, with 92% of assets in loans. The recent boom in the housing sector has not changed this picture yet; mortgage lending is still less than 15% of total loans, but also of new loans as shown in Graph 3 below). Second, almost all liabilities are deposits, with an average share of 89% in 2003. This is even higher in SOCBs (92%) but much less so for JSCBs (79%), which have used non interest bearing funding. Retail depositors are the main financers of the banking system since corporate deposits only represented one third of the total. (Tables A-2, A-3 and A-4 in Appendix 1). Again, large differences exist among types of banks since retail depositors represent 60% of total deposits for SOCBs and corporate deposits 65% for JSCBs.

Chart 2



(*) Considering all commercial banks in EU-15
Source: Bankscope

Chart 3. Composition of New Loans



The fourth feature of Chinese banks, also rather common in transition economies, has been their very poor asset quality. The ratio of NPLs to total loans was 20% in 2003 (see Table 1 below), well above international standards (3.1% for EU banks in the same year) and was even larger before the Chinese authorities started their restructuring (above 30% in 1997 according to the CBRC). Also provisioning, as a percentage of non-performing loans (NPLs), was well below international standards, namely less than 22%[1], as compared to 67.4% in the EU in 2003. The underlying reasons for such poor asset quality are soft-budget constraints for the lending to SOEs but also a weak credit culture. In fact, the latter explains why NPLs from small and medium size enterprises (SMEs) and household lending are also high for international standards. Finally, capitalization is low. The solvency ratio, calculated according to Basel I, was only 6.73%[2] in 2003 (as shown in Chart 4 below) and the ratio of equity to assets was 4.3%, virtually the same as before the reform started (Table A-5 in Appendix 1 shows the evolution of basic indicators of bank performance for each bank group).

1. Due to data limitations, this ratio has been calculated for three of the four SOCBs (i.e., excluding the Agricultural Bank of China), and ten of the twelve JSCBs.
2. Ibid.

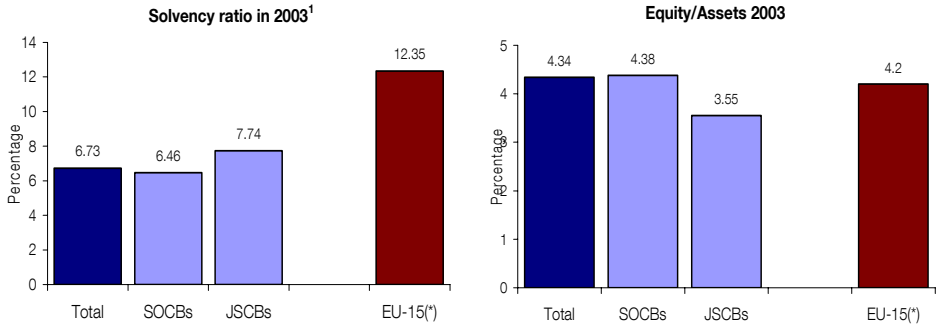
Table 1. Reported NPLs in Chinese financial system

	as of	USD billion	NPL ratio (% of total loans)	% of GDP [1]
State owned commercial banks	dic-03	232	20	17
Joint Stock Commercial Banks	mar-04	23	7	2
Policy Banks	jun-03	19	18	1
Credit cooperatives	mar-04	60	30	4
Banking system total	dic-03	373	19	28
Asset management companies	dic-03	107	-	8
Financial system total	mar-04	480	-	36

Source: Authors' own estimations based on official figures reported by Bofit (2004), Ernst & Young (2004), Ping (2003) and Pei & Shirai (2004).

[1] June 2003 annual GDP

Chart 4



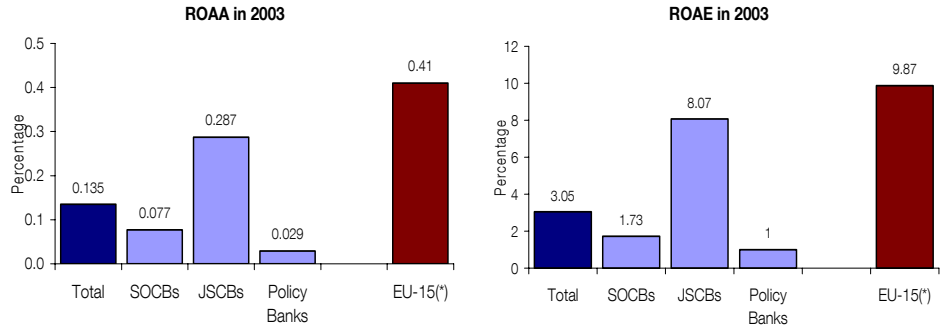
[1] According to Basel I. Total and SOCBs figures are assesed excluding ABC due to data limitations

(*) Considering all commercial banks in EU-15.

Source: Bankscope

A fifth characteristic is very poor profitability. In 2003, the return on average equity (ROAE) of the banking system was 3.05% (see Chart 5 below), and the return on average assets (ROAA) was 0.14%, well below international standards. As an example, EU banks had 9.87% ROAE and 0.41% ROAA in the same year.

Chart 5



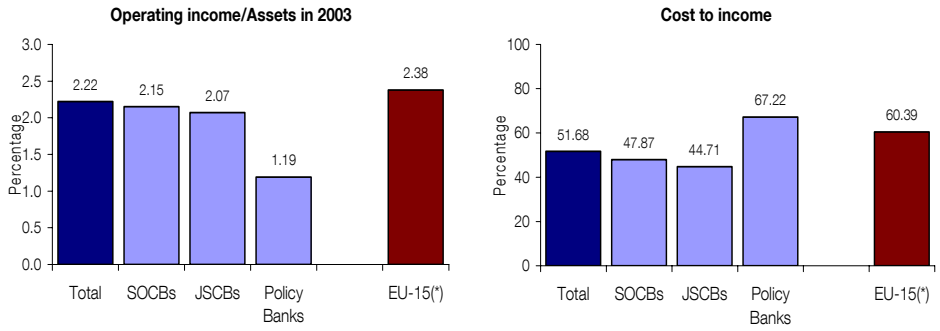
(*) Considering all commercial banks in EU-15

Source: Bankscope

The main reason for the low profitability seems to be asset quality. Operating income, as a percentage of total assets, is only slightly lower for Chinese banks than for European ones (2.22% compared to 2.38% in 2003, as shown in Chart 6 below), albeit very different in composition. In fact, Chinese banks have a much lower non-interest income than

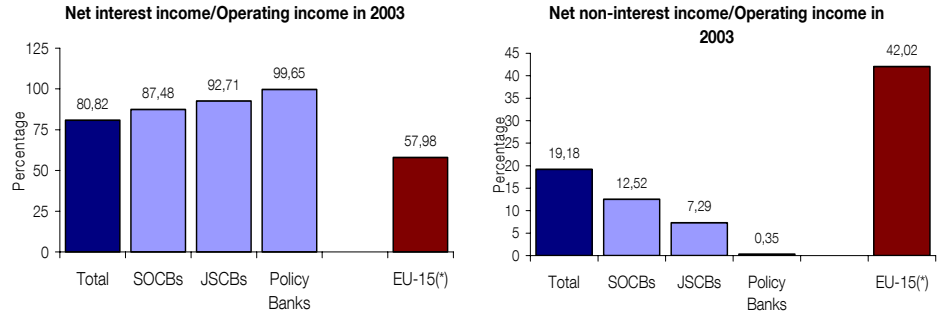
European ones (see Chart 7 below). In addition, the efficiency of Chinese banks, measured by the cost to income, is actually better, (51.68% compared to 60.39% in the same year), although it is basically explained by low wages. In fact, other measures of efficiency, such as pre-provision profit over employees generally ranks EU banks better than Chinese. The difference in profitability is, therefore, mainly explained by the much larger amounts of provisions and write-offs, stemming from the very low asset quality. In fact, provisions and write-offs reduce Chinese banks' net income to only 11.7% of pre-provision profits in 2003, compared to 43.6% for EU banks. Tables A-2, A-3 and A-6 in Appendix 1 depict the evolution of assets, liabilities and income and expenditure for different types of Chinese banks.

Chart 6



(*) Considering all commercial banks in EU-15
Source: Bankscope

Chart 7



(*) Considering all commercial banks in EU-15
Source: Bankscope

Sixth, corporate governance is very weak. The root of this problem is government intervention, which inhibits banks allocating their assets according to market criteria. This is particularly true for the SOCBs. SOCBs lack the basic attributes of a profit making bank. In fact, they do not have clearly identifiable owners, or, until very recently, board of directors or specialized organs for monitoring management. They only have an external board of supervisors –as all Chinese companies– which monitors conformity with banking law and regulations but has no role in the governance or oversight of bank management. Banks are accountable only to the government (usually the Ministry of Finance) and disclosure requirements are minimal. Finally, management has traditionally been selected from the ministerial system and has remained subject to the close control of the party. JSCBs do not have the same legacy as SOCBs so that their management has a higher commitment to shareholder value although they are still very much influenced by local governments and government-controlled enterprises given their large participation in the capital of most of these institutions. JSCBs have also introduced improvements in the procedures for granting credit

and risk management. Some of the largest CCBs are in a similar position to JSCBs, but not the small ones which still resemble to urban credit cooperatives. Credit cooperatives are characterized by even weaker governance that SOCBs, since they are subject to the direct control from local governments.

The last characteristic is the poor institutional framework of the banking system. This is featured by a rather loose regulation and supervision, particularly as regards enforcement. Furthermore, the regulatory bodies, as well as the central bank, are dependent on the party's decisions. The lack of enforcement power from the supervisory part helps explain the very limited improvement in corporate governance. Additional weaknesses are the lack of a bankruptcy law, a national credit bureau and a smooth functioning of the payment systems.

3 Steps taken in banking reform

The reform of the Chinese banking system started with an institutional shake-up, as was generally the case in transition economies. The first, and foremost important step, was the substitution, in 1984 of a monobank system with a multi-tiered one, in which central banking functions were separated from the rest. The second step was the separation of commercial banking activities from those specially geared towards economic development. To this end, policy lending banks were established in 1994 in order to take over from SOCBs projects for development purposes and a new Commercial Banking Law was approved in 1995 to regulate commercial banks. Third, the institutional design of the People's Bank of China (PBC) was strengthened through a new charter in 1995, where its three main responsibilities were: monetary stability, banking supervision, and oversight of the payments system. The new charter, however, did not grant the PBC independence from the State Council. Finally, responsibilities for monetary policy and banking supervision were separated with the creation of the Chinese Banking Regulatory Commission (CBRC) in 2003.

In addition to the institutional shake-up, China's bank reform has been based upon three main pillars (i) bank restructuring, through the cleaning up of NPLs, and recapitalization; (ii) the reduction of government interference in the system, through quantity and price liberalization as well as the opening up to foreign competition; and (iii) improved regulation and supervision.

3.1 Restructuring

Bank restructuring has probably been the most important pillar of bank reform since poor asset quality, coupled with very low capitalization, was a very pressing problem. Bank restructuring has, until now, mainly focused on SOCBs but there have also been some measures for credit cooperatives. This section concentrates on SOCBs, given their systemic natures. The SOCBs' restructuring process has not been linear but in waves. Three can be clearly identified, each of which with two clearly differentiated steps: first a capital injection and, second, the clean-up of NPLs.

3.1.1 THE THREE RESTRUCTURING WAVES FOR SOCBS

The first wave started in 1998, with an injection of the equivalent of USD 33 billion in Renminbi (RMB) into the four SOCBs. The operation started with a reduction in the reserve requirement which freed liquidity for the banks to acquire government paper. The government transferred again the receipts of this purchase to these banks in the formal of fresh capital. This operation was followed, in 1999-2000, by the transfer –at book value– of NPLs from the four SOCBs[3] to the four newly created Asset Management Companies (AMCs) for the equivalent of USD 170 billion (more details will be given on the functioning of these AMCs in the next section).

The second wave started in December 2003 with 22.5 billion USD capital injections in the two best performing SOCBs, namely China Construction Bank (CCB) and Bank of China (BoC)[4]. These injections came directly from the country's official international reserves, through the transfer of rights of ownership of US government bonds. These have not been converted into RMB yet because of imposed restrictions. Since each bank's existing capital was mainly used to provision or write-off the equivalent of 23.4 billion USD in NPLs, this

3. NPLs were also transferred from one policy bank (China Development Bank).
4. Table A-7 in Appendix 1 gives details of NPLs at each SOCB.

operation led to a very marginal increase in capitalization while asset quality did improve substantially. In June 2004, the equivalent of 15.6 billion and 18.1 billion USD in NPLs was auctioned from CCB and BoC, respectively, to AMCs at 50% of face value. The provisions accumulated with the capital injections were used to write-off the other 50% of the value. Cynda, the most active AMC won the auction by promising a 30% recovery rate. In addition, CCB and BoC increased their Tier II capital by issuing subordinated debt for the equivalent of 4.8 billion and 7.3 billion USD, respectively. Finally, the listing of part of these two banks' share has been announced for the second half of 2005[5] and a state-owned investment company has been created to organize the listing. Chinese authorities have expressed interest in strategic investors entering these banks' capital in order to diversify ownership and improve management quality. This has been shown by Bank of America's recent acquisition of a 9% stake of CCB (amounting to 2.5 billion USD), before the actual listing. This has been followed by an additional 1 billion USD stake in CCB by Singapore's state-owned financial holding, Temasek.

The third restructuring wave started in April 2005 with the injection of 15 billion USD into the Industrial Commercial Bank (ICB). As for the second wave, these funds came from the official international reserves and have not been converted into RMB. Although the share of NPLs in this bank is much larger than in the previously restructured ones, only 9 billion USD of the previous capital was used to provision NPLs while the remaining 15 billion was retained in equity (i.e., total equity is now 30 billion USD). The restructuring continued in June 2005 with the approval of an NPL disposal of 85.5 billion USD to AMCs and the issuance of 12.1 billion USD in subordinated debt. In the same way as CCB and BoC did, ICBC plans to be listed in 2006 or 2007.[6]

In these three waves, an estimated 20 to 24% of the 2004 GDP has been injected in the banking system[7], either as capital or as a substitute of NPLs. This amounts to over 110% of SOCBs' capital in injections.

3.1.2 THE NPLS' DISPOSAL

As previously mentioned, the Chinese authorities established a number of AMCs where NPLs from SOCBs have been transferred, and their staff seconded. AMCs are legally independent agencies with a very broad mandate, namely collecting NPLs, restructuring them or converting them into equity. They are also responsible for issuing bonds and borrowing from financial institutions to pay for the NPLs they receive. Finally, they are also in charge of restructuring SOEs and recommending companies for listing [Pei and Shirai (2004)].

The original idea was to assign one AMC for each SOCB. The separation of NPLs recoveries depending on the bank of origin was preferred by the Chinese authorities for several reasons. First, the average size of loans seemed to be small and the clients widely dispersed, making the recovery of NPLs more cumbersome. Second, the specialization of SOCBs, at least in their origin, meant that economies of scale could be rather limited[8]. In reality, banks are no longer as specialized as they use to be and loans are sometimes very large, which might explain why this separate model has evolved into an auction, where AMCs bid to receive additional NPLs.

5. Although not officially confirmed, the stock exchange chosen will probable be Hong Kong and not New York. In addition, there have been rumours that the listing of BoC will be postponed until 2006.

6. The transfer of NPLs to an AMC and the issuance of subordinated debt are still pending.

7. If we assume that the purchase of NPLs in the third wave (i.e. from ICB) is carried out at face value as in the first restructuring wave, the estimated cost is 23.5% of 2004 GDP. If it is done at 50% value as in the second wave, the cost goes down to 20.7% of GDP.

8. For this reason, the main staff members of each AMC are generally seconded from the relevant SOCB.

In the first restructuring wave, each AMC received NPLs from its respective SOCB at face value for a total amount equivalent to 8% of GDP (see Table 3 below) and issued a 10 year bond with an annual 2.25% coupon for 83% of that amount and paid the remaining 17% in cash. In the second restructuring wave, auctions have been used to transfer NPLs. The action implied that the highest bidding AMCs, in terms of recovery value, namely Cynda, received the NPLs. In the third wave, the NPLs of ICBC are being transferred to one of the AMCs (Huarong). This will issue a claim to cover the full face value of the loans with no specific maturity and an annual fixed rate of 3%. In this case the Ministry of Finance seems to have taken the responsibility of covering the shortfall of revenues with the income taxes and dividends of ICBC.

Excluding the third wave, which is still ongoing, the amount of NPLs which has been restructured or disposed of hovers around 50% of total loans transferred. From the restructured (resolved) loans, only 20% of their nominal value has been cashed, which implies that only 10% of the nominal value of the NPLs transferred has been recovered. Only a marginal part of these NPLs has been securitized or purchased by foreign investors. Finally, the government has set the end of 2006 as deadline for the AMCs to work out all NPLs.

Table 2. AMCs disposal of NPLs at March-2005

AMC	SOCB	Assets transferred (USD billions)	Share of banks loans outstanding (% at end-1998)	NPL resolved	% NPL resolved	Cash recovery	% Cash recovery
Orient Asset Management	BoC	32.3	20.4	12.9	39.9	2.9	22.8
Great Wall Asset Management	ABC	41.8	24.6	25.8	61.8	2.7	10.4
Cinda Asset Management	CCB	45,0	21.7	18.56	41.2	6.2	33.6
Huarong Asset Management	ICBC	49.2	17.9	25.9	52.6	5.1	19.9
Total		168.3	20.7	83.2	49.4	16.9	20.5

Note: in USD billions at March-2005
Source: PBC, CRBC, Annual reports, BIS working paper No.115

3.1.3 OTHER RESTRUCTURING EFFORTS

The other restructuring steps taken by the Chinese authorities concern the small financial institutions. Credit cooperatives, as well as Trust and Investment Corporations, underwent a consolidation from 2000 to 2002 through closures and mergers at the provincial level. In August 2003, given the undercapitalization of rural cooperatives and their incapability to rejuvenate the rural economy, additional measures were introduced with a pilot project which has recently been extended to most Chinese provinces. In particular, credit cooperatives were given specific milestone objectives which, if complied with, would allow them to receive new capital injections, as well as tax-breaks and subsidies, from the PBC or the local government. Until now, the amount of government funds injected into credit cooperatives hovers around 10 billion USD.

Notwithstanding the restructuring, the government control on the credit allowances to farmers remains tight, given the importance attached to raising rural income. The second programmed step is the restructuring of credit cooperatives is clarifying their ownership structure and improving their management capacity. The longer-term objective is the consolidation of credit cooperatives to no more than 2,000 (from over 32,000 at end-2004) reaching the necessary capitalization level and providing enough credit to the rural sector.

In parallel to the credit cooperatives, the CBRC announced it would move ahead with the reforms of other types of financial institutions, including policy banks and AMCs.

As for AMCs, foreign firms will be allowed to compete with, and ultimately buy stakes in, China's AMCs.

3.2 Financial liberalization

Financial liberalization is another important pillar of bank reform in China. Having been a planned economy for so long, government intervention in the Chinese banking system was massive and still is, in certain aspects. Liberalization efforts have gone in several directions: first, introducing market practices in the functioning of the banking system; second, freeing interest rates; third opening up to foreign competition; and, finally, liberalizing exchange rate controls, which affect banks' transactions with the rest of the world.

3.2.1 INTRODUCING MARKET PRACTICES

Reducing government intervention in the banking system started in the 1990s with a number of different actions. An important one was the reduction of reserve requirements from 20% to 8% in 1998 and again to 6% in 1999. In addition, the remuneration of excess reserves was lowered to discourage banks from hoarding liquid assets and encourage them to manage their assets. The last reduction took place in March 2005 (from 1.62% to 0.99%). This has implied a steady reduction in liquid assets although they still remain at relatively high levels (Table A-2 in Appendix 1).

In parallel, SOCBs were given more responsibility for their lending decisions and some of their credit quotas were removed. Another important step was taken in 1999, when government interference in commercial lending was forbidden, at least in formal terms, and private capital was allowed to enter JSCBs and CCBs.

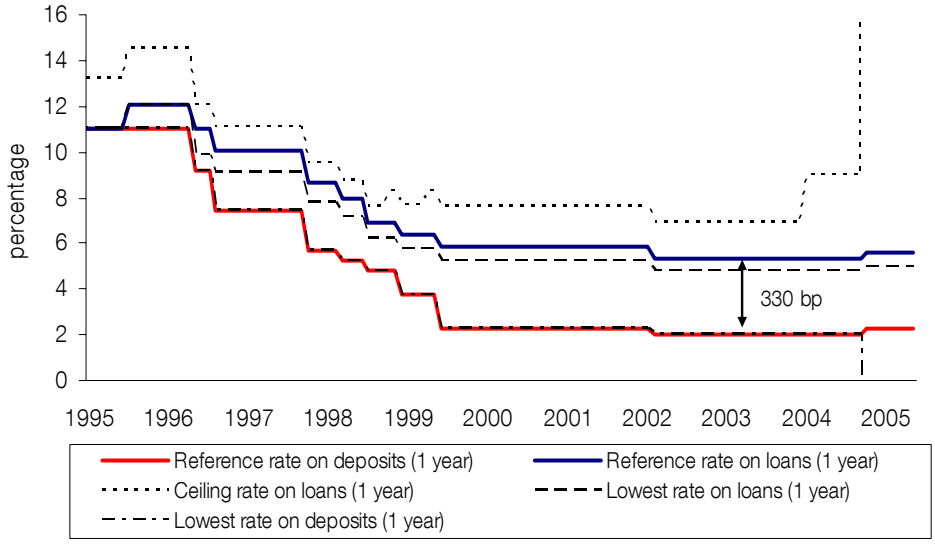
3.2.2 INTEREST RATE LIBERALIZATION

Interest rate liberalization is an important element of China's efforts to enhance the role of market forces in resource allocation. It is also a prerequisite for increasing the competitiveness of financial institutions, introducing market-based monetary instruments and improving the monetary transmission mechanism.

The approach towards interest rate liberalization has been gradual and is not yet completed. As for the sequencing, interest rates in money markets and bond markets were liberalized first, followed by the gradual liberalization of the interest rates of loans and, only later, deposits. The very first measure was taken in 1996, when interest rates in the inter-bank market were liberalized. In 1997, the interest rate in the bond repo market was also freed from controls and the issuing rate of government bonds started to be determined by market forces in 1998. Controls on foreign currency lending rates and large-value foreign currency deposit rates started to be removed in 2000. As for domestic currency transactions, a corridor was established in 1996 for RMB loans, which was gradually widened until the upper limit was lifted in October 2004, except for credit cooperatives. In 1999, interest rates on long-term large-value RMB deposits started to be liberalized on a gradual basis. In October 2004 the lower limit on the interest rate of all RMB deposits was lifted but not the upper limit (Table A-8 in Appendix 1 offers additional details on interest rate liberalization). The PBC has announced additional measures, such as eliminating the upper limit on RMB loans for credit cooperatives and abolishing the existing lower limit on lending rates for all institutions; It also intends to eliminate the upper limit for all RMB deposits and liberalize interest rates on remaining foreign currency deposits (small-value with maturity less than one year) at some point in time. In this context, the PBC has also announced the introduction of market-based monetary policy instruments.

In the current setting, the liberalization of the ceiling on the lending rate and the floor on the deposit rate imply no limit as to how large the spread between the lending and deposit rate but a clear one on how small it can be, i.e., the difference between the reference lending and deposit rates. This difference hovers at 330 basis points (Chart 8 below) and offers a safe margin for banks to maintain a relatively high net interest margin.

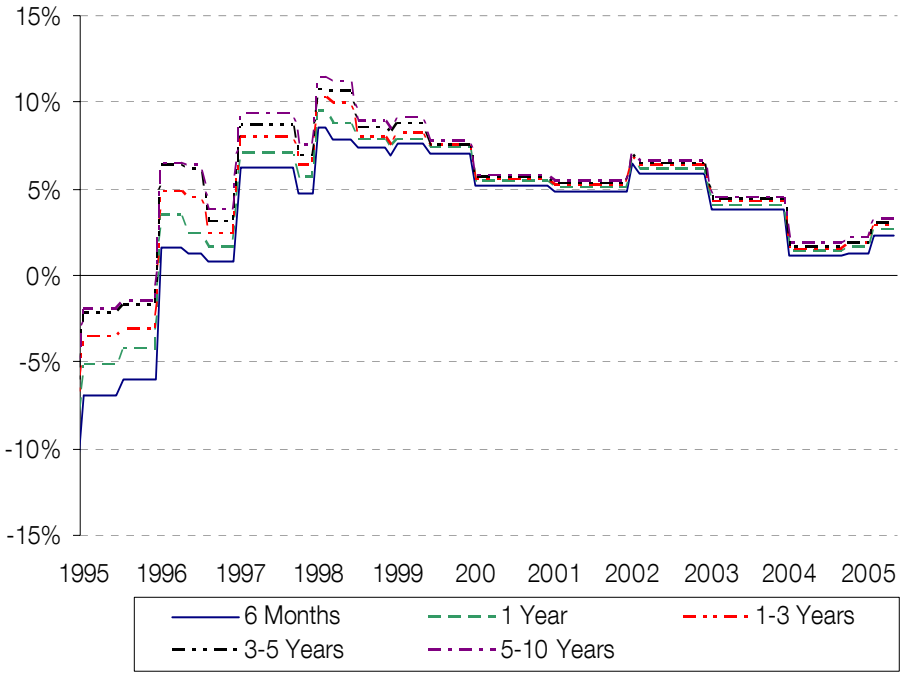
Chart 8. Lending and deposit rates



Source: CEIC

At the same time, nominal lending and deposit rates have fallen substantially in the last few years together with real lending rates, which had reached relatively high levels in the first compasses of the reform, as double-digit inflation was being controlled. In late 2004, real lending rates have started to increase again, as a consequence of a more restrictive monetary policy stance, but still remain relatively low, well below 4% (Chart 9 below).

Chart 9. Real interest rates on loans (reference)



Source: CEIC

3.2.3 OPENING UP TO FOREIGN COMPETITION

A crucial milestone in the financial liberalization process was the conclusion of the negotiations for China's accession to the WTO, in late 2001. The commitments agreed under WTO imply the full opening up of the Chinese banking system to foreign affiliates by end-2006 but the approach followed has been very gradual and cautious. At the beginning, foreign banks were only allowed to carry out foreign-currency transactions. As a second step, foreign banks were authorized to offer local currency services to foreign enterprises and individuals, albeit with geographical restrictions (starting with the richest regions[9]), high minimum capital requirements and tight prudential norms, compared with international standards (see Table 3 below). Third, in 2003, the wholesale market in domestic currency (i.e., to Chinese enterprises) was opened to foreign competition for a relatively large number of provinces. Finally, from end 2006 onwards, foreign banks will be able to offer all banking services in local currency in all provinces and even to Chinese households. In addition, the Chinese authorities have recently announced measures to facilitate the entry of foreign affiliates, such as lifting the ban to open more than one branch per year and reducing minimum set up capital requirements for the establishment of new branch. Since the signing of WTO in 2001 foreign bank branches have increased from 157 to 192 in 2004, most of which from Asian origin (mostly Taiwan, South Korea and Hong Kong). The number of representative offices also rose from 184 in 2001 to 223 in 2004.

9. In Shanghai and Shenzhen, as special economic areas, interest rates were liberalized for foreign companies and individuals even before becoming a WTO member, in 1996.

Table 3. Timetable for opening the financial sector under WTO commitments

	Foreign banks can begin to offer services in domestic currency to		
By Geography	Foreign companies and foreign individuals	Chinese domestic companies	Chinese individuals
Open Shanghai, Shenzen	1996	2003	2006
Open Tianjing, Dalian	2001	2003	2006
Open Guangzho, Qingdao, Nanjing, Wuhan	2002	2003	2006
Open Jinan, Fuzhou, Chengdu, Chongqing	2003	2003	2006
Open Kunming, Zhuhai, Beijing, Amoy	2004	2004	2006
Open Swatow, Ningbo, Shenyang, Xian	2005	2005	2006
Lift all geographical restrictions	2006	2006	2006

Source: WTO and Deutsche Bank Reasearch (2004)

Banking services in foreign currency were liberalized in all regions immediately after WTO accession

Although WTO commitments do not deal directly with a foreign acquisition of a stake from a Chinese bank, Chinese authorities have increases the limit on bank's foreign ownership from 15% to 20% of total capital for one single investor, and to 25% for the joint participation of all foreign investors. This is probably related to the need for fresh capital and highly qualified bank management. Twelve foreign banks have already entered the capital of Chinese banks but their participation is generally low[10]. Table A-9 in Appendix 1 offers a list of the purchases by foreigners and their capital share.

3.2.4 CAPITAL ACCOUNT LIBERALIZATION

Capital account liberalization has been even more gradual and remains more incomplete than the rest of the liberalization process. Although more details are offered in Tables A-10 and A-11 in Appendix 1, the situation, in a nutshell, is that capital inflows are much more liberalized than outflows. FDI abroad, portfolio outflows and even the repayment of credit operations need to be authorized by the State Administration of Foreign Exchange (SAFE). This, together with the fact that resident transactions in foreign currency are strongly regulated, explains why Chinese institutions, including banks, have limited foreign exchange positions although they appear to have increased very fast in the last few years, above 50% on average (see Table 4 below). Banks' are long in foreign currency, with net foreign assets equivalent to 6.1% of GDP in 2003, while corporate are short, with net foreign liabilities equivalent to 10.8% in 2003.[11]

10. There is one case in which participation is actually above the 20% limit.

11. Households can only be long since they can deposit money in foreign currency but not borrowed. There is a global limit for households' deposits in foreign currency, namely 5% of total deposits.

Table 4. China: Foreign Currency Exposures of Financial and Corporate Sectors

(USD billions)			
	2001	2002	2003
Net foreign exchange-denominated assets of the banking system (1)	31	60	67
Of which, net foreign assets	85	108	85
(in percent of GDP)	7.3	8.5	6.1
Net domestic foreign currency assets	-54	-48	-19
Banks' foreign currency loans to domestic residents	81	103	130
(in percent of GDP)	6.9	8.1	9.2
Net foreign currency exposure of corporate sector	-103	-121	-150
Corporates' foreign currency assets (2)	45	52	52
Corporates' foreign currency liabilities (3)	149	172	202
Total external debt	170	171	194
Of which: short-term	44	48	73
Of which: corporate	68	70	82

(1) Sum of net foreign assets (net claims against foreign residents) and net foreign currency-denominated assets against domestic residents.
(2) The estimates are based on corporate foreign currency deposits in domestic banks.
(3) Sum of corporate external debt and domestic foreign currency loans.
Source: Prasad, et al. (2005)

3.3 Regulation and supervision

The liberalization and restructuring measures have been accompanied by improvements in regulation. In 1995, together with the assignment to the PBC of its main objectives, capital adequacy requirements were introduced in all commercial banks, as well as prudential ratios, namely loan to deposit ones and assets to liquid liabilities. These prudential ratios, however, were a formality. In 2002, the PBC, still the Chinese regulator until 2003, established the international five-tier loan classification although it was not made fully compulsory. The reasons for this weak situation were the PBC's lack of sanctioning power and the decentralized nature of its regulatory and supervisory functions. In fact, the bulk of the work was conducted by the local offices, which themselves had to report to the local government.

With the establishment of the CBRC in 2003, there were several improvements. First, the five-tier loan classification system was enhanced and made fully compulsory for all banks by end-2005. Second, capital adequacy became key: after an evaluation of the compliance with the Basel Core Principles for Effective Banking Supervision, the 8% minimum capital adequacy ratio, defined in Basel I terms, was introduced and a 4% minimum total capital. These ratios will need to be fully complied with by 2007. Third, risk-based supervision started to be implemented through a new CAMEL-type Risk Assessment System, which not only uses quantitative criteria but also qualitative ones for capital, asset quality, management competence, liquidity and profitability. For the time being this system is being applied only to JSCBs. Fourth, related-party lending has also been limited, which is quite important given the concentration of lending in the corporate sector and, in many cases, large SOEs. Fifth, enforcement has also improved –although to a much lesser extent– since the CBRC has started to impose sanctions for infractions of rules. The latter has been facilitated by the legal protection granted to supervisors. Finally, the CBRC has embarked in a large scope program of capacity building, necessary to conduct on-site and off-site inspections.

Efforts have also been made to improve bank corporate governance, through the creation of shareholder boards with outside directors but this is only a very small step, as shall

be explained later. Finally, there is now some disclosure of information, particularly for listed banks, which must go through an auditing process as well as the publication of more comprehensive balance sheets and income statements. The CBRC, itself, is enhancing its transparency through the publication of individual bank data, including NPLs.

4 An assessment of the banking reform so far and potential impact

From the information above, there is no doubt about the commitment of the Chinese authorities to bank reform and the measures taken seem to go in the right direction. However, these measures do not seem to be comprehensive enough and several important ones are missing, particularly as regards the incentive structure. The results in terms of bank performance are relatively good in some aspects, such as asset quality for the restructured SOCBs, but not in others, as we shall explain.

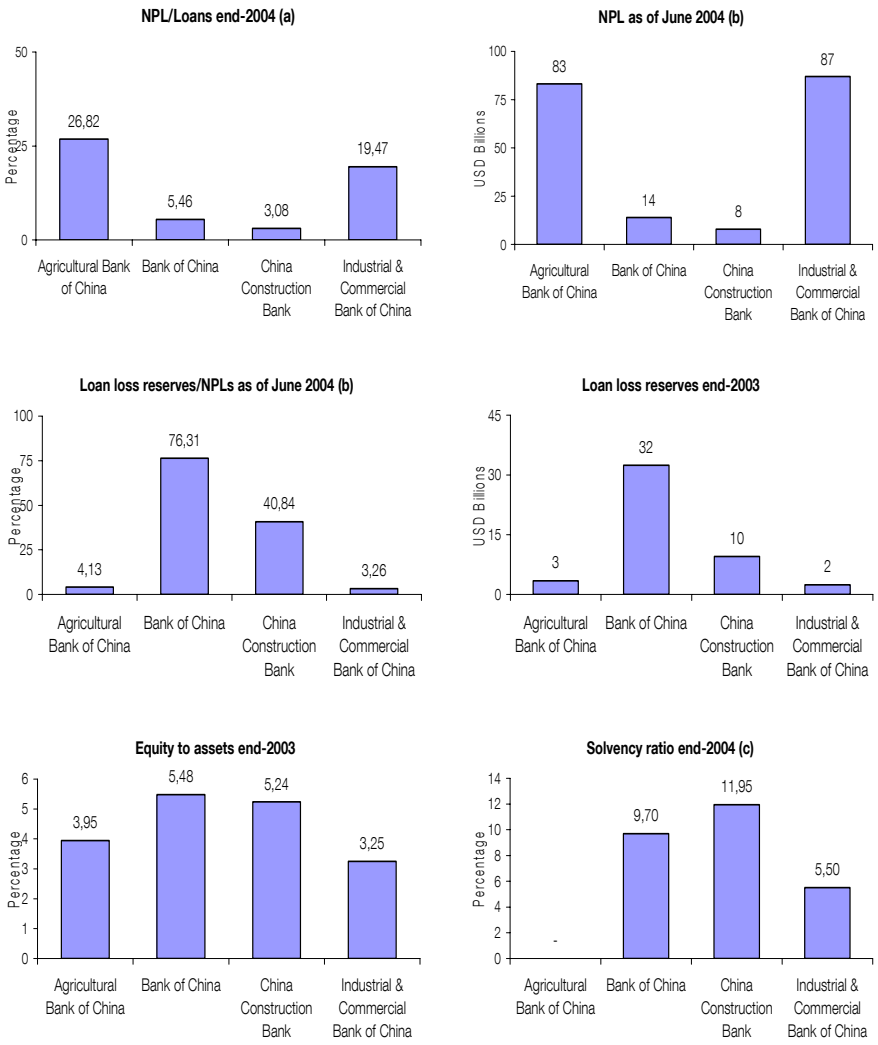
4.1 Bank restructuring

So far, the restructuring process has managed to improve asset quality but the results seem to be weaker in terms of capitalization. The solvency ratio, calculated according to Basel I, was only 6.73%[12] in 2003 and the ratio of equity to assets remained at similar levels than before the reform started (namely 4.3% in 2003). The capital injections carried out by the government in 1998 (33 mm USD) had an immediate positive impact on the ratio equity to assets of the banking system (from 4.54% in 1997 to 6.03% in 1998) but this ratio fell again even below the 1997 levels. This is because, in the second restructuring wave, most of the capital injection was directed to improving asset quality and the third wave has involved relatively few funds. In addition, there has been very little private or public capital raised otherwise. In 2004, however, the situation has improved for the restructured SOCBs (data is not available yet for the whole banking system).

CCB and BoC have received enough public funds to maintain adequate solvency levels; measured in Basel I terms (see Chart 10 below). Instead, ICB and, much more so, ABC still suffer from much poorer solvency, higher NPLs and very low provisioning ratios, both in ratios and levels. We have estimated the capitalization needs of these two SOCBs, so as to reach the solvency and asset quality targeted by the Chinese authorities for 2005. These amount to 150 billion USD (or the equivalent of 9.7% of 2004 GDP), if we assume the same recovery rate for the NPLs as that obtained by AMCs for the other two restructured SOCBs (for details see Table A-12 and A-13 in Appendix 1).[13] Another point to take into account is that the capital injected into SOCBs in the second and third wave is in USD, which implies an exchange rate risk, particularly considering the larger probability of a of a RMB appreciation. In fact the recent 2.1% revaluation led to a loss of 9.8 billion RMB.

12. Due to data limitations, this ratio has been calculated for the four SOCBs, except for Agricultural Bank of China, and ten of the twelve JSCBs.
13. This is within the estimates provided by Standard & Poors of 110 to 190 billion USD.

Chart 10

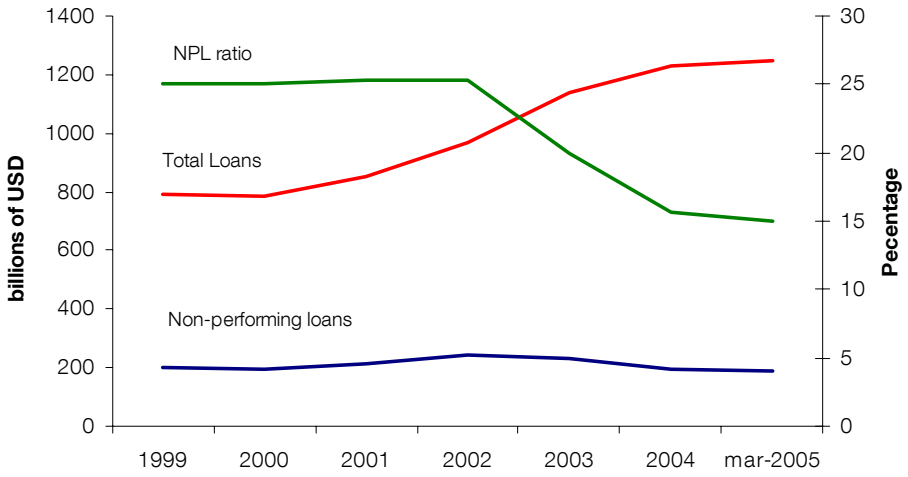


(a) BoC and CCB figures as of June 2004; (b) ABC figures as of end-2003; (c) ICBC figures as of end-2003.

Source: Bankscope, CBRC and Fitch.

As for asset quality, the three waves of restructuring have reduced NPLs in three of the four SOCBs (see Table 1 and A-7 in Appendix 1). This welcome development, though, needs to be seen in the context of a very rapid loan growth. In fact, apart from the government injections, the improvement in asset quality is mainly explained by the increase in the denominator (bank loans), as shown in Chart 11, below.

Chart 11. Non-Performing Loans on SOCBs



Source: CEIC

The problem is that there are reasons to think that these new loans may end up into NPLs. First, the criteria for granting loans have not changed substantially, as banks' ownership structure is virtually the same and the reform of SOEs still has a long way to go. Second, the reported NPL ratio for loans extended after 2000 is only 2.5 %, dramatically lower than the NPL ratio for older loans. Third, the slow-down of the economy –particularly if abrupt– would convert many loans in bad ones. Fourth, the total amount of NPLs in the financial system (i.e., counting what has been transferred to the AMCs and not yet recovered) has not fallen much since AMCs have disposed of only (half) one third of the NPLs transferred. The latter is due to several factors: first, the incentive structure of AMCs, which are evaluated in terms of the recovery value and not so much the speed at which assets are disposed of or recovered; second, the poor legal framework under which they operate; third, the lack of market instruments to dispose of NPLs. An additional concern is that only the best assets have been sold, which raises doubts about the recovery capacity of AMCs in the medium term and the costs for the Chinese authorities. Finally, the way in which the asset disposal has been designed raises concerns for SOCBs profitability and, eventually, even solvency. This is because AMCs –which are formally independent institutions– have purchased NPLs either at face value or at a 50% while they are obtaining a much lower recovery rate. If government support to AMCs were not to materialize, these agencies will find it virtually impossible to pay for the principal of the bonds now at SOCBs' balance sheets. Even the payments of the interest coupon –which are anyhow low– are doubtful.[14] This support, however, should eventually exist, since the whole reform process would be derailed otherwise.

4.2 Liberalization process

Although government interference has been reduced with the liberalization process, it is still very large compared to international standards. The share of SOCBs has fallen and that of JSCBs has risen but even the latter are only partially privatized.[15] Furthermore, foreign participation is still very limited in most JSCBs.

14. Reportedly, not all interests on these AMC bonds have been paid to SOCBs.
15. According to the CBRC, the largest private share is 80% for the case of China Minsheng.

Competition is still weak, particularly among the largest banks. This is due to several factors. First price and quantity controls have not been fully lifted and the opening up to foreign competition has proceeded very cautiously. Foreign competition is limited to the wholesale business and in few areas. The full opening up, following WTO commitments, at end-2006 will change the picture only slightly; the country's huge size will make it difficult for banks to compete through Greenfield investment and direct participation in Chinese banks remains limited. In fact, the announcement that SOCBs will be listed does not mean that foreign investors will be offered control. Second, fast economic growth and, in particular the high investment rate, implies that there is an enormous amount of projects which need to be financed. Thus, there is room for all banks to make business. Third, the current upper limit on the deposit rate limits competition for deposits, particularly those highly sensitive to the return obtained. Finally, the excessive liquidity of the banking system inhibits competition so even the programmed full liberalization of the deposit rate might not increase competition in this setting.

Regarding capital account liberalization, the relatively small percentage of banks' foreign exchange transactions limits, for the time being, the risks related to sharp exchange rate swings. However the fast increase in exposure in the last few years clearly hints at growing risks as economic openness and capital account liberalization proceed. This is even more the case if we consider that hedging instruments are limited; Chinese banks are not used to managing foreign exchange risk; and the regulator has still not developed strict prudential tools for foreign exchange risk. Furthermore, the fixed exchange regime may be understood as an implicit guarantee, inducing moral hazard and thus a further build-up of risks, as has happened in other countries.

4.3 Regulation and supervision

Efforts have been huge given the starting conditions of Chinese regulatory authorities. However, it is not completely clear how China is going to ensure a level playing field to all banks. For example, there are questions as to how the regulation imposing a minimum capital adequacy ratio of 8% for all commercial banks will be enforced by end-2007, as programmed. We cannot expect ABC, credit cooperatives and even some JSCBs to comply with it by that data unless they receive very large capital injections. As previously mentioned, for the remaining two SOCBs, our estimate is 150 billion USD and that of credit cooperatives and city commercial banks could hovers around 12 billion USD (around 9 billion for the former and 3 for the latter). As for JSCBs, we estimate at least 19 billion USD to reach a capital to assets ratio similar to that of BoC and CCB, namely 6% (details on this estimate can be found in Table A-12 in Appendix 1).

One of the main objectives of strengthening regulation and supervision was the introduction of a more cautious approach towards risk. Although it is difficult to draw conclusions from the available evidence, there are two facts which can hardly be reconciled with an improvement in risk management. First, loan pricing by SOCBs does not seem to have changed, despite the additional space provided by the liberalization of interest rates. Most loans are still contracted at, or even below, the PBC's benchmark rate. Second, bank lending has continued to grow rapidly (even if it has decelerated somewhat) and there has not been a substantial change in the sector composition: traditional sectors, such as infrastructure projects, continue to be an important part of new lending (over 20%, as shown in Graph 3 above). New sectors, particularly housing, are growing fast, but they still account for a small share of outstanding lending. Moreover, the attempts to improve corporate governance have not shown clear results yet. The recently created shareholder boards are

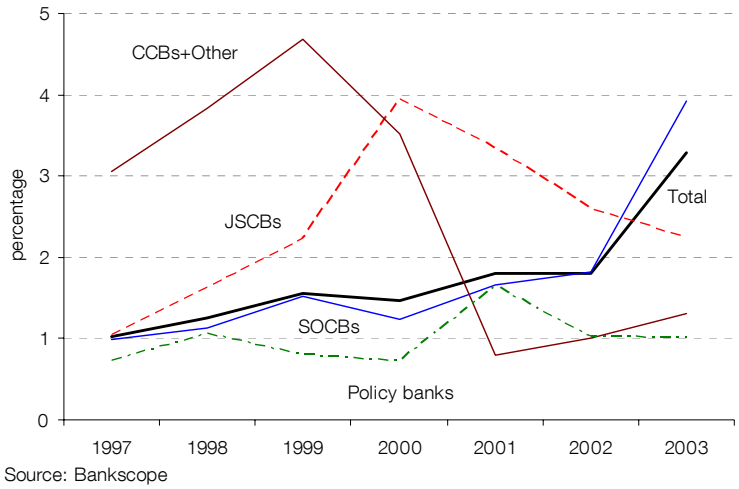
still a formality and the practically full state-ownership biases the decisions taken by bank managers. Finally, Chinese banks are ill-equipped to adopt Basel II –event the second and third pillar as announced by the Chinese authorities– as they are still struggling to adopt Basel I. The large share of low-rated corporate bonds in their balance sheets will increase their need for additional capital under Basel II. In addition, operational risk will probably be large because of poor internal controls.

4.4 General assessment of bank performance

In the years in which the reform has been ongoing, overall bank performance has not clearly improved. This is also the case of JSCBs considered some kind of laboratory of the reform because of their partial private ownership and market orientation, relative to SOCBs.

As already mentioned, the most promising developments come from asset quality but credit growth explains a good part of it.[16] Another good signal is growing provisioning although a large part comes from the government recapitalization programs and is still insufficient to cover NPLs (see Chart 12 below). Developments in solvency have been less encouraging: the capital to asset ratio for the banking system as a whole has remained practically unchanged since the beginning of the reform (see Chart 13 below). JSCBs have reduced their capital to asset ratios, which is even more worrisome if we consider hat they have relatively little Tier II capital[17]. The reason behind this worrisome trend is fast asset growth (nearly three times faster than the average) without recourse to additional capital.

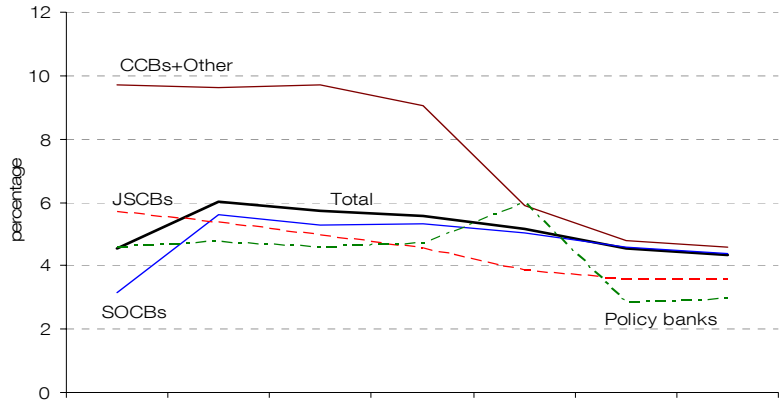
Chart 12. Percent change in Loan loss reserve to gross loans by type of institution



Source: Bankscope

16. In an empirical exercise with bank panel data, García Herrero, Gavilá and Santabárbara (2005) find that bank size, measured in terms of assets, tends to increase the flow and NPLs. For the stock of NPLs, both bank size and bank concentration, measured in terms of the Herfindhal index, increases it.
17. The issuance of subordinated debt has been stepped up in 2004-5.

Chart 13. Equity to assets



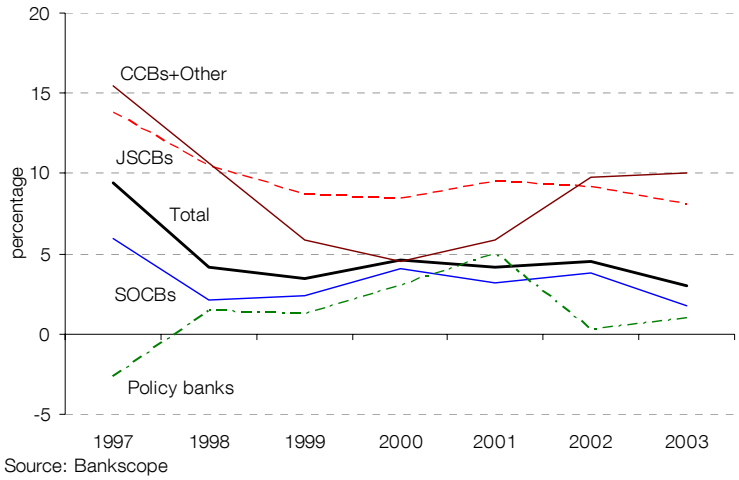
Source: Bankscope

Finally, from already low levels, profitability, measured in terms of ROAE, has generally declined. This is also the case for JSCBs (see Graph 14 below). There are some welcome reasons to explain the fall in profitability, namely declining inflation and real interest rates as well as provisioning, which have been found important determinant or profitability in an empirical analysis for Chinese banks [García Herrero, Gavilá and Santabárbara (2005)]. In the case of JSCBs, ROAE has fallen, notwithstanding their low capital to asset ratio and their relatively low cost to income ratio[18], because they have experienced a reduction in interest income to achieve a higher market share. Graph A-3 in Appendix 1 show which are the main factors behind the declining trend of ROAA.

In sum, the reform on the Chinese banking system has not brought sizeable benefits so far except for asset quality and doubts remain about a possible build-up of new NPLs given the fast credit growth. This poor assessment is valid not only for SOCBs, but also for JSCBs, and for the banking system as a whole. In the case of JSCBs, the poor performance might be due to the very limited private control of these banks or, on a more optimistic tone, because it is too early to feel the benefits. However, it could also be the case that the steps taken have not been bold enough and more aggressive measures are needed to change the course of events.

18. García Herrero, Gavilá and Santabárbara (2005) also find these two factors significant determinants of the Return on Assets (ROAA).

Chart 14. Return on equity (ROAE)



Source: Bankscope

5 Suggestions for future steps

5.1 An accelerated and more comprehensive reform strategy

Although the Chinese reform is going in the right direction, we argue that it should be accelerated and made more comprehensive. We offer three main reasons for this. First, the challenges that the Chinese economy faces are pressing, in terms of huge financing needs for such a dynamic economy and the commitment to open-up to foreign competition by end-2006. Second, opportunities are also large, since China is considered a very attractive economy and foreign investors' interest is enormous. Third, the reform, so far, has not managed to improve banks' performance to an extent that we can be sure that the process will not be derailed. The main risk in this regard is the huge pile-up of new loans, some of which could become non-performing in the future, particularly if the economy decelerates.

The main objectives of this comprehensive reform should be: (i) raising asset quality and solvency to international levels, as soon as possible, and maintaining them, notwithstanding the very fast growth of credit; (ii) transforming existing banks into viable, financially sound and independent commercial institutions. The former requires a complete restructuring, coupled with improved corporate culture, risk management, supervision and, possibly a change in the ownership structure. For the second, apart from better corporate governance, completing financial liberalization is needed so that banks learn to take decisions of their own and to manage risk. Finally, this second objective should also imply choosing a model for the Chinese banking system, in terms of institutional functioning, size, structure and ownership.

5.2 On bank restructuring

The authorities seem to have embarked in the restructuring process without a clear diagnosis of the underlying causes of the problem. Or, if such diagnosis exists, it has not been considered with the highest priority. It seems undeniable that government interference is behind the huge accumulation of NPLs. Bold and fast steps are needed to improve corporate governance and to reduce government control in the banking system. Good corporate governance requires strong in-house capability to price and monitor credit risk, which is a challenge given the scarcity of human capital in Chinese banks. Assessing interest and exchange risk will become more relevant as financial liberalization moves on. The introduction of internal audit and external audits needs to be accelerated and strengthened.

As for the cleaning up of NPLs and the recapitalization of the banking system, the current strategy is too piecemeal and is not time-bound. Chinese authorities should announce a precise timetable with specific deadlines for NPL disposal and recapitalization up to Basel I solvency levels for those banks deemed viable. The sooner the financial system is freed from NPLs, the easier it will be to introduce good corporate governance and risk management. The two, however, should go hand in hand, to avoid using the newly injected capital to grant loans under the same criteria as before. In this regard, the currently very high interest of foreign investors in China should be profited from since a larger share of foreign competition in the Chinese banking system would be of great benefit to change the incentive structure. The example of Central and Eastern Europe is interesting in this regard since foreign banks were a key restructuring instrument.

Independently from a change in ownership structure, the Chinese authorities should take action to solve both the stock and the flow problem. Removing inherited NPLs is important but even more so freeing banks from inherited bad clients; by nature, banking is a relational business and bad relations are hard to break. A key measure to tackle the flow problem is accelerating SOEs' restructuring. Otherwise, the tight links between SOCBs and SOEs are bound to bring new NPLs. In this regard, the government announcement that SOEs will not be bailed out from 2008 onwards is welcome. Besides, financial liberalization will oblige banks to evaluate risk and price it properly, instead of taking the official lending rate as given. In this regard, risk management procedures, still at their infancy in China, need to be improved as fast as possible. This obviously requires capacity building at banks, which can be speeded up through the participation of foreign investors in banks' ownership. A new bankruptcy law –whose approval has been delayed in several instances–, is also needed, to help restore debt-payment capacity among viable firms and recover NPLs from banks and AMCs.

As for the stock problem, the Chinese model, based on one AMC per SOCBs, is probably delaying the resolution of the NPL problem. In fact, in the absence of a monopolistic position, AMCs are obliged to compete offering high recovery values. The fact that their position with large borrowers is not strong probably delays recovery too. Another problem is that the governmental nature of AMCs is not explicit so that they should, at least formally, care for profitability, probably delaying disposal. For the latter, an explicit government guarantee to AMCs would be highly welcome. Finally, fiscal cost considerations should not delay the process: the longer it takes to solve the problem the higher the cost will be. Finally, the transfer of NPLs to solve the stock problem, should be accompanied by enough capital injections to comply with the capital adequacy ratio. This is not only necessary for the soundness of Chinese banks but also to improve its profitability [as shown by García-Herrero, Gavilá and Santabárbara (2005) for the ROAA)]. The current approach based on different restructuring waves, and starting with capital injections, does not induce bank managers to strengthen the assessment of risks when granting credit. The easiest way to improve this situation is to link recapitalization to a change in ownership (i.e., privatization). Another –more difficult– possibility to set stringent rules for provisioning and improving asset quality while forcing a change in corporate governance. Finally, the substitution of NPLs with bonds issued by AMC appears as a good restructuring technique as long as AMCs are solvent or have a clear government guarantee. Otherwise, banks may be facing new problems when these bonds are due, or even before if AMCs cannot recover enough assets to pay for the annual interests of these bonds.

Regarding privatization, only solvent and viable institutions should be privatized. Otherwise, there is a risk that these banks can never be profitable and that shareholder problems are bounced back to the public sector. Not all privatization methods are equally effective in improving corporate governance. While initial public offerings (IPOs) may be politically attractive, widely held ownership is unlikely to produce the desired improvements in operations, management, and controls that a strategic investment by a strong financial institution would deliver. Options to ensure participation by a desirable strategic investor include a sale by tender or an IPO, where a significant percentage is reserved for a pre-qualified investor. The Chinese authorities seem to have followed this path with CCB, which is welcome but more might be needed in the most difficult cases. This would imply the transfer of the control from the state to the acquirer.

For the Chinese case, it is important to note that controlling interest does not necessarily imply majority ownership. The voting rights on the investors' shares, versus those retained by the government, can be structured in such a way as to convey controlling influence to a minority stakeholder, or explicit agreements can be made as part of the contract that the investor will make appointments to key management and board positions. Finally, even if the State retains control of banks, the same level playing field needs to be ensured between private (also foreign) and public banks. This will be tackled later in the suggestions for improved regulation and supervision.

5.3 On financial liberalization

China has taken a very cautious approach to liberalization but it faces pressures to accelerate it from several fronts. First, the international community is calling for exchange rate flexibility, which eventually needs to be accompanied by capital account liberalization[19]. This might bring new opportunities, but also new risks, for the financial system. The major risk that Chinese authorities perceive is capital flight, which would imply a sharp drop in the deposits held at Chinese commercial banks. Second, China has committed under the WTO to finalize the opening up of the banking system to foreign competition by 2006. Although this basically refers to Greenfield investment (which may take long to acquire a large dimension in China's huge market), it is still an important challenge for Chinese relatively inefficient banks.

As for the sequencing of liberalization, China has basically gone by the handbook, starting with macroeconomic stabilization, followed by domestic financial liberalization and leaving capital account liberalization as last step [McKinnon (1982)]. However, in China's case the completion of bank restructuring is needed to profit fully from financial liberalization. We see two reasons for this. First, banks will probably not use correctly the room offered by financial liberalization unless banks' incentive structure changes. In fact, banks are not using the space they now have to increase the lending rate. In addition, the currently "guaranteed" minimum interest rate spread –because of the floor on the lending rate and the ceiling on the deposit rate– contributes to a rather large interest rate margin which could be reduced with full interest rate liberalization, particularly if competition increases. The potential additional fall in profitability would call for an increase in the currently very low capitalization of the Chinese banking system since so as to counteract this trend.[20]

As for the opening-up, there is not doubt that foreign capital can help modernize the Chinese banking system, through better corporate governance and risk management, in addition to fresh capital. To achieve this goal, however, their presence cannot be limited to representative offices or branches focused on niche businesses. They should become a real competitive force in the intermediation of domestic savings. Given the country's huge size, this can only be achieved, in a reasonably short time, by allowing foreign banks to obtain the control of some Chinese financial institutions, as previously proposed.

Finally, a successful opening of the capital account requires a change in the way monetary and exchange rate policies are conducted. Monetary instruments that impose a high cost or administrative constraint on the banks –as is the case with credit or interest rate ceilings or high non-remunerated reserve requirements– need to be substituted by market instruments.

19. Prasad, et al. (2005) argue that exchange rate flexibilization may come first but they acknowledge that it will need to be followed by capital account liberalization.
20. As previously mentioned, García Herrero, Gavilá and Santabarbara (2005) find the equity to asset ratio to be a key determinant of ROAA.

5.4 On regulation and supervision

Although the authorities have moved forward on this front, bolder steps are needed. The main objectives should be: (i) to improve –or at least maintain– asset quality but also solvency; and (ii) to ensure a level playing field across different institutions.

For the former, the current regulation on asset quality and solvency should be enforced to all commercial banks and sanctions applied when necessary. The recent major scandals in some SOCBs are a sign of the need for coercion and sanctioning power, so that the experience will not be repeated. In addition, the regulator should encourage a radical change in the banks' incentive structure, though better corporate governance and reducing government intervention. This is clearly key since, in the current setting, regulators and owners are generally the same. Apart from a change in the ownership structure, the regulator has a role to play by requesting to strengthen the functions of the board of independent directors so that they are clearly charged with fiduciary responsibility for the public funds invested in the bank. Finally, better bank management techniques need to be encouraged as well as a tighter grip on risk management. This should include exchange rate risk, given the country's move towards more exchange rate flexibility and the gradual lifting of foreign exchange controls.

To ensure a level-playing field, banks should have a clear mandate as to what are their duties when operating on a commercial basis. This should include full insulation from political influence and be subject to the same regulatory and supervisory regime. Such mandate should not only include SOCBs but, possibly, credit cooperatives. Policy banks, as development banks, should also have clear rules they should abide with. In addition, Accounting rules in line with international standards are crucial to ensure a level playing field as well as external and internal auditing. Finally, more disclosure, starting with the regular publication of banks balance sheets and income statements.

Other steps towards improving the institutional setting of the banking system need to be taken swiftly, such as a better functioning of the payment system, the creation of a credit register and a limited an explicit deposit insurance system. The recent announcement of a government compensation for individual deposits is welcome but it could be defined better. Finally, a bankruptcy law, which also deals with financial institutions, needs to be established as soon as possible.

All in all, it seems clear that the announcement of a comprehensive, fast and time-bound reform strategy is urgently needed, where the authorities should clarify their long term view of the Chinese financial sector and the steps they will take to achieve it, with precise deadlines. For the reform to be comprehensive, a clear definition of responsibilities for each Chinese agency involved would be highly welcome, as well as the nomination of a single coordinator. As for the speed, the current reform process seems too slow for the immediate challenges that China faces so that it risks being derailed. The strategy should not be that of "growing out of the problem", as could be interpreted from the rapid growth in bank lending. Finally, foreign players should be offered an important role in the process since government intervention is at the origin of the problem and there are not enough private investors in the country having banking experience.

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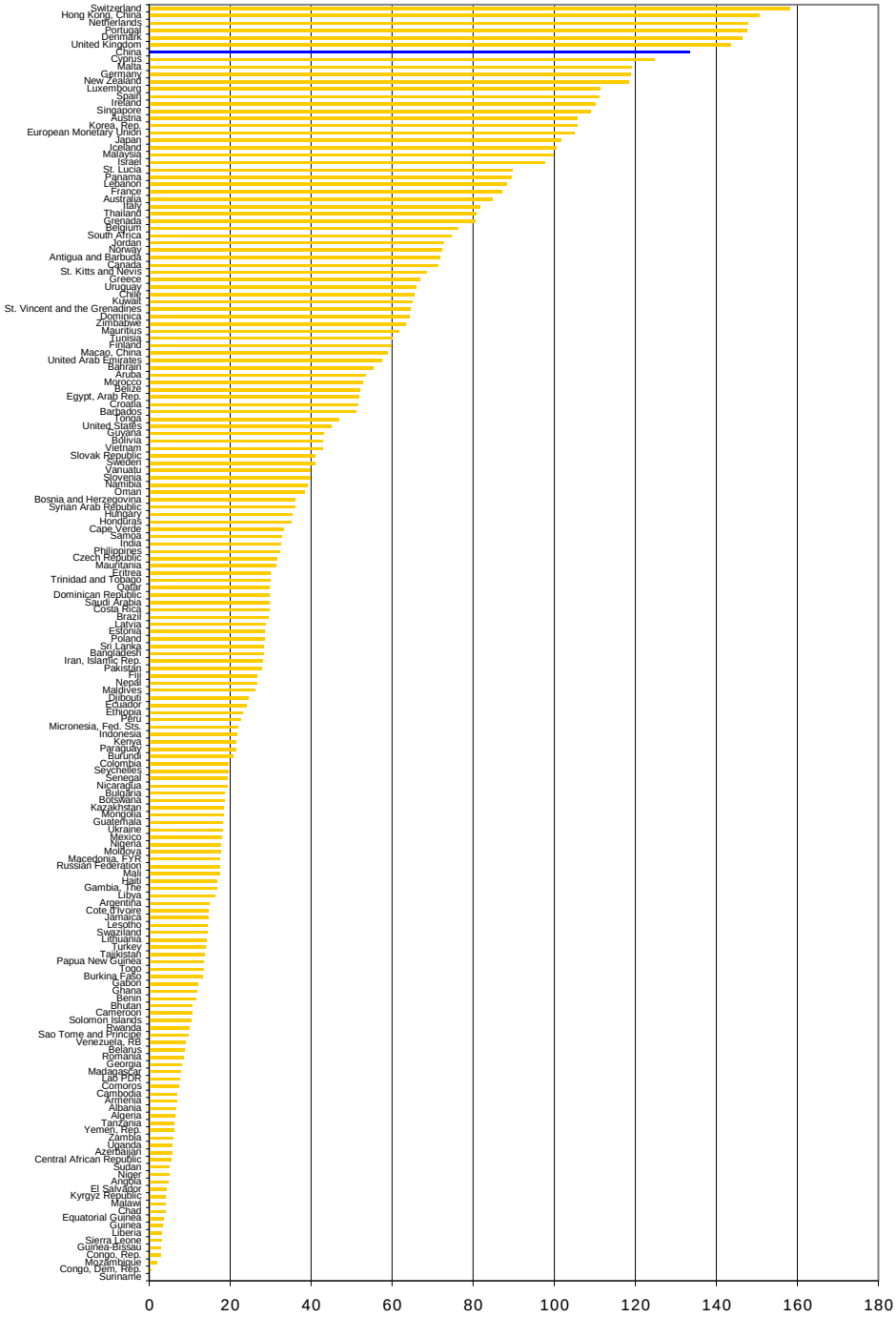
ACRONYMS

ABC	Agricultural Bank of China
AMCs	Asset management companies
BoC	Bank of China
CBRC	China Banking and Regulatory Commission
CCB	China Construction Bank
CCBs	City Commercial Banks
ICB	Industrial and Commercial Bank of China
ITICs	International Trust and Investment Corporation
JSCBs	Joint-Stock Commercial Banks
NPLs	Non-performing Loans
PBC	People's Bank of China
PPP	Purchasing Power Parity
RMB	Renminbi
ROAA	Return on Average Assets
ROAE	Return on Average Equity
SAFE	State Administration of Foreign Exchange
SMEs	Small and Medium Size Enterprises
SOCBs	State-owned Commercial Banks
SOEs	State-owned Enterprises
USD	United States Dollar
WTO	World Trade Organization

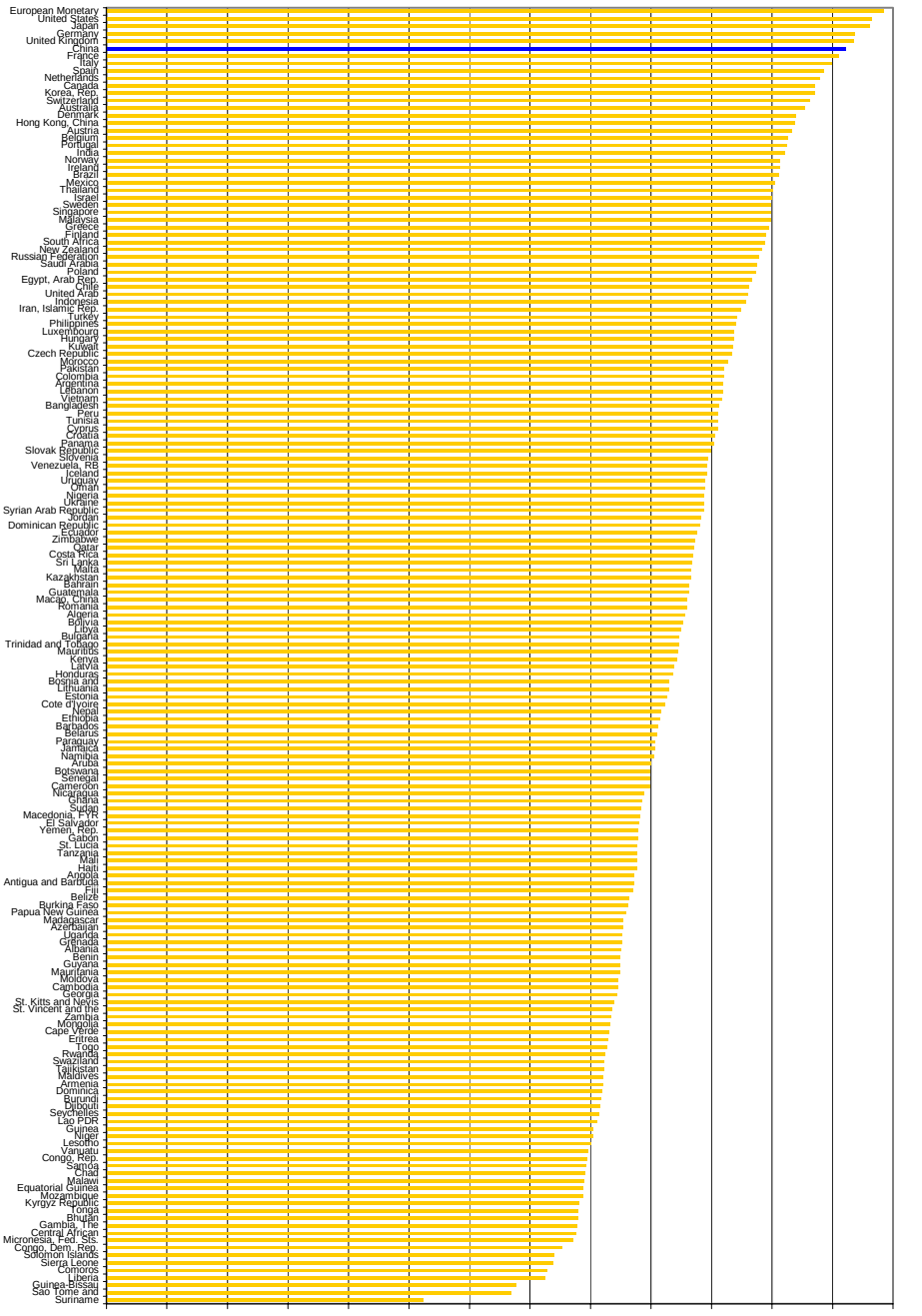
Appendix 1: Graphs and Tables

Graph A-1. International comparison of bank credit to the private sector, as a percentage of GDP



Source: IFS (IMF)

Graph A-2. International comparison of bank credit to the private sector, in USD



Logarithmic scale
Source: IFS (IMF)

Table A – 1. Share on assets by type of institution

	SOCBs	JSCBs	Credit Cooperatives	CCBs	Foreign Funded Banks	Policy Banks	Other Institutions	Total Assets (USD billion)
1993	73.9	4.4	11.4	0.0	0.0	9.9	0.4	695
1994	72.1	5.4	12.9	0.0	0.0	9.2	0.5	596
1995	69.7	6.6	14.3	0.0	0.0	8.8	0.7	770
1996	65.3	7.3	14.1	0.0	0.0	12.4	0.9	944
1997	65.8	7.1	14.2	0.0	0.0	12.0	0.9	1,154
1998	65.1	7.5	13.5	0.0	0.0	13.0	1.0	1,333
1999	64.9	8.1	13.3	0.0	0.0	12.8	1.0	1,489
2000	63.9	9.6	13.1	0.0	0.0	12.3	1.0	1,680
2001	60.5	11.3	14.1	0.0	0.0	12.8	1.3	1,797
2002	57.9	12.8	9.9	4.9	1.2	11.4	1.7	2,598
2003	56.1	14.0	10.1	5.3	1.2	11.5	1.8	3,070
2004	54.6	15.0	10.4	5.4	1.6	11.4	1.5	3,619

Source: CEIC

Table A – 2. Asset Structure of the Banking Sector

(as a percentage of total assets)

	1997	1998	1999	2000	2001	2002	2003
Loans	62,7	62,3	59,9	57,6	57,3	58,8	60,8
State-owned commercial banks	60,7	61,1	57,6	55,9	56,8	57,9	60,3
Other Commercial banks	48,8	48,2	47,0	47,6	53,0	55,0	58,5
Joint Stock Commercial Banks	48,4	50,5	49,9	50,3	53,7	57,0	60,5
Other	49,5	44,6	41,5	42,0	49,5	47,5	50,5
Policy banks	93,2	89,7	92,2	89,2	81,7	93,5	92,1
EU-15	49,2	49,4	48,3	47,9	47,0	46,7	45,2
Other risky assets [1]	11,1	14,7	18,1	22,1	24,6	24,7	23,7
State-owned commercial banks	11,4	15,2	20,3	24,3	25,2	25,9	24,9
Other Commercial banks	12,9	16,3	17,7	19,6	23,8	25,0	22,8
Joint Stock Commercial Banks	15,9	19,2	19,1	20,9	21,9	22,1	20,6
Other	8,0	11,7	15,0	17,0	32,7	36,5	31,6
Policy banks	3,0	6,8	4,9	8,5	16,6	1,7	1,3
EU-15	17,5	18,3	21,2	22,4	23,4	24,1	24,8
Liquid assets	24,2	21,1	20,0	18,3	16,0	14,6	13,7
State-owned commercial banks	25,7	21,6	19,9	17,7	15,9	14,2	13,1
Other Commercial banks	37,1	34,3	33,8	31,3	21,6	18,5	17,4
Joint Stock Commercial Banks	34,4	29,0	29,3	27,3	22,8	19,6	17,6
Other	41,6	42,7	42,4	39,9	15,9	14,5	16,5
Policy banks	3,6	3,2	2,6	1,8	1,5	3,8	5,4
EU-15	32,1	31,1	29,4	28,7	28,6	28,2	29,0
Fixed Assets	1,9	1,8	2,0	2,0	2,0	1,9	1,7
State-owned commercial banks	2,2	2,0	2,1	2,1	2,1	2,0	1,7
Other Commercial banks	1,1	1,2	1,5	1,4	1,6	1,4	1,3
Joint Stock Commercial Banks	1,2	1,3	1,7	1,6	1,5	1,4	1,3
Other	1,0	1,0	1,1	1,2	1,9	1,4	1,4
Policy banks	0,2	0,3	0,3	0,5	0,3	1,0	1,2
EU-15	1,2	1,2	1,1	1,1	1,0	1,0	0,9

Source: Bankscope

1) It includes AMC bonds.

Table A – 3. Liability Structure of the Banking Sector

(as a percentage of total assets)

	1997	1998	1999	2000	2001	2002	2003
Deposits & Short term funding	83,6	82,3	81,0	83,7	83,8	89,0	89,1
State-owned Commercial Banks	89,1	88,8	89,4	90,3	90,9	91,8	92,1
Other Commercial Banks	85,6	86,3	78,0	79,2	80,9	81,8	81,7
Joint Stock Commercial Banks	84,6	86,1	73,7	75,6	79,0	79,7	79,9
Other	87,4	86,6	86,0	86,8	89,7	89,9	88,7
Policy Banks	64,8	50,4	47,9	45,3	5,1	82,6	83,7
EU-15	73,0	73,0	70,9	69,3	69,2	69,5	68,2
Other Funding	5,7	6,3	6,9	5,3	5,7	1,1	1,1
State-owned Commercial Banks	1,2	0,8	0,7	0,6	0,6	0,4	0,4
Other Commercial Banks	1,0	0,3	0,7	0,5	0,7	0,4	0,6
Joint Stock Commercial Banks	1,6	0,5	1,1	0,6	0,6	0,3	0,5
Other	0,1	0,0	0,1	0,2	1,0	0,9	1,2
Policy Banks	27,2	38,3	43,1	46,7	84,8	11,7	12,2
EU-15	13,1	12,3	13,0	13,2	13,4	12,2	13,0
Other (Non-Interest bearing)	6,1	5,4	6,4	5,4	5,4	5,4	5,5
State-owned Commercial Banks	6,5	4,8	4,6	3,8	3,5	3,2	3,1
Other Commercial Banks	6,1	6,4	14,7	14,3	14,2	14,0	13,9
Joint Stock Commercial Banks	8,1	8,1	20,2	19,2	16,5	16,4	16,1
Other	2,9	3,7	4,2	3,9	3,5	4,5	5,5
Policy Banks	3,4	6,6	4,4	3,2	4,1	2,9	1,1
EU-15	9,4	10,0	10,4	11,4	11,4	12,1	12,6
Equity	4,5	6,0	5,7	5,6	5,2	4,5	4,3
State-owned Commercial Banks	3,2	5,6	5,3	5,3	5,0	4,6	4,4
Other Commercial Banks	7,2	7,0	6,6	6,0	4,2	3,8	3,8
Joint Stock Commercial Banks	5,7	5,4	4,9	4,5	3,9	3,6	3,5
Other	9,7	9,6	9,7	9,1	5,9	4,8	4,6
Policy Banks	4,6	4,7	4,6	4,7	6,0	2,8	3,0
EU-15	4,2	4,4	4,4	4,6	4,5	4,6	4,5

Source: Bankscope

Table A – 4. Sources and uses of bank financing

		Source of deposits (percentage)						
	Deposits (USD billion)	Enterprise	Fiscal Deposits	Govt. Agency	Household Saving Deposits	Rural Deposits	Trust Deposits	Other
1993	518	29	2	2	51	4	0	12
1994	466	33	2	2	53	3	0	7
1995	649	32	2	2	55	2	0	7
1996	823	33	2	1	56	2	0	6
1997	990	35	2	1	56	2	3	1
1998	1156	34	2	1	56	2	3	2
1999	1314	34	2	2	55	2	3	3
2000	1495	36	3	2	52	2	2	3
2001	1735	36	2	2	51	2	2	4
2002	2063	35	2	3	51	2	1	5
2003	2511	35	2	3	50	2	1	6
2004	2905	35	3	3	50	2	1	6

		Use of loans (percentage)						
	Total Loans (USD billion)	Short Term (ST)	ST: Industrial	ST: Commercial	ST: Construction	ST: Agricultural	Medium to Long Term	Other
1993	576	74	22	28	3	15	16	11
1994	470	67	21	25	3	11	20	13
1995	609	59	20	25	2	6	20	21
1996	734	66	20	24	3	12	20	14
1997	900	74	22	25	2	4	21	2
1998	1045	70	21	23	2	5	24	3
1999	1132	68	19	21	2	5	26	4
2000	1200	66	17	18	2	5	28	3
2001	1357	60	17	17	2	5	35	3
2002	1584	57	15	14	2	5	37	5
2003	1919	53	14	11	2	5	41	6
2004	2142	49	13	10	2	6	43	7

Source: CEIC

Table A – 5. Selected Indicators for the performance

	1997	1998	1999	2000	2001	2002	2003
Return on average assets (ROAA) (%)	0.43	0.22	0.20	0.26	0.23	0.22	0.14
State-owned commercial banks	0.19	0.09	0.13	0.22	0.16	0.18	0.08
Other Commercial banks	1.05	0.75	0.49	0.41	0.41	0.37	0.32
Joint Stock Commercial Banks	0.78	0.58	0.45	0.40	0.39	0.34	0.29
Other	1.50	1.03	0.57	0.43	0.46	0.51	0.47
Policy banks	-0.12	0.07	0.06	0.14	0.26	0.01	0.03
Return on average equity (ROAE) (%)	9.39	4.19	3.48	4.59	4.21	4.48	3.05
State-owned commercial banks	5.94	2.08	2.35	4.07	3.16	3.78	1.73
Other Commercial banks	14.61	10.55	7.22	6.49	8.10	9.33	8.56
Joint Stock Commercial Banks	13.76	10.47	8.69	8.42	9.50	9.17	8.07
Other	15.42	10.62	5.86	4.54	5.86	9.81	10.00
Policy banks	-2.68	1.40	1.21	2.97	4.99	0.23	1.00
Net interest margin (%)	2.03	2.07	1.90	2.22	1.93	1.95	2.03
State-owned commercial banks	2.40	2.47	2.07	2.35	1.98	2.02	2.11
Other Commercial banks	2.49	2.50	2.25	2.24	2.10	2.18	2.19
Joint Stock Commercial Banks	2.38	2.57	2.20	2.30	2.32	2.21	2.27
Other	2.68	2.40	2.32	2.14	1.43	2.04	1.89
Policy banks	-0.06	0.02	0.81	1.63	1.47	1.01	1.21
Cost to Income Ratio (%)	54.51	65.40	62.22	56.61	54.51	55.52	51.68
State-owned commercial banks	49.31	66.33	59.16	56.18	55.52	51.76	47.87
Other Commercial banks	49.56	59.96	64.07	59.80	51.17	50.92	45.67
Joint Stock Commercial Banks	56.05	63.13	55.33	52.24	50.48	50.64	44.71
Other	38.61	54.47	77.17	75.20	54.47	52.04	49.52
Policy banks	65.94	34.25	48.49	23.47	6.23	64.93	67.22
Equity / Total Assets (%)	4.54	6.03	5.72	5.56	5.16	4.54	4.34
State-owned commercial banks	3.15	5.61	5.28	5.32	5.04	4.59	4.38
Other Commercial banks	7.20	7.01	6.60	5.99	4.22	3.81	3.76
Joint Stock Commercial Banks	5.68	5.36	4.95	4.53	3.86	3.56	3.55
Other	9.72	9.63	9.70	9.07	5.91	4.78	4.57
Policy banks	4.60	4.73	4.59	4.72	5.98	2.81	2.95
Capital Funds / Liabilities (%)	4.76	6.41	6.07	5.89	5.44	4.76	4.55
State-owned commercial banks	3.26	5.94	5.57	5.62	5.31	4.81	4.58
Other Commercial banks	7.76	7.54	7.07	6.37	4.41	3.96	3.97
Joint Stock Commercial Banks	6.02	5.66	5.20	4.75	4.01	3.69	3.77
Other	10.76	10.66	10.75	9.97	6.28	5.02	4.79
Policy banks	4.82	4.97	4.81	4.96	6.36	2.90	3.04
Loan Loss Reserve / Gross Loans (%)	1.03	1.26	1.55	1.46	1.81	1.81	3.30
State-owned commercial banks	1.00	1.12	1.52	1.24	1.66	1.82	3.91
Other Commercial banks	1.83	2.43	2.99	3.82	2.93	2.32	2.08
Joint Stock Commercial Banks	1.05	1.63	2.23	3.94	3.35	2.60	2.24
Other	3.06	3.84	4.69	3.52	0.80	1.01	1.32
Policy banks	0.73	1.06	0.79	0.73	1.64	1.02	1.01
Loan Loss Provisions (USD millions)	2,197	2,957	3,662	6,971	10,277	10,379	14,061
State-owned commercial banks	2,109	2,409	3,203	5,565	7,989	8,798	11,025
Other Commercial banks	74	113	371	756	1,008	1,582	3,036
Joint Stock Commercial Banks	74	113	355	715	906	1,229	2,603
Other	0	0	15	41	102	353	433
Policy banks	0	436	89	650	1,281	0	0

Source: Bankscope

Table A – 6. Income and Expenditure Structure of the Banking Sector

(as a percentage of total income and expenditure respectively)

	1997	1998	1999	2000	2001	2002	2003
Interest income	90.2	91.2	90.4	91.9	90.7	87.0	87.0
State-owned commercial banks	96.4	96.7	95.1	95.3	93.9	91.3	91.2
Other Commercial banks	85.4	89.4	88.8	90.6	91.6	93.0	93.0
Joint Stock Commercial Banks	81.9	86.8	89.0	90.4	91.7	94.5	94.7
Other	90.1	92.4	88.4	90.8	90.9	87.6	87.1
Policy banks	88.2	85.8	95.4	98.4	97.7	97.5	97.5
Commission Income	2.4	2.5	4.2	4.2	4.3	5.0	5.2
State-owned commercial banks	2.5	2.8	3.6	4.2	4.7	5.8	6.1
Other Commercial banks	4.5	3.6	3.9	4.2	3.7	3.9	4.1
Joint Stock Commercial Banks	2.5	1.9	2.5	3.1	4.1	4.3	4.5
Other	7.2	5.5	5.7	5.7	2.4	2.5	2.6
Policy banks	0.3	0.7	4.5	1.3	1.7	2.4	2.4
Other Income	7.4	6.3	5.4	3.9	5.1	8.0	7.8
State-owned commercial banks	1.1	0.5	1.3	0.6	1.4	2.9	2.7
Other Commercial banks	10.2	6.9	7.3	5.2	4.7	3.1	2.9
Joint Stock Commercial Banks	15.7	11.2	8.4	6.4	4.2	1.3	0.8
Other	2.6	2.1	5.9	3.5	6.8	9.9	10.3
Policy banks	11.5	13.4	0.1	0.2	0.6	0.0	0.1
Interest Expenditure	75.9	70.8	65.7	63.4	54.3	45.4	42.0
State-owned commercial banks	76.4	68.6	64.9	64.4	54.5	46.0	41.9
Other Commercial banks	70.7	68.5	61.8	59.4	54.3	48.5	47.5
Joint Stock Commercial Banks	64.4	59.2	59.8	55.0	53.3	47.8	45.3
Other	79.8	78.8	64.0	65.3	58.6	51.2	55.3
Policy banks	92.2	91.2	89.3	81.1	70.0	78.2	73.9
Personnel Expenditure	0.9	1.1	1.7	3.0	4.1	8.2	8.6
State-owned commercial banks	1.5	1.6	2.5	3.9	4.8	10.4	11.1
Other Commercial banks	0.1	0.2	0.7	0.9	3.8	4.0	4.6
Joint Stock Commercial Banks	0.2	0.4	0.7	1.6	4.7	5.2	5.9
Other	-	-	-	-	-	-	-
Policy banks	-	-	-	-	-	-	-
Other Expenditure (1)	23.2	28.2	32.6	33.6	41.5	46.3	49.4
State-owned commercial banks	22.1	29.8	32.6	31.7	40.6	43.6	46.9
Other Commercial banks	29.1	31.3	37.5	39.7	41.9	47.4	47.9
Joint Stock Commercial Banks	35.4	40.4	39.4	43.4	42.0	47.1	48.8
Other	20.2	21.2	36.0	34.7	41.4	48.8	44.7
Policy banks	7.8	8.8	10.6	18.7	29.7	21.8	26.1

(1) Include personnel expenditures if it is not reported before.

Source: Bankscope

Table A – 7. NPL ratio in each SOCB

(based on the Five-Category Classification)

	2000	2001	2002	2003	2004
Agricultural Bank of China	-	42,1	36,6	30,8	26,8
Bank of China	26,5	26,7	23,6	16,3	5,5
China Construction Bank	19,9	19,0	15,1	8,3	3,1
Industrial & Commercial Bank of China	34,4	29,8	25,7	21,5	19,5

Source: Bankscope

Table A – 8. Interest rate liberalization process

1. Liberalization of inter-bank lending rates	
1990	Pilot liberalization of inter-bank lending market and rates
1996	Creation of unified inter-bank market
1996	Abolish the upper limit of interbank lending rates
2. Liberalization of bond market interest rates	
1996	Market based issuance of government bonds on pilot markets (stock markets)
1997	Utilization of the inter-bank market to deal in inter-bank bond repo transactions. Liberalization of the bond repo interest rates
1998	Market-based issuance of financial bonds by the policy banks
1999	Market-based issuance of government bonds
3. Market-based reform of lending and deposit rates	
3.1. Foreign currency rates	
3. 1. 1. Loans	
1996	Introduction of foreign currency business in the commercial banks
2000	Liberalization of lending rates
3. 1. 2. Deposits	
2000	Liberalization of over 3m USD deposit rates
2002	Liberalization of small deposit rates of residents in foreign financial institutions
2003	Liberalization of deposit rates in GBP, FRF, CHF, CAD.
2003	Lower limit of deposit rates removed
2004	Liberalization of small deposits rates with maturity above one year.
3. 2. RMB rates	
3. 2. 1. Loans	
1987	Surcharge until 20% on reference rates on loans (working capital)
1996	The band changes to +-10% around reference rates
1998	Increase of upper limit to 20% (RCCs 50%)
1999	Increase of upper limit to 30% (RCCs and large enterprises 10%)
2003	Increase of upper limit to pilot RCCs to 100%
2004	Increase of upper limit to 70% and to RCCs to 100%. Lower limit remain at 90%
2004	Liberalization of upper limit of RMB lending rates (excluding UCCs and RCCs, that increase until 130% above reference rates)
3. 2. 2. Deposits	
1999	Negotiation on rates on over 30m RMB deposits with maturity above 5 years for insurance companies
2002	Same scheme for Social Security Fund
2003	Same scheme for China Postal Saving and Remittance Bureau
2004	All kind deposit rates can adjust downward

Source: PBC (2005)

Table A – 9. Foreign bank acquisitions

Chinese bank	Assets in 2003 (million of USD)	Share on assets in 2003 (% of bank system assets)	Foreign bank	Date of the agreement (or publication)	Stake acquired (%)	Observations
China Everbright Bank	47.63	1.4	Asian Development Bank (ADB)	oct-96	3.0	
Nanjing Commercial Bank	3.6	0.1	International Finance Corporation (IFC)	nov-01	15.0	
Bank of Shangai	23.4	0.7	Hong Kong and Shanghai Banking Corp (HSBC)	dic-01	8.0	Acquisition of 8%. HSBC, IFC and other foreign investors maintain a share of 18%
Shangai Pudong Development Bank	44.8	1.3	Citigroup	ago-02	4.6	Increase its share to 5% in November 2003
Xi'an Commercial Bank	3.1	0.1	IFC and Royal Bank of Canada (RBC)	sep-02	24.9	IFC acquires 12,5% and RBC buy a 12,4% stake. First operation in the north-east part of China
Nanchong Commercial Bank	1.5	0.4	DEG, una filial de KFW	ene-03	n.a.	First acquisition in the south east of China
Qingdao International Bank	0.0	0.0	Hana Bank	oct-03	50.0	Acquisition of 50% stake in exchange of 16,1 millions of USD. Foreign bank as the major shareholder
China Minsheng Banking Corporation	43.6	1.3	IFC	nov-03	1.6	
Fujian Industrial Bank Co. Ltd	1.5	0.0	Hang Seng Bank, IFC, The Government of Singapore Investment Corporation	dic-03	25.0	
Ping An Bank	0.1	n.a.	HSBC, Ping An of China	mar-04	n.a.	HSBC y Ping An bought Fujian Asian Bank and founded Ping An Bank. It is planned to convert it into a Urban Commercial Bank by 2007
Shenzen Development Bank	22.9	0.7	Newbridge Asia AIV III, LP	may-04	18.0	
Bank of Communications	114.8	3.4	HSBC	ago-04	20.0	Strategic investor. HSBC will pay 1.7 billions of USD for a stake of 20%
Industrial Bank	31.4	0.9	Hang Seng Bank (HSBC), Government of Singapore and IFC	mar-04	25.0	Hang Seng Bank acquires 15,98%, Government of Singapore 5% through Tetrad Investment Pte Ltd. and IFC 4%.
Jinan City Commercial Bank	2.4	0.1	Commonwealth Bank of Australia	nov-04	11.0	
Bohai Bank	n.a.	n.a.	Standard Chartered	nov-04	20.0	
China Construction Bank	429.3	13.4	Bank of America	jun-05	9.0	Acquisition of 9% for USD 2.5 billions. The new owner will get a seat on the CCB board.

n.a.: not available
Source: own calculations from Financial Times, Bankscope, He & Fan (2004) and CBRC.

Table A – 10. Current situation on Financial Openness

Area	Type	Description
Direct Investment and real state transactions	Inflows	No restrictions for non-residents (and also for profits' repatriation and investment liquidation) beyond the regional and sectoral limits
	Outflows	Requires the authorization of the SAFE, except some kind projects pre-authorized by the State Council
Stocks and bonds	Inflows	Non-residents only can only purchase B shares (nominated in RMB) but the QFII can buy A shares (for residents) with limitations
	Outflows	Only authorized resident financial institutions by the SAFE can purchase shares abroad. Issuance abroad or in foreign currency requires an administrative approbation.
Money market instruments	Inflows	Not allowed, neither purchases or issuances
	Outflows	Only resident financial institutions authorized by the SAFE can purchase money market instruments abroad. Issuance abroad or in foreign currency requires an administrative approbation.
Credit operations	Inflows	In general, only for financial institutions, enterprises authorized and foreign funded enterpries can borrow. Nonethelless, financing under 3 moths of maturity is not subject to limitations.
	Outflows	Only financial institution after the analysis of the operation by the SAFE. It is allowed, with limitations, the advance repayment of the loans in foreign currency.
Other financial instruments	Inflows	Not allowed or allowed with strong requirements
	Outflows	Either purchases or issuance are subject to prior approbation
Deposits operations	Inflows	No restrictions
	Outflows	Requires the approbation of the SAFE

Table A – 11. Steps in Financial Account Liberalization

Date	Objective	Area of reform	Description
2004	Limit RMB convertibility	Capital inflows	Limited convertibility of RMB for foreign banks FDI can only be conveted to RMB upon proof of domestic payment
2004	Portfolio Investment	Capital outflows	The national Security Fund and domestic insurance firms were approved to invest part of this portfolios
2004	QFII	Capital inflows	Soften the remaining restrictions
2002	QFII	Capital inflows	Qualified foreign Institutional investors may invest in A shares (for residents, in RMB) with some restrictions (maximum of investment, maximum share in a single company, size of the investor among others)
2001	FDI	Capital outflows	Pre-authorised investment overseas in strategic projects that entail importing materials of China or foreign aid projects.
2001	Credit operations	Capital outflows	Lifting restriction on advance repayments of loans in foreign currency
2001	Stock market	Capital outflows	Domestic investors are allowed to invest in B shares (for non-residents) with foreign deposits
1998	Bond market	Capital outflows	Partial authorization to issue bond in foreign currency
1997	Announcement of Financial Account liberalization by 2000	Capital inflows and outflows	

Table A – 12. Estimated government cost of recapitalization of ICBC and ABC

SOCB	Actual figures	Recapitalization needs[1]
Industrial & Commercial Bank of China		
NPL	86,05[2]	63,45[3]
NPL/LOANS	19,47%	
PROVISIONS	12	0,38[4]
PROVISIONS/NPL	13,95%	
EQUITY	29,95[5]	10,89
EQUITY/ASSETS	4,40%	
Total		74,72
Agricultural Bank of China		
NPL	79,81[2]	63,02[3]
NPL/LOANS	26,82%	
PROVISIONS	4	4,33[4]
PROVISIONS/NPL	4,80%	
EQUITY	16,66	8,27
EQUITY/ASSETS	4,01%	
Total		75,62

Author's own calculations

[1] Recapitalization needs are calculated as the difference between the actual levels of NPLs, provisions and equity, and the necessary levels to achieve the objective values for the three ratios (NPL/loans, provisions/NPL and equity/assets) established by the CBRC for BOC and CCB at 2005 (4%, 70% and 6%, respectively).

[2] NPLs are obtained from the bank's ratio NPL/loans published by CBRC at 2004 and bank's total loans at end 2003 considering a loans' estimated growth rate of 10% in 2004.

[3] We assume that the AMCs recover the same amount of NPLs as now (7.2% in cash value). In this setting, the amount recover by AMCs reduces the cost of recapitalization for the Chinese government.

[4] We assume that the banks modify their NPLs before their provisions so the necessary level of provisions is calculated over the objective NPLs.

[5] It includes the government's capital injection of USD 15 billion in 2005.

Table A – 13. Estimated recapitalization needs for JSCBs

JSCB	NPL[1]	PROVISONS[2]	EQUITY[3]	TOTAL
Bank of Communications[4]	5,71	0,47	1,97	8,15 (2,15)
CITIC Industrial Bank	1,27	0,53	1,01	2,81
China Everbright Bank	1,60	-0,72	1,25	2,14
China Merchants Bank	-0,32	-0,10	1,55	1,14
China Minsheng Bank	-0,66	0,26	1,44	1,05
Hua Xia Bank	0,04	0,00	1,70	1,74
Shanghai Pudong Development Bank	-0,46	-0,18	1,23	0,59
Shenzhen Development Bank	0,76	-0,11	0,77	1,42
Industrial Bank	-0,29	0,26	1,04	1,01
Guangdong Development Bank	3,54	0,28	1,48	5,30
Total				**25,33 (19,33)**

Author's own calculations

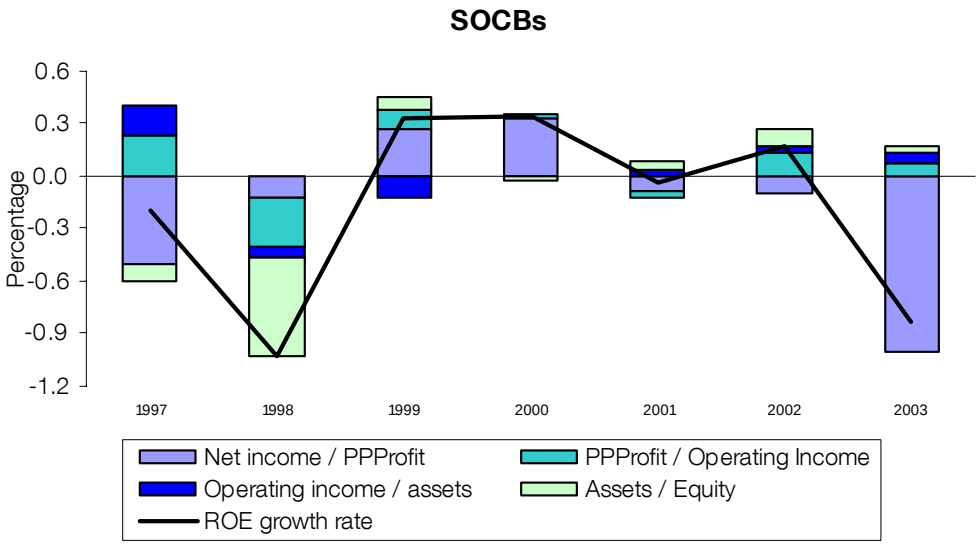
[1] Recapitalization needs are calculated as the difference between the actual level of NPLs and the necessary level to achieve the objective value of 4% for the ratio NPL/loans established by the CBRC for BOC and CCB at 2005.

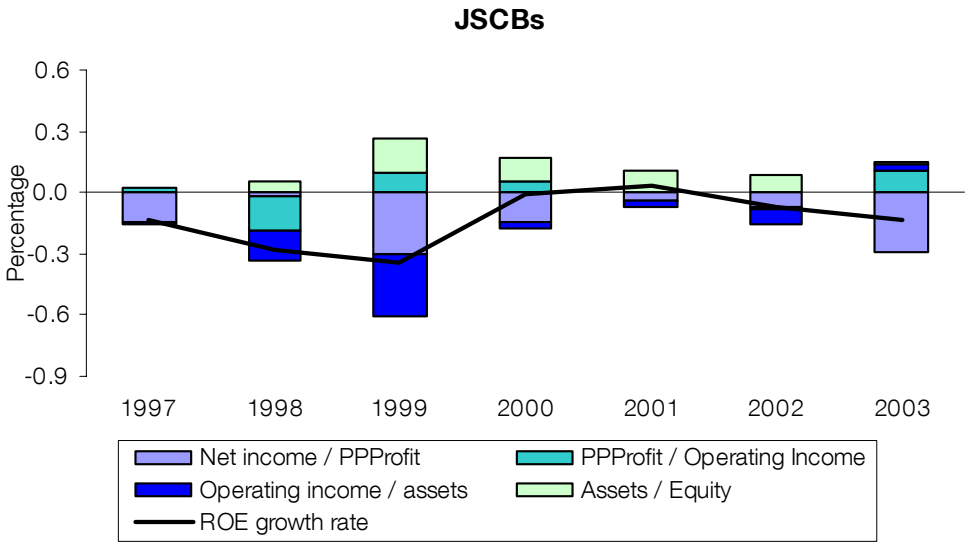
[2] Recapitalization needs are calculated as the difference between the actual level of provisions and the necessary level to achieve the objective value of 70% for the ratio provisions/NPL established by the CBRC for BOC and CCB at 2005. We assume that the banks modify their NPLs before their provisions so the necessary level of provisions is calculated over the objective NPLs.

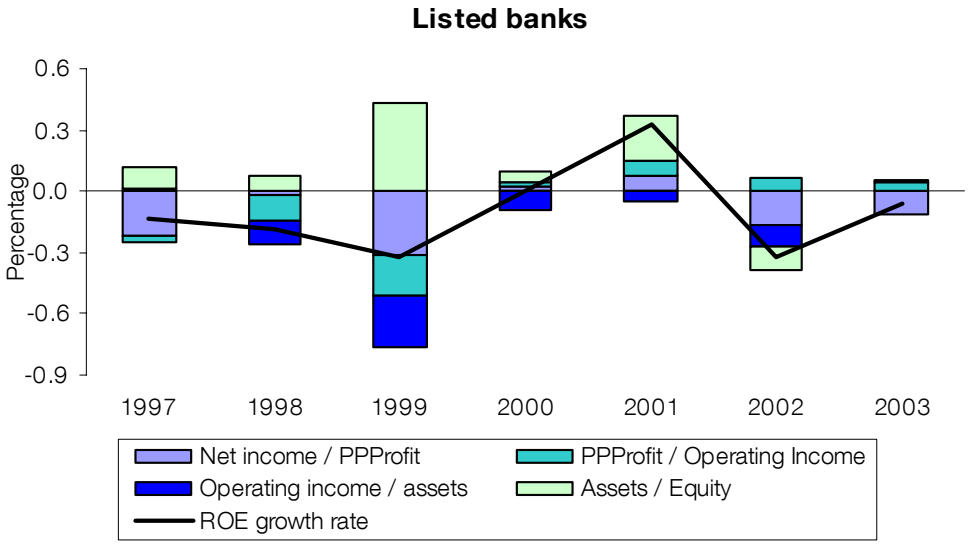
[3] Recapitalization needs are calculated as the difference between the actual level of equity and the necessary level to achieve the objective value of 6% for the ratio equity/assets established by the CBRC for BOC and CCB at 2005.

[4] This bank has sold 6 billion USD to an AMC in 2004. The calculations have been done without taking into account this fact so if we substract the 6 billion USD, recapitalization needs for Bank of Communications and total JSCBs are the values in brackets (2,15 and 19,33 billion USD, respectively).

- **Graph A-3. Contribution to the ROAE growth rate**







Appendix 2. Institutional setting of the Chinese banking system[21]

Until 1979, China had a monobank financial system, as other centrally planned economies. The People's Bank of China (PBC) was the only bank and, therefore, in charge of a large number of issues, such as the conduct of monetary policy, exchange policy, foreign reserve management, deposit-taking, commercial lending activities, and the financing of development projects. The introduction of a two-tier banking system in 1979 was the first milestone in the modernization of the Chinese financial system.

Today China's banking sector counts with two **regulatory institutions**, the central bank (PBC) and the China Banking and Regulatory Commission (CBRC), both ultimately overseen by the State Council (the cabinet), and the rest of the financial system.

The **PBC** is currently in charge of the monetary policy and the liquidity of the financial system. It aims at promoting economic growth and price stability. The PBC manages the interest rate bands for loans and deposits, since interest rates are not fully liberalized yet, the reserve requirements and other instruments affecting banks' liquidity. The PBC also monitors and regulates the credit expansion of a large share of the banking system.

The **CBRC** was established in April 2003 to take over the regulatory and supervisory functions of the banking sector so that the PBC could concentrate on monetary policy matters. Its objectives include protecting consumers and depositors, maintaining the stability in the banking system, enhancing banks competitiveness, encouraging competition, educating the public on the role of finance and eradicating financial crime. To this end, it focuses on the strength of financial institutions, capital adequacy issues, and the restructuring of the banking sector.

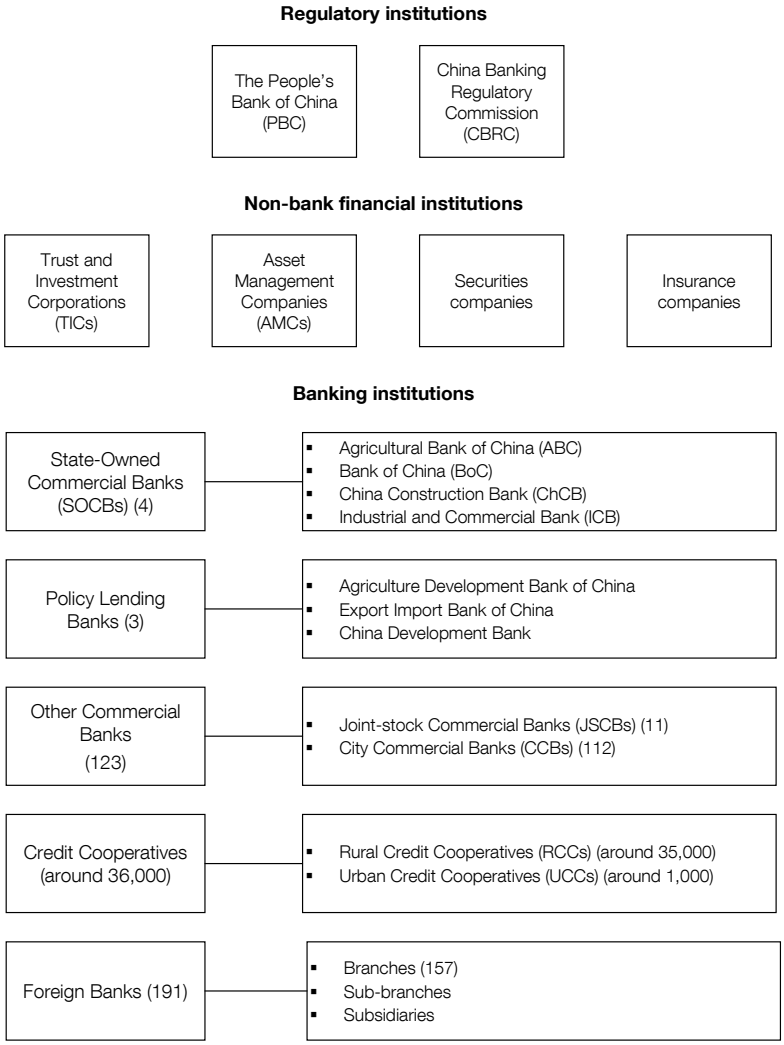
There is also a number of **non-bank financial** institutions in the Chinese banking system. The main ones are the **Trust and Investment Corporations**, created in the 1980s to support the development of the private sector and to provide financing outside the credit quotas imposed to commercial banks. Some TICs act as the investment instrument of local or provincial governments. Some others are intermediaries of international funds (through bond issues or syndicated medium and long term loans) to finance local companies and infrastructure and construction projects. Other important non-bank financial institutions are **Asset Management Companies** (AMCs), established in 1999 to receive the NPLs from the state-owned commercial banks (SOCBs) and recover them through different asset resolution techniques. **Securities companies** have played an important role in the development of the stock exchanges since the 1990s. Their ownership has become more diversified with an increasing participation of the private sector. **Insurance companies**, in turn, are basically in state hands although most of the newly created companies are joint-stock ones and have shifted their focus from market share to economic return. Since China's World Trade Organization (WTO) entry, foreign companies have expressed great interest in the Chinese insurance sector.

The core of the Chinese financial system, the **banking system,** includes four large SOCBs, three policy lending banks and a large number of other commercial banks, credit cooperatives and financial institutions. Among the commercial banks, there are

21. Drawn from García Herrero and Santabárbara (2004).

eleven joint-stock commercial banks (JSCBs), which were initially created to provide specialized product niches but now offer a full range of financial services. At the local level, there are more than 110 city commercial banks (CCBs), 1,000 urban credit cooperatives (UCCs), and 35,000 rural credit cooperatives (RCCs) providing basic banking services.

Chart A-2-1. Structure of the Chinese financial system



The **four SOCBs**[22], the Agricultural Bank of China, the Bank of China, the China Construction Bank, and the Industrial and Commercial Bank of China, were established in the 1980s. They were assigned sector policy objectives, previously in the hands of the PBC with the monobank system. In 1994, with the creation of the policy lending banks, their responsibilities were restricted to commercial purposes. Although their assets have fallen in the last two decades (from 72% of total assets in the banking system in 1994 to 55% at the end of 2004), they are still very large. In fact, they are among the biggest banks in the world,

22. In the process of establishing a two-tier banking system, the government in 1979 first removed the monopolistic position of the PBC by establishing the Agricultural Bank of China, the Bank of China and the China Construction Bank. The Agricultural Bank of China's objective was to foster rural banking business and to take the supervisory authority of a network of rural credit cooperatives that had been providing small-scale rural banking. The Bank of China was assigned foreign currency transactions, while the China Construction Bank focused on the construction sector. The government completed a two-tier banking system by removing commercial banking activities from the PBC and transferring them to the Industrial and Commercial Bank of China, the fourth specialized bank, established in 1984.

with total assets in above of USD 2,000 billion and an extensive branch network (with a total of 42,000 offices) and over 700,000 employees at the end of 2002.

Three **policy lending banks** were created in 1994 to carry out the development policies previously assigned to the SOCBs and hold about 10% of total bank assets. These are the Agricultural Development Bank, the China Development Bank, and the Export-Import Bank of China. Their main objectives are agricultural development, national infrastructure and foreign trade, respectively, with special attention to the poorer western and central regions. Policy lending banks fund themselves through central bank loans, government deposits and the issuance of government-guaranteed deposits held by commercial banks. They also lend extensively to the government. Even more than in the case of SOCBs, profitability is only a residual objective for their managers.

There are a number of **other commercial banks** in the Chinese banking system, with a diverse ownership structure and geographical scope. Part of them has been used as an experiment for the liberalization process of the financial system and others are specialized in some market niches. There are two main groups: joint-stock commercial banks and city commercial banks:

Joint-stock commercial banks (JSBCs) are partially owned by local governments and SOEs, and sometimes by the private sector. There are currently eleven banks –five of which listed on local stock market– and account for 15% of total bank assets. The biggest ones are Bank of Communications, China Minsheng Bank[23], China Everbright Bank, China Merchants Bank, Shanghai Pudong Development Bank and Shenzen Development Bank. The JSCBs finance small SOEs and firms with partial private ownership, including small and medium size enterprises (SMEs). They maintain much smaller branch networks than SOCBs, typically confined to the region of origin or to the fast growing coastal area, although they are generally allowed to operate at the national level. These banks are the most market oriented, with better governance and management and have experienced the fastest expansion in the last few years.

Since the mid-1990s, **city commercial banks** (CCBs) have been created by restructuring and consolidating UCCs. There are currently 112, accounting for about 5% of total assets in 2004. Their capital is in the hands of urban enterprises and local governments. They are not allowed to operate at the national or regional scale unlike the JSCBs, which is their major competitive disadvantage. Finally, CCBs lend to small and medium size enterprises, collective and local residents in their municipalities.

Rural and urban credit cooperatives were established in the 1980s as a mechanism to diversify the financial system and to finance projects in areas where resources were scarce. They typically attract deposits from rural areas or small towns and provide credit to small and medium-sized enterprises or peasants, a good part of which is subsidized. In fact, their lending policies are subject to the control of the local public authorities As of June 2003, there were about 35,000 RCCs, providing 80% of rural finance, and 1,000 UCCs. Their share of assets was 10.4% as of end-2004, marking a steady reduction since 1995 (with 14.3% of total bank assets). This is mainly due to their inability to expand lending even if their deposits continue to expand. Nowadays, rural credit cooperatives are more important and numerous than urban ones, after the consolidation of the latter into city commercial

23. China Minsheng Bank is the only one fully privately owned. It focuses on lending to the private sector, including joint ventures with foreign partners.

banks. Finally, RCCs are the worst performing financial institutions in China, with very poor governance and the highest NPL ratios.

Foreign banks play a very limited role in the Chinese banking system. As of September 2003, there were 191 licensed foreign banking institutions, among which 157 are branches, 11 sub-branches and 15 subsidiaries incorporated locally with 8 branches[24]. They hold 0.3% of the local currency lending market and around 13% in the foreign currency lending market; all in all about 1.5% of total bank assets.

24. Ping (2003).

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