WHERE IS THE CHINESE BANKING SYSTEM GOING WITH THE ONGOING REFORM?

2004

Alicia García-Herrero
Daniel Santabárbara

Documentos Ocasionales
nº 0406

BANCO DE **ESPAÑA**

WHERE IS THE CHINESE BANKING SYSTEM GOING WITH THE ONGOING REFORM?

WHERE IS THE CHINESE BANKING SYSTEM GOING WITH THE ONGOING REFORM?

Alicia García-Herrero

Daniel Santabárbara

BANCO DE ESPAÑA

(*) Both authors are affiliated with Banco de España. The opinions expressed are the authors' and not necessarily those of Banco de España. We would like to thank Sayuri Shirai and Bruno Carrasco for their clarifications on data and other issues. We are also grateful to Lucía Cuadro and the participants in the Banco de España seminar for their suggestions. Authors may be contacted at alicia.garcia-herrero@bde.es and daniel.santabarbara@bde.es. Remaining errors are our own.

Documentos Ocasionales. N.º 0406
2004

ISSN: 1696-2222 (print)
ISSN: 1696-2230 (on line)
Depósito legal: M-42337-2004
Imprenta del Banco de España

Abstract

The Chinese banking system, characterized by a large proportion of state-ownership and low capitalization, has started a reform process based on three main pillars: (i) bank restructuring, with 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 flexibilizaton of price and quantity controls and the opening-up to foreign competition; and (iii) strengthened financial regulation and supervision, as well as better risk management, corporate governance, disclosure, and the introduction of international standards. Although it is still early to judge on the success of the reform, the available evidence does not offer a very optimistic outlook. The solvency of Chinese banks is still very weak, with a stubbornly high level of non-performing loans, and profitability is poor. Given the commitment of the Chinese authorities to fully open up its banking system to foreign competition by 2006, it seems crucial that financial reform accelerates so that the Chinese banking system can compete at the international level. This is particularly the case for the reduction of NPLs and bank recapitalization as well as for a furthered improvement of bank regulation and supervision.

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

JEL classification: E44, E66, G2, G21

ACRONYMS

AMCs	Asset management companies
CBRC	China Banking and Regulatory Commission
CCBs	City commercial banks
ITICs	International trust and investment corporation
JSCBs	Joint-stock commercial bank
NPLs	Non-performing loans
PBC	People's Bank of China
PPP	Purchasing Power Parity
RCCs	Rural credit cooperatives
ROAA	Return on average assets
ROAE	Return on average equity
SAFE	State Administration of Foreign Exchange
SOCBs	State-owned commercial banks
SOEs	State-owned enterprises
SMEs	Small and medium size enterprises
TICs	Trust and investment corporations
UCCs	Urban credit cooperatives
WTO	World Trade Organization
USD	United States Dollar

TABLE OF CONTENTS

LIST OF TABLES

Main text

Appendix

LIST OF GRAPHS

Main text:

Appendix:

1 Introduction

The Chinese authorities are in the process of transforming a centrally-planned economy into a market based one. Given that China has one fourth of the world's population and 12.5% of its GDP measured in terms of purchasing power parity (PPP) (Graph A-1 and Graph A-2), such process is bound to have consequences at the global level. The authorities' efforts go in three main directions: macroeconomic stabilization, restructuring of the real and financial sectors, and liberalizing the financial system.

Macroeconomic stabilization has been very successful since inflation has been brought down to single digits in the second half of the 1990s while maintaining sustained economic growth of around 8% on average (Graph A-3). This has increased income per capita from about USD 700 in PPP terms in 1980 to USD 4,000 in 2002 (Graph A-1). One of the main engines of China's fast growth is its competitiveness, with very low labour costs, and a depreciating exchange rate until 1995 and constant thereafter (Graph A-4). This has contributed to the accumulation of large current account surpluses (Graph A-5). Gross capital formation and exports have also increased their contribution to economic growth, as well as private consumption (Graph A-6).

The restructuring of the real and financial sectors and the liberalization of the financial system have proceeded relatively slowly notwithstanding the reform efforts. This has not inhibited the size of the financial system increasing very fast, at average growth rates of 20% a year for broad money and bank domestic credit (Graph A-7), and reaching 190% of GDP and nearly 180% of GDP, respectively (Graph A-8). Stock market capitalization and the stock of government debt issued have also risen albeit at slower pace (Graph A-9).

This has resulted in China's financial system becoming one of the largest in the world, not only in relative terms, as percentage of GDP (Graph A-10) but also in absolute terms (Graph A-11). This is particularly impressive if one considers that financial systems tend to be larger the bigger a country's GDP per capita while the latter is relatively low in China (Graph A-12).

This paper analyzes and assesses the ongoing reform of the Chinese financial system. Although three main areas of reform can be identified –the banking system, the capital markets and the capital account– we concentrate on the first. In fact, the banking system continues to be the driving force of the Chinese financial system although it must be acknowledged that its reform is closely intertwined with the rest as part of a global strategy.

This paper is organized as follows. In Section 2, the structure of the Chinese bank system is described. Section 3 summarizes the main steps taken towards reform in the areas of bank restructuring, financial liberalization and bank regulation and supervision. Section 4 informs of the next steps announced by the Chinese authorities. Finally, Section 5 is an evaluation of the reform process after which a number of recommendations are offered to contribute to the success of the reform.

2 The Chinese Bank System

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.

The reform efforts carried on by the Chinese authorities in the last three decades have led to the current structure of the financial system. The banking system continues to be the main player in the Chinese financial system although the importance of capital markets is growing fast. By end-2002, bank loans represented 61 per cent of the entire financial sector and the stock and bond markets accounted for 22 and 17 percent, respectively[1]. Total assets of the banking sector were more than USD 2,850 billion at end-2002, representing around 225 percent of China's GDP (Table 1). The bond market was the second biggest in absolute terms in non-Japan Asia, after South Korea, with USD 250 billion but it only amounted to 20% of China's GDP in comparison to 140% of GDP for the first Asian issuer, Japan. Also at end-2002, the Chinese stock market counted with USD 520 billion, equivalent to 41% of GDP Graph A-9).

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 (Chart 1 below).

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.

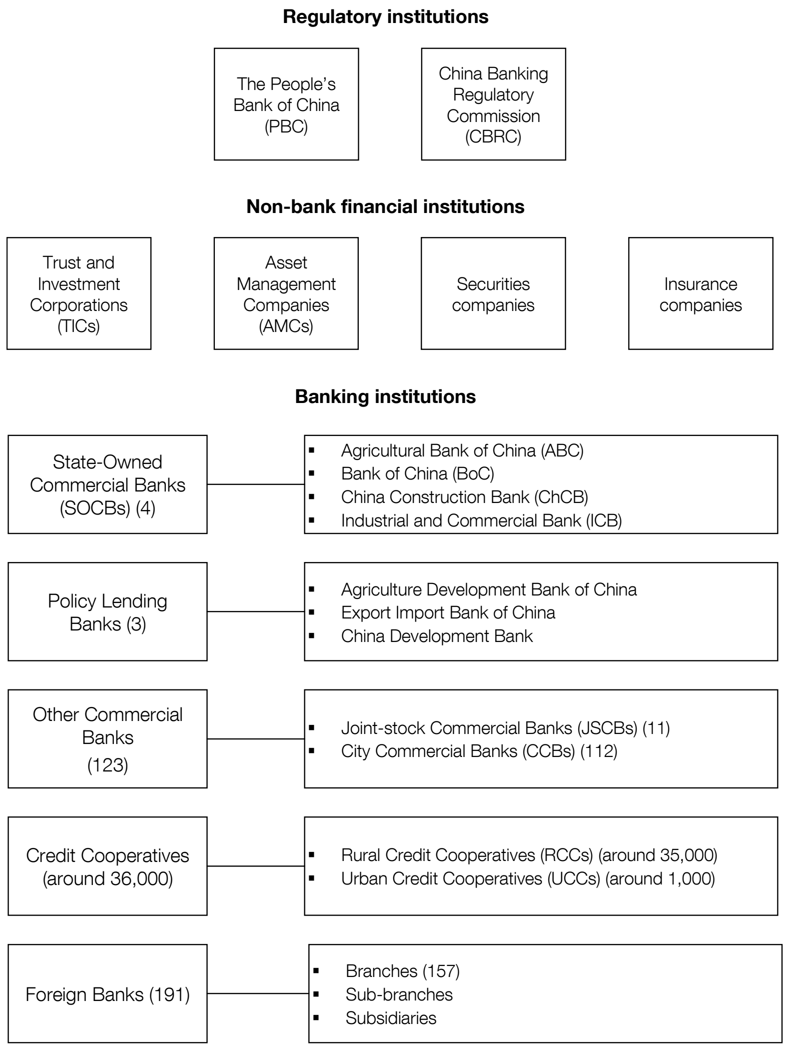
There is also a number of **non-bank financial** institutions in the Chinese banking system. The main ones are the **Trust and Investment Corporations** (TICs), created in the 1980s to support the development of the private sector and to provide financing outside the credit quotas imposed to commercial 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 non-performing loans (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**

1. Deutsche Bank Research (2004).

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 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 1. Structure of the Chinese financial system



The **four SOCBs**[2], the Agricultural Bank of China, the Bank of China, the China Construction Bank, and the Industrial and Commercial Bank of China, were established in

2. 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.

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 77% of total assets in the banking system in 1995 to 60% at the end of 2003 as shown in Table 1), they are still very large. In fact, they are among the biggest banks in the world, with total assets in the range 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. The SOCBs have been the primary source of finance for large state-owned enterprises (SOEs), where soft-budget constraints have been a common practice, as in other centrally-planed economies. This explains the large concentration of NPLs in the SOCBs, which continues to constrain their profitability. They are also very active lenders to other financial institutions (Table 2). The fact that SOCBs are still fully state-owned and the objective of their managers is not necessarily profit maximization also impinges on their profitability. Table A-1 shows that their return on average assets (ROAA) and return on average equity (ROEE) are lower than in other Chinese commercial banks.

Three **policy lending banks** were created in 1994 to carry out the development policies previously assigned to the SOCBs and hold about 8% 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 (as shown in Table 2). 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 markets– and account for 10% of total bank assets. The biggest ones are Bank of Communications, China Minsheng Bank[3], 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. They may also carry out most bank activities, including accepting deposits, extending loans, and providing foreign exchange and international transaction services. In the last few years, their relative market-oriented corporate culture has allowed them to gain market share at the expense of the SOCBs.

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 2003. 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.

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

Rural and urban credit cooperatives (RCCs and UCCs, respectively) were established in the 1980s as a mechanism to diversify the financial system and to finance projects in areas where resources were scarce. Their share of assets was 11.4% as of end-2003, marking a steady reduction since 1995 (with 15.9% of total bank assets). Credit cooperatives typically provide credit to small and medium-sized rural or urban enterprises and individuals. Their lending policies are subject to the control of the local public authorities. Nowadays, rural credit cooperatives are more important and numerous than urban ones, after the consolidation of the latter into city commercial banks. As of June 2003, there were about 35,000 RCCs, providing 80% of rural finance, and 1,000 UCCs. RCCs are burdened by NPLs, which are bound to increase when the agricultural sector opens up under WTO requirements.

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[4]. They hold 0.3% of the local currency lending market and around 13% in the foreign currency lending market; all in all about 1.2% of total bank assets. In addition, some JSCBs are partially owned by foreigners.

Table 1. Share on assets by type of institution

(as % of total bank assets)

end-period	SOCBs	Policy Banks and Other Commercial Banks	Credit Cooperatives	Foreign Funded Banks	Other Institutions	Total Assets (USD billion)
1995	77.0	7.2	15.9	-	-	891
1996	75.0	8.8	16.3	-	-	1,113
1997	73.9	8.7	16.3	-	1.0	1,353
1998	73.6	9.2	16.1	-	1.0	1,510
1999	73.2	10.0	15.7	-	1.0	1,677
2000	71.5	11.9	15.5	-	1.1	1,869
2001	68.4	13.6	16.5	-	1.4	2,009
2002	62.6	19.7	11.1	1.2	5.4	2,839
2003	61.0	21.5	11.4	1.2	4.9	3,356

Source: CEIC Database

Table 2. Structure of banks' balance sheet as of June 2003

(as % of the total bank assets)

	Foreign assets	Reserve assets	Claims on government (1)	Claims on non-financial institutions	Claims on financial institutions	Other assets	Total assets
State commercial banks	77.3	62.6	62.9	62	77.5	50.7	62.7
Policy lending banks and other commercial banks	14.1	22.4	28.9	23.7	18.6	25.3	23.3
Credit cooperatives	0.2	13.5	5.7	11.7	2.5	18.8	10.9
Other institutions	0.1	0.9	2.3	1.7	1.1	3.6	1.7
Foreign banks	8.3	0.6	0.2	1	0.2	1.6	1.3

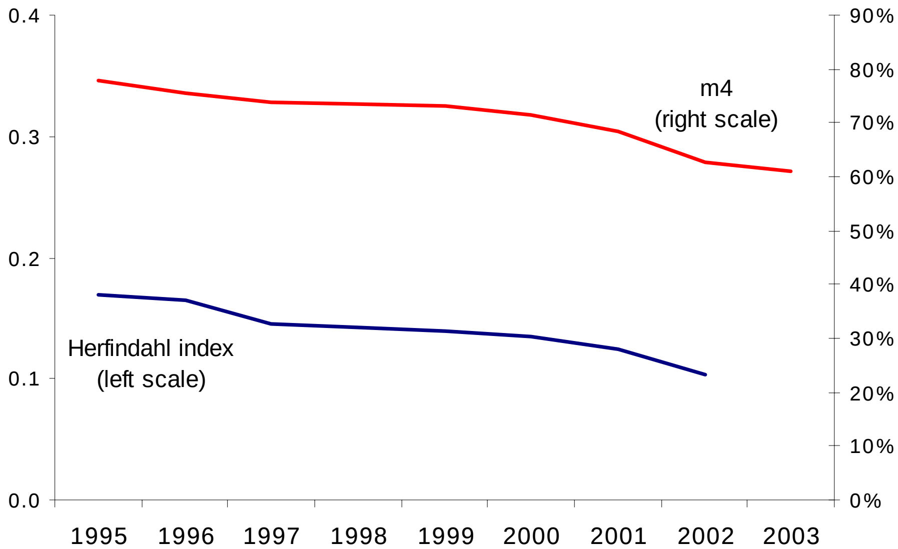
(1) Including central bank bonds.
There may be slight differences with previous table due to different sources of information
Source: People's Bank of China

The previously mentioned reduction in the SOCBs share can be explained by the increasing importance of JSCBs and CCBs. Both have proven to be generally more profitable than SOCBs (Table A-1) and count with a more effective management and weaker government interference.

4. Ping (2003).

These developments have reduced the concentration of the Chinese banking system although it is still high for international standards. In fact, the share of assets in the four largest banks has fallen from 77% to 61%. The Herfindahl index displays a similar pattern (Graph 1)[5].

Graph 1. Concentration on assets



Notes: m4 is the share of total assets fot the 4 largest banks (in %).
Herfindahl Index is measured from 0 to 1
Source: CEIC

Finally, the asset and liability structure of the Chinese banking system has also experienced some transformations in the past few years. On the asset side (Table A-2), loans continue to have the largest share, of nearly 59% in 2002. This is even more the case for policy banks. Risky assets have become the second largest (nearly 25% of total assets), having experienced a rapid growth in the last eight years. In turn, liquid assets have drastically reduced their share from nearly 24% to 6%. This is in line with the steady reduction of banks' reserve requirements. On the liability side (Table A-3), the share of deposits has continued to increase reaching 93% of total liabilities. This is even higher in SOCBs and much less so in JSCBs. Finally, the share of capital and reserves has always been very low and the trend since 1998 is towards a further reduction. Finally, the income structure (Table A-4) is quite similar for all commercial banks. Interest income represents around 95% of the overall income and commission income around 4%. The latter has more than doubled in eight years, in line with a similar reduction in interest income. This points to a certain degree of substitution between the two types of income.

5. Herfindahl index is defined as the sum of the squares of the market shares of each individual firm.

3 Steps taken in banking reform

China's financial system has experienced a deep transformation in the past two decades. After the substitution of the monobank system for a multi-tiered one, the core reforms started in 1994, when policy lending banks were created in order to take over public policy lending duties from the SOCB. In 1995, a new Commercial Banking Law laid the foundations for commercially-oriented banking. At the same time, a new Charter for the PBC was approved with three main responsibilities: monetary stability, banking supervision, and oversight of the payments system. This charter, though, did not grant independence to the PBC, which remained under the control of the State Council. In 2003, banking supervision competences were transferred from the PBC to the CBRC.

Additional reforms took place after the Asian financial crisis in 1997, aimed at gradually transforming a fully state-owned banking system into a profitable and competitive one. The three main areas of reform were: (i) restructuring, through the cleaning up of NPLs, recapitalization and merger and closure of unviable institutions; (ii) financial liberalization, through the reduction of government interference in the system, market determination of lending, greater transparency and opening up to foreign competition pursuant to China's WTO commitments; and (iii) improved regulation and supervision. These three areas are first analyzed with some detail in the following sections and, then, summarized in Table 6.

3.1 Restructuring

The poor capitalization of the Chinese banking system and the very large amount of NPLs is one of the main problems faced by the Chinese authorities. This is particularly the case for the four SOCBs, which have maintained older and closer relations with SOEs.

The reported improvement in asset quality in recent years is mainly based on the rapid credit growth, associated with the investment boom and new export opportunities.[6] In fact, while the share of NPLs to total loans has recently fallen from 25% in the last few years to 20% of total loans (equivalent to 17% of GDP), the stock of NPLs in USD has remained stubbornly high, at USD 232 billion in mid-2003. This implies a very small reduction compared to 2002 and an increase compared to previous years. (Table 3). When considering the whole financial system (i.e., including the AMC where NPLs have been transferred), NPLs amount to 36% of GDP, equivalent to a stock of USD 480 billion (Table 4). Independent analysts tend to have even higher estimates of NPLs, of about 50% of GDP for the financial system as a whole.

The problem is most acute in the credit cooperatives, which have accumulated the largest share of NPLs as a percentage of their loans (30%). These are followed by SOCBs with 20% of NPLs although differences exist among the four. The Industrial and Commercial Bank of China accumulates the largest share of NPLs (Table 5). This is probably due to its specialization, which implies tighter relations with SOEs.

6. According to the Institute of International Finance (2004), two-thirds of the reduction of the NPLs reported by the four SOCBs from more than 25% of total loans as of December of 2002 to 20% as of December 2003 was due to an increase in new loans.

Table 3. Reported NPLs in SOCBs

	1997	1998	1999	2000	2001	2002	2003
NPLs (USD billions)	155	75	198	196	213	245	232
Total Loans (USD billions)	-	753	793	786	850	968	1,139
Ratio of NPLs (as % of total loans)	25	10	25	25	25	25	20
NPL (as % of GDP)	17.2	7.9	20	18.2	18.4	19.8	17

Source: Pei & Shirai (2004) based on Chinese authorities and own calcultaions

Table 4. Reported NPLs in Chinese financial system

	as of	USD billion	NPL ratio (% of total loans)	% of GDP [(1)]
State owned commercial banks	Dec-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	Dec-03	373	19	28
Asset management companies	Dec-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

Table 5. NPL ratio in each SOCB

(based on the Five-Category Classification)				
	2000	2001	2002	sep-03
Industrial and Commercial Bank of China	34.4	29.8	25.7	21
Bank of China	27.2	27.5	22.5	17
China Construction Bank	20.3	19.2	15.2	11
Agricultural Bank of China	-	35	30 [(1)]	-

[(1)] Figure based on the five-category classification. Under the old four-category classification the ratio would be higher than 38%

Source : Pei & Shirai (2004)

The potential consequences of the large stock of NPLs are even more worrisome if we take into account the very low capital ratios of Chinese banks, particularly policy lending banks and SOCBs. The latter maintain an average risk-weighted capital adequacy ratio of 4.6%[7], notwithstanding the several recapitalization programs carried out by the Chinese government in the last few years[8].

In 1998, the government injected USD 33 billion in equity into the four SOCBs. In the period 1999-2000, the SOCBs and one policy lending bank (China Development Bank) were allowed to transfer USD 170 billion in NPLs, in book value, to the four newly created AMCs. Each of them was assigned the primary goal of maximizing NPLs recoveries from one of the SOCBs through different asset resolution techniques[9]. The separation of NPLs recoveries depending on the bank of origin is not the general practice but was preferred by the Chinese authorities for several reasons. First, the size of loans at each SOCB is small, on average, and the clients are widely dispersed, which makes the recovery of NPLs particularly cumbersome. Second, the origin of the loans, mainly relationship lending, is crucial for a successful recovery, and this varies for each SOCB since they had a different specialization[10]. From their creation until May 2003, AMCs remain under the supervision of the PBC, with the guidance from the State Securities Supervisory Committee and the Ministry of Finance. Thereafter, they moved to the newly established CBRC. By end-2003, the AMCs managed more than USD 100 billion in NPLs, an amount equivalent to 8% of the GDP (Table 4).

7. Ping (2003) states that the existing capital rules have favourable risk weights for loans secured by physical collateral and guaranteed by other third parties in addition to banks. This means that the capital adequacy ratio would be even less if it completely followed the standards of the Basel I Accord.

8. CCBs and JSCBs are in a better position although still weak, with capital adequacy ratios of 6.8%, and 6%, respectively.

9. The general mandate of the AMCs is to collect debt, restructure, or assign NPLs; convert NPLs into equity; issue financial bonds and borrow from financial institutions; and, recommend companies for listing [Pei and Shirai (2004)].

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

The recapitalization and cleaning up of NPLs were accompanied by a number reforms introduced in SOCBs to improve efficiency and avoid accumulating new NPLs. These included the closure of branches and reduction in staff, strengthening bank governance and internal controls, the establishment of a board of directors, and the development of credit risk management techniques, including internal rating systems in the largest banks.

The other restructuring steps taken by the Chinese authorities concern the small financial institutions. Between 2000 and 2002, the consolidation of RCCs and UCCs as well as TICs was instrumented by closures and mergers mainly at the provincial level. In August 2003, additional measures were taken to rehabilitate RCCs. In particular, they were given specific milestone objectives which, if complied with, would allow them to receive new capital injections from the PBC or the local government. Notwithstanding the restructuring, the government control on the credit allowances to farmers remains tight, given the importance attached to raising rural income.

3.2 Liberalization

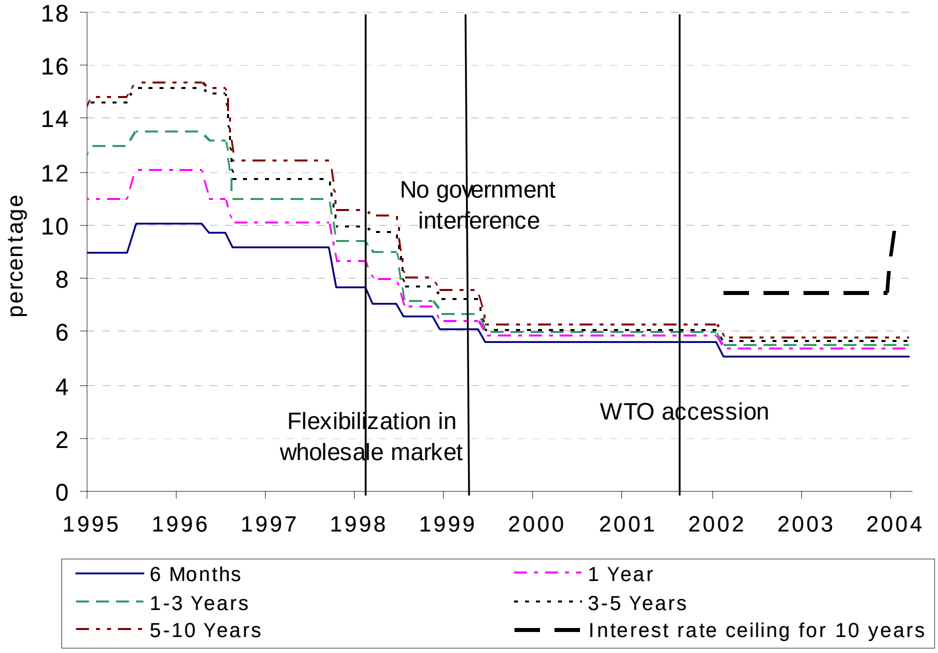
The liberalization efforts of the Chinese authorities started in 1997 with the introduction of a number of market practices in the functioning of the banking system. They continued in 1998 by granting SOCBs more responsibility in their lending decisions and removing a number of their credit quotas. In 1998 reserve requirements were reduced from 20% to 8% and again to 6% in November 1999. In addition, the remuneration of excess reserves was lowered to discourage banks from hoarding liquid assets. This explains the previously mentioned steady reduction in liquid assets (Table A-2). In addition, some flexibility was introduced in setting interest rates in the wholesale market, the interbank market was unified and the ceiling on interbank rates was lifted[11].

An important step was taken in 1999, when government interference in commercial lending was explicitly forbidden and a number of private and local banks were established. More recently the ceiling on banks' lending rates was lifted in several occasions. In particular, in 2002 banks were permitted to charge borrowers up to 1.3 times the central lending rate. In January 2004, it was raised again to 1.7 (Graph 2). With this flexibilization of interest rates, the Chinese authorities expect to encourage lending to SMEs, previously shunned by SOEs[12]. It should also improve risk assessment by banks, which need to price loans differently, depending on the client. At the same time, nominal lending and deposit rates have fallen substantially in the last few years (Graph 2 and Graph 3) while the real lending rate has risen from negative levels during the period of double-digit inflation and has remained at about 6% from 2000 onwards (Graph 4). Such increase in the real lending rate, although expected in a financial system in a liberalization process, is worrisome given the large level of NPLs and the rapid credit growth without well-established risk management techniques. Finally, the spread between the lending and deposit rates at the same maturity has remained practically constant at a safe level of 300 basis points, which does not hint at an improvement in competitiveness in the banking system (Graph 5).

11. Shirai (2002b).

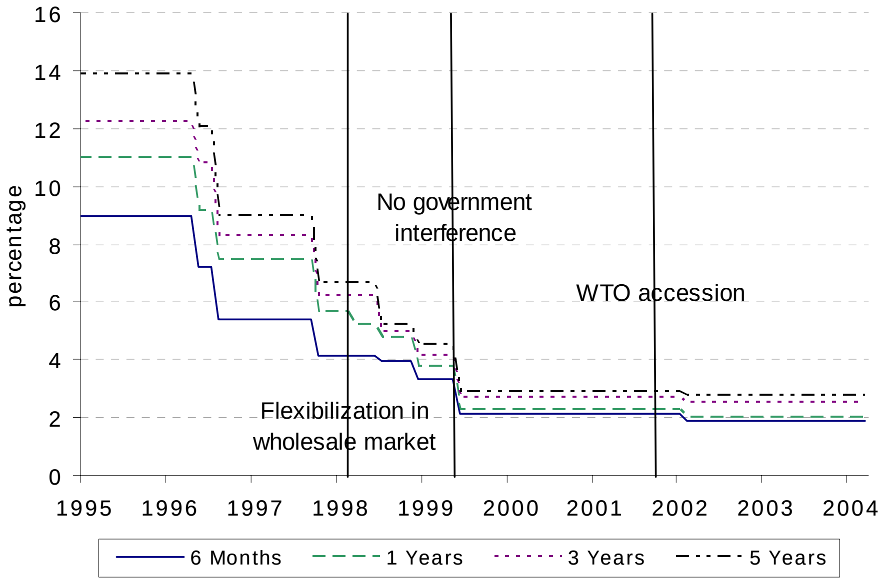
12. It should be noted that these margins differ by type of financial institution and size of the enterprises. The rural credit cooperatives in selected areas may set their lending rate between 90 and 150-200 percent of the central bank's benchmark rate. For commercial banks, the lending rate charged to small and medium-sized enterprises may be within 90-130 percent of the benchmark rate, and that to large enterprises within 90-110 percent.

Graph 2. PBC's nominal lending rate by maturity



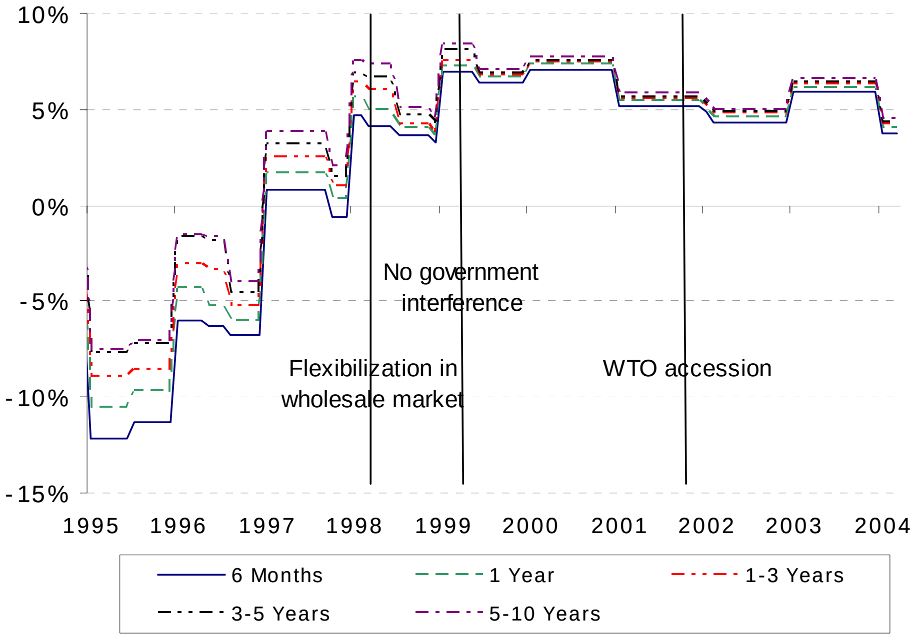
Source: CEIC

Graph 3. PBC's nominal household deposit rate by maturity



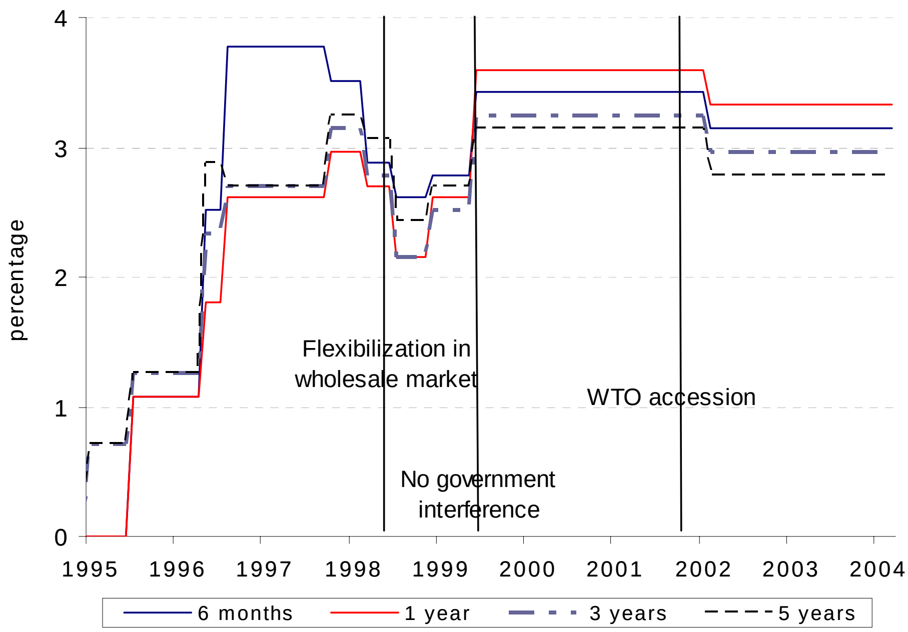
Source: CEIC

Graph 4. PBC's real lending rate by maturity



Source: CEIC

Graph 5. Spread between lending and deposit rate by maturity



Source: CEIC

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 the banking system to foreign institution. Since WTO entry in 2001, all banks –also foreign banks– have been allowed to carry out certain transactions in foreign currency, particularly as regards taking deposits. Foreign currency transactions have, therefore, been the main activity of foreign banks until accesion, with the main purpose of facilitating the operations of foreign direct investors in China. Since 2003, foreign banks were authorized to operate in the wholesale market in domestic currency, but with strict geographic limits. From late 2006 onwards, the remaining restrictions will be lifted and foreign banks will be allowed to operate in the retail market in domestic currency without geographic or business restrictions (Chart 2 shows the time schedule for the opening-up to foreign competition by province and type of business). Foreign insurance companies will also be allowed to own up to 50% of the equity of joint ventures and to operate in more cities.

Chart 2. Opening up of the banking system to foreign competition: Situation by province

	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: Deutsche Bank Reasearch (2004)

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

3.3 Regulation

The liberalization and restructuring measures have been accompanied by a strong regulatory effort, particularly with respect to loan classification and provisioning, which were far behind international standards.

With the first wave of reforms in the mid 1990s, capital adequacy requirements were introduced in all commercial banks in 1995. Other prudential rules followed, such as loan to deposit ratios and asset to liquid liabilities.

Since 2002, China's banks have introduced new techniques of credit analysis and lending policies more aligned with international practices. The loan classification system was reformed in 2002 by adopting an internationally accepted five-tier classification of loans but very few banks followed it until recently. In 2004, the loan classification system was strengthened again and all banks have been asked to fully comply with it by end of 2005.

Disclosure has been enhanced, particularly for listed banks, which must go through an auditing process as well as the publication of more comprehensive balance sheets and income statements. In addition, attempts have been made to improve corporate governance, by instituting shareholder boards with outside directors.

The newly created CBRC pushed for the introduction of Basel Core Principles for Effective Banking Supervision from the very beginning and granted legal protection to supervisors, as well as accountability and more transparency. Regarding transparency, the CBRC has announced plans to issue quarterly NPLs data for the banking sector. Finally, the CBRC has an additional challenge related to the local nature of most banks except for the large SOCBs, for which it has recently established 36 new local branches.

4 Additional steps announced towards financial reform

In the course of 2004, the Chinese authorities have announced additional steps in the domains of restructuring, liberalization and improved regulation

As regards **bank restructuring**, a precise goal for the reduction of NPLs at the SOCBs has been announced, from the current 20% of total loans to 15% by the end of 2005. Second, the SOCBs are due to be listed on the international stock exchanges. It is expected that strategic investors are involved in the process in order to diversify the SOCBs' ownership while improving the quality of management, as was done with some JSCBs in the period 2000-2002. The first ones to be listed will be the Bank of China and the China Construction Bank, in 2004 and 2005 respectively. This explains the additional capital injection of USD 22.5 billion, which these two banks received in late 2003, so as to be in a better financial condition when listed[13]. The funds have come directly from the PBC's foreign exchange reserves, through the transfer of rights of ownership of US government bonds[14]. At the same time, a state-owned investment company has been created to organize the future listing of these banks on the international markets. In March 2004, the CBRC announced that the remaining SOCBs would also be recapitalized and listed in the medium term.

The second programmed step is the restructuring of RCCs, which include clarifying their ownership structure and improving their management capacity. In parallel, the CBRC announced it would move ahead with the reforms of other types of financial institutions, including policy banks, AMCs, and also JSCBs. To this end, additional improvements in risk management, corporate governance and profitability will be required[15], as well as the elimination of any government interference.

As regards **financial liberalization**, the PBC intends to continue introducing flexibility in lending rates by widening the margins even further and, finally eliminating them. The PBC is also studying the timing for the liberalization of deposit rates. At the same time, the overheating of the Chinese economy has led the PBC to revert the situation of ample liquidity, favoured by the reduction in reserve requirements during the last few years. From late September 2003, these have been raised again from 6% to 7%, prompting some volatility in the interbank market with raising interest rates. Regarding the opening-up to foreign competition, the need for fresh capital has led the Chinese authorities to announce a lift of the limit on bank's foreign ownership from 15% to 20% of total capital. Moreover, the CBRC recently announced that foreign bank expansion will be facilitated and market entry encouraged, by reducing the minimum capital requirements and easing administrative procedures.

Finally, additional steps are being taken to improve **regulation and supervision**. In particular, the CBRC will soon issue a new regulation on risk management in line with the three-pillar approach of the Basel II accord. This implies that large banks will be expected to build their own internal credit risk rating system. The authorities expect that this system to be fully operative in three or four years' time.

13. This directly boosted these two banks' capital levels, allowing them to write-off from their balance sheets a significant amount of NPLs. Additionally, in July 2004, the Bank of China and the China Construction Bank announced tbe issuance of USD 3.5-billions in subordinated bonds in order to fulfil the 8% Basel I capital adequacy ratio.

14. More specifically, the injection came from the State Administration of Foreign Exchange (SAFE).

15. Targets were set on return on equity: 11% by 2005 and 13% by 2007.

Table 6. China: Steps in Banking Reforms

Reforms already taken

Date	Objective	Area of reform	Description
1995	Laws governing PBC and Commercial Banks	Regulation	PBC assigned monetary stability; banking supervision; and oversight of the payments system The Commercial Bank Law introduced capital adequacy requirements to all commercial banks among other measures
1996	Creation of a nation-wide interbank market and an interbank bond market	Regulation	Interbank markets unified and developed
1997	First wave of Liberalization	Liberalization	Financial sector allowed to operate commercially
1997-2000	SOCBs reforms	Restructuring	Cutting costs and strengthening bank governance, internal controls and credit risk management
1998	Restructuring of PBC	Liberalization	PBC provincial branches replaced by 9 regional branches with greater independence on credit policy and supervisory decisions
1998	Credit quotas on SOCBs eliminated	Liberalization	Own responsibility of lending decisions
1998	Lower reduction in reserve requirements. Some flexibility of interest rates	Liberalization	Reserve requirements reduced from 20% to 8% and some flexibility introduced in interest rates in the wholesale market.
1998	Recapitalization of SOCBs	Restructuring	Injection of USD 33 billion in equity into 4 SOCBs
1999	Lower government interference in lending	Liberalization	Forbid government interference in commercial lending
1999	Creation of AMCs	Restructuring	Agencies created with the sole goal of disposing NPLs in the most cost efficient way
1999-2000	Transfer of NPLs to AMCs	Restructuring	USD 170 billion in NPL (14% of SOCBs loans) transferred to four newly established AMCs
2000-2002	RCC reform	Restructuring	Insolvent RCC liquidated Merger with other credit cooperatives and improved supervision
	TIC and TICs reform	Restructuring	Merger with credit cooperatives and closures
	UCC reforms	Restructuring	Merger with other credit cooperatives and closures
	Creation and listing of JSCBs	Liberalization	Turnover (Corporate governance, diversified ownership and reduce political interference through listing in stockmarkets)
2002	Improve of prudential Regulation	Regulation	Introduction of loan classification system and provisioning requirements in line with Basel I accord
2002-2006	WTO-related opening up to foreign ownership	Liberalization	
2002	Client restrictions on foreign currency business lifted	Liberalization	Foreign currency restrictions lifted both for domestic and foreign banks' wholesale and retail operations immediately after WTO entry
2003	Foreign entry for wholesale operations	Liberalization	Conduct domestic currency business with Chinese firms
2003	Creation of CBRC	Regulation	Taking over regulatory and supervisory functions of PBC
2003	Banking Bailout	Restructuring	PBC's international reserves used for recapitalization of two SOCBs Domestic banks allowed to issue subordinated bonds

Announced Reforms

Date	Objective	Area of reform	Description
2004 onwards	Liberalization of interest rates	Liberalization	PBC is to widen the margin from the central rate for banks to freely set interest rates. Announced liberalization of deposit rates
2004-2005	Listing of SOCBs	Liberalization	To improve corporate governance, diversify ownership and reduce political interference
2006	Opening of retail market to foreign banks	Liberalization	To conduct domestic currency business with Chinese retail consumers
	RCC reform	Restructuring	To clarify the RCCs' ownership structure and improve their management capacity
2004-2005	Basel II accord	Regulation	For big banks to build an internal credit risk rating system in 3-4 years

Expected Reforms			
Date	Objective	Area of reform	Description
2004-2006	Second wave of Liberalization: Announcement of a Comprehensive Reform Strategy	Restructuring	Transfer of ownership to the Private Sector Additional emphasis in risk management and corporate governance
		Regulation	Stricter accounting, Internal Reporting and Disclosure Standards Adopting International Accounting Standards Reduction of tax burden Stricter Regulatory and Prudential Enforcement Framework for asset resolution regarding collateral, foreclosure and creditors rights need to be solved
		Liberalization	Improvement of statistics and banking data

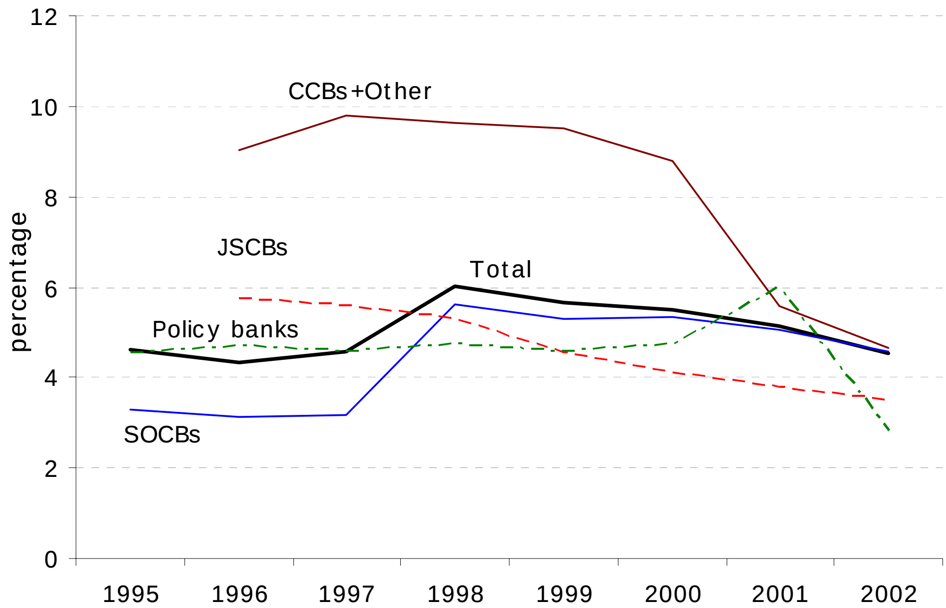
Sources: Own authors based on several sources of information among which Karacadag, C. (2003) "China: Financial System Soundness and Reform", IMF

5 An assessment of the banking reform so far and suggestions for future steps

From the information above, there is no doubt about the commitment of the Chinese authorities to reform the banking system and the measures taken seem to go in the right direction. However, clear results are yet to be seen. This is particularly worrisome in a country who intends to fully liberalize and open its banking system by late 2006.

As previously mentioned, the **restructuring process** has not yet been very successful if one considers the stubbornly high levels of NPLs and the low solvency ratios. In fact, the reduction in the share of NPLs to total loans is due to the growth of new credit, which could become non-performing in the future if granted under the same criteria as in the past. In turn, the total amount of NPLs has actually increased, particularly if we consider the whole financial system, i.e., also the NPLs transferred to the AMCs. The latter have only managed to dispose of about one third of the NPLs received. This is partly due to the poor legal framework under which the AMCs operate[16]. In fact, they have been relying mainly on debt-equity swaps or sales of collateral assets, since there is no market for trading of distressed securities in China. An additional problem 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, notwithstanding the recapitalization efforts, bank solvency –which was already very weak– has fallen further. As Graph 6 shows, equity to total assets stands at 4.5%. The worst situation is that of policy lending banks.

Graph 6. Equity to total assets by type of institution



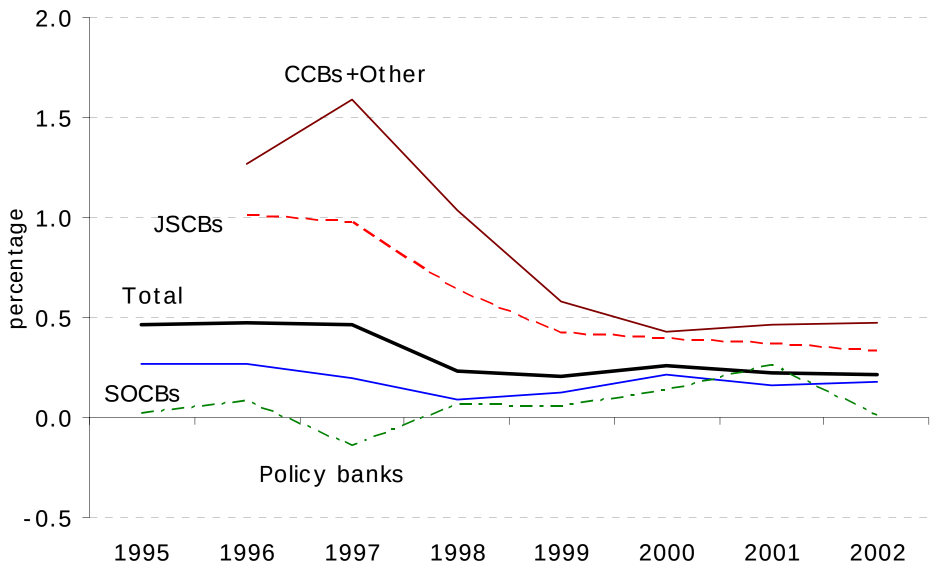
Source: Bankscope

The **liberalization process** has not managed to reduce the very large participation of the State in the banking system, except for the entry of some foreign branches and representative offices and the minority participation in some JSCBs. Competition is still weak, particularly among the largest banks. Price and quantity controls have not been fully lifted and, still, profitability, measured by the ROAA has deteriorated[17]. As previously mentioned,

16. Moody's (2004).
17. This is particularly so excluding taxes. The reduction in the business tax to 5% in 2002 –the last of various scheduled cuts– has helped maintained after-tax earnings.

this does not seem to be related to heightened competition –the interest spread still hovers at 300 basis points– but rather to the rise in personnel expenditure and the increasing holding of excess reserves. The three policy lending banks are the least profitable institutions, measured by the ROAA (Graph 7)[18]. This could be expected given their focus on long-term development projects rather than profit maximization. SOCBs are the second least profitable group while JSCBs have a higher ROAA, which hints at a potential improvement in profitability when banks are opened to the private sector[19]. Cost efficiency has improved in the last few years, if measured by the cost to income ratio (Graph 8) although it is known that large inefficiencies exist particularly in policy lending banks and SOCBs.

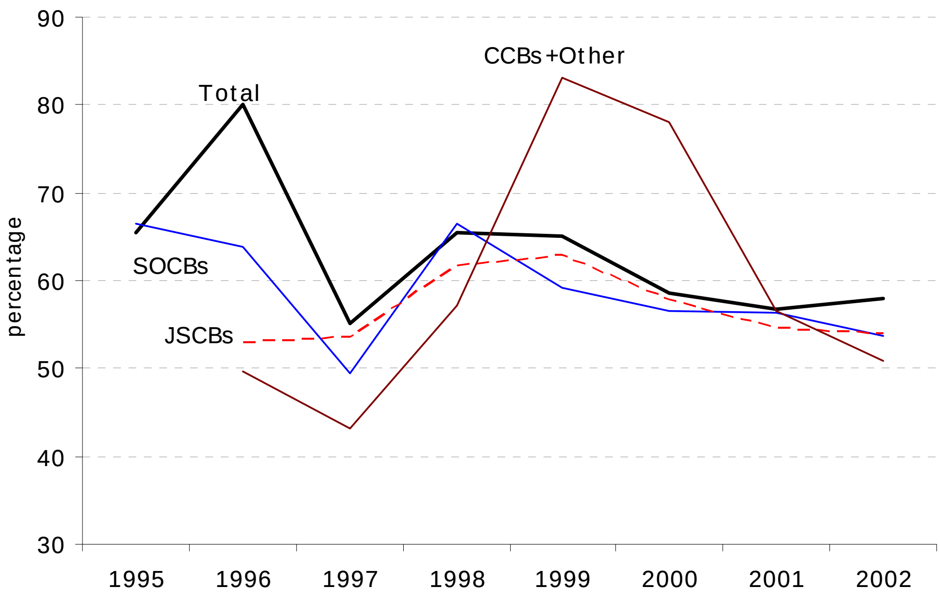
Graph 7. ROAA by type of institution



Source: Bankscope

18. They also have the smallest net interest margin (Table A-1).
19. The return on average equity (ROAE) follows a similar patter than ROAA (Table A-1)

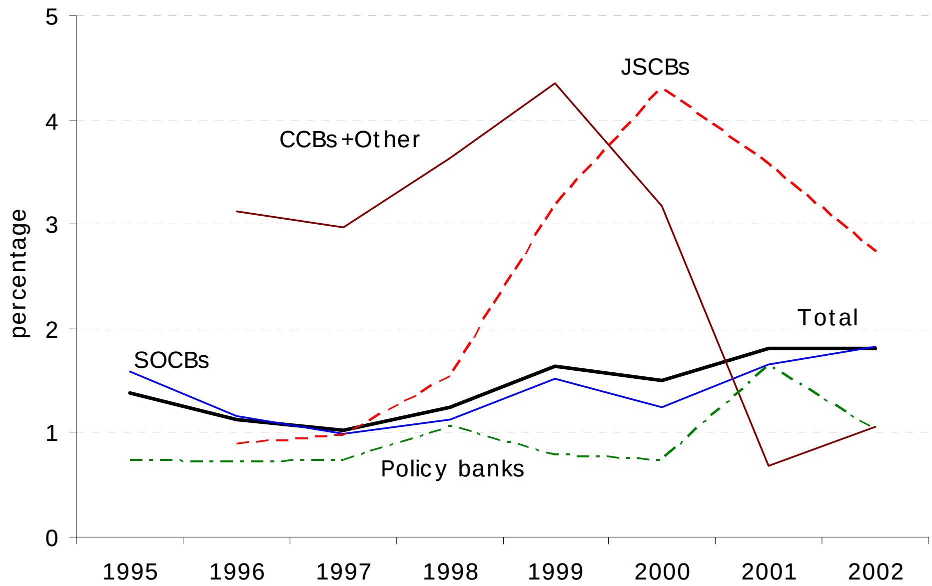
Graph 8. Cost to income ratio by type of institution



Source: Bankscope

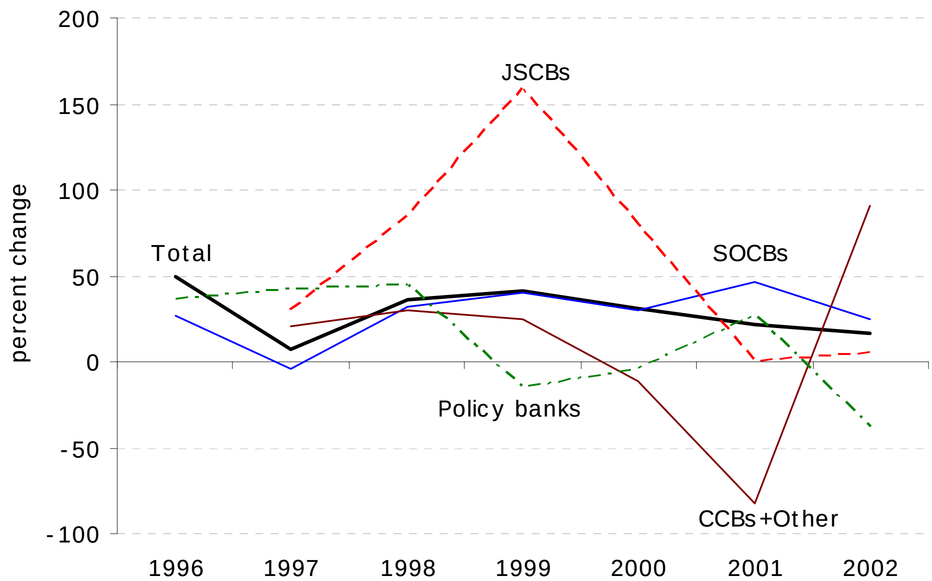
One of the main objectives of strengthening **regulation and supervision** was the introduction of a more cautious approach towards risk. Although it is difficult to draw conclusions from the available evidence, the fact that bank lending has grown even faster in recent times could be worrisome. Being investment led, the over-heating of the Chinese economy implies multi-year funding generally based on overly optimistic assumptions. This implies that new NPLs may appear in the future raising the stock of NPLs to new record levels. The tougher provisioning rules introduced in 2001 do not seem to have increased significantly the ratio of loan loss reserves to total loans (Graph 9) although the loan loss reserves are growing at a rate around 20% (Graph 10). This is not only the case of policy lending banks and SOCBs, but also JSCBs. 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 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.

Graph 9. Loan loss reserve to gross loans by type of institution



Source: Bankscope

Graph 10. Percent change in Loan loss reserve by type of institution



Source: Bankscope

In sum, there does not seem to be a clear improvement in the functioning of the Chinese banking system associated with the reform process. This is not only the case for SOCBs but also for the whole banking system. The JSCBs, considered to some extent a laboratory of the reform because of their partial private ownership, offer mixed results. This might be so because the private sector is not yet in full control of these banks or, more generally, because it is too early to feel the benefits of the reforms. 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.

The challenges that the Chinese economy faces –the huge financing needs for such a dynamic economy and the commitment to open-up to foreign competition under the WTO– call for **an acceleration of reforms in the financial system**.

The two fundamentals problems faced in the short-run are: (i) the large stock of NPLs coupled with the scarce capital, and (ii) how to transform existing banks into viable, financially sound and independent commercial institutions. The latter requires moving towards financial liberalization while strengthening bank regulation and supervision. This should limit the risk of a banking crisis induced by the liberalization process and has been the case in several countries[20].

Learning from the Chinese experience in the last few years, as well as that of other countries, a more comprehensive reform strategy should be introduced to avoid asymmetries in the functioning of the financial system. This would need to include a long-term vision of where the Chinese financial system should go in terms of size, structure, ownership and institutional functioning. To this end, the additional steps that might need to be taken in the three areas analyzed before are the following:

Regarding **bank restructuring**, a more rapid and decisive action is needed to improve bank solvency. In particular, the accumulation of new NPLs should be avoided. To this end, the current situation of over-borrowing should be slowed down as soon as possible, but gradually, to avoid a hard-landing of the Chinese economy. In addition, bolder steps are needed towards the cleaning up of SOCBs balance sheets and their recapitalization, before listing them in the international capital markets. Until now, the conditionality imposed to receive new public capital injections has been rather limited, which contributes to maintaining "soft budget constraints". In fact, the tight links between SOCBs and SOEs are another source of new NPLs, which needs to be addressed. Bank and enterprise restructuring should run in parallel, as has been done in other transition economies. Finally, improvements in bankruptcy and foreclosure loans are also needed, to help restore debt-payment capacity among viable firms and recover NPLs from banks and AMCs. This should include informal mechanisms to fasten the process. It would also be important to encourage foreign investment for the recovery of NPLs.

Bank restructuring should lead to the rapid **privatization** of a large part of the banking system. Before privatising, the profitable parts of financial institutions should be identified so as to separate good assets from bad ones. In principle, only solvent institutions should be handed in to investors. Otherwise, there is a risk that these banks can never be profitable and that shareholder problems are bounced back to the public sector. In this regard, the entry of foreign capital should be welcome since they can introduce more sophisticated management and risk assessment techniques, as well as better corporate governance. For foreign capital to play an active role in modernizing the Chinese financial system, their presence should not be limited to small representative offices or branches focused on niche businesses, but should actually become a real competitive force in the intermediation of domestic savings.

Regarding **financial liberalization,** more flexibility is needed in setting interest rates and in eliminating rules on credit allocation to reach a more efficient financial intermediation. However, such liberalization should not be carried out too rapidly given the undercapitalization of the banking system and the still weak banking regulation and supervision. The two are clear pre-conditions to full financial liberalization. In any event, financial liberalization should lead to the consolidation of the Chinese banking system, currently very fragmented by sector and geographical constrains. As the experience of other Asian countries shows, consolidation can improve financial soundness and efficiency since sounder banks are strengthened in the process. More competition between JSCBs, and also SOCBs, would be welcome to this end, as well as stepping up the entry of foreign capital.

As for **prudential regulation and supervision**, additional steps need to be taken faster so that the process of financial liberalization can continue. Accounting rules need to

20. Demirgürç-Kunt and Detragiache (1998) find empirical evidence that financial liberalization increases the probability of a banking crisis when financial regulation and supervision are not strengthened in the transition.

comply with international standards and external and internal auditing have to be enhanced. More detailed financial information should be disclosed regularly in order to promote market discipline. Supervisory authorities should also encourage better bank management techniques and a tighter grip on risk management. Prudential regulation can also help banks focus more on exchange rate risk, given the growing openness of the Chinese economy, the increasing importance of foreign currency deposits and the possible moral hazard stemming from the implicit guarantee of fixed exchange rate regime. The authorities' commitment to introduce Basel II is welcome but it should be based on a faster implementation of Basel I.

Another important limitation to a successful bank reform, especially when the liberalization and privatization processes are accelerated, is the lack of a **deposit insurance system.** This is particularly worrisome in light of the poor capitalization of most Chinese banks. While the introduction of a limited guarantee is welcome, it is crucial that the scale, scope and duration of the guarantee be spelled out in advance. Making explicit the extent to which the State will support bank deposits in case of bank closure can reduce moral hazard, as long as it is credible.

Finally, China's poor **transparency** is another limitation, whose importance will grow over time, as its banking system opens to foreign competition. In this regard, statistics, methodologies and data collection should clearly improve.

All in all, it seems clear that a new comprehensive reform plan 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. The current reform process –while welcome– seems too slow and follows a piece-meal approach, which could lead to disruptions. In addition, the strategy should not be that of "growing out of the problem", as could be interpreted on the basis of the rapid growth in bank lending.

A faster pace of reform is particularly needed in the restructuring and regulation front and less so for financial liberalization. This is to strike the appropriate balance between reform and stability. Finally**, deeper capital markets** can also help in the reform of the banking system as a potential "spare wheel" in the event of systemic bank distress.

There are signs that the Chinese authorities are moving in this direction although it is doubtful whether it will be fast enough. The reduction in NPLs and the attraction of fresh capital is key as well as the consolidation of the banking system, where the most viable and sounder banks acquire a leading role.

REFERENCES

BOFIT (2004). *BOFIT Weekly,* January-July, Bank of Finland.

— (2004). *China Review,* Vol. 1 and 2, May, Bank of Finland.

BROWNE, A. (2004). "China steps up plans for IPOs of major banks", article at *The Wall Street Journal,* 1 June.

CARRASCO, B. (2003). "*Challenges to Macro-Financial Stability in People's Republic of China,* Asian Development Bank, December.

CHINA DAILY (2004). "NPL Disposal Business Picks Up", 26 March.

CHINA-BRITAIN BUSINESS COUNCIL (2002). "The Banking System", *CBBC China Guide.*

DEMIRGÜRÇ-KUNT, A., and E. DETRAGIACHE (1998). "Financial liberalization and financial fragility", *Annual World Bank Conference on Development Economics.*

DEUTSCHE BANK RESEARCH (2004). *China's Financial Sector: Institutional Framework and Main Challenges,* January.

FERRI, G. (2003). *Corporate Governance in Banking and Economic Performance – Future Options for PRC,* ADB Institute, Preliminary Draft.

GANG, F. (2001). "Promoting Financial Reform through the Development of Non-state Finance", *China & World Economy,* n.º 2.

GREGORY, N., and S. TENEV (2001). "The Financing of Private Enterprise in China", *Finance & Development,* Vol. 38, n.º 1, IMF.

HSBC (2004). *China Economic Insight,* Vol. 12–14, January-March.

INGVES, S. (2002). "Meeting the Challenges for the Chinese Financial Sector: What Have We Learned from Other Countries?", Conference at *Second China Financial Forum,* Beijing, China, May.

INSTITUTE OF INTERNATIONAL FINANCE (2004). *Country Report: People's Republic of China,* 5 April.

KARACADAG, C. (2003). "China: Financial System Soundness and Reform", chapter of the book *China, Competing in the global economy,* IMF, Washington.

LIN, J. Y. (2001). "WTO Accession and Financial Market Reform in China", *The Cato Journal,* Vol. 21, n.º 1.

MA, G., and R. N. McCAULEY (2002). "Rising Foreign Currency Liquidity in China", *BIS Quarterly Review,* September.

MOODY'S (2004). "China. Reform Continues to Progress, but requires time as problems persists", *Moody's Banking System Outlook,* May.

PEI, G., and S. SHIRAI (2004). *The Main Problems of China's Financial Industry and Asset Management Companies,* February.

PEOPLE'S BANK OF CHINA (2003). *China Monetary Report.*

PING, L. (2003). *Challenges for China's banking sector and policy responses,* Speech in New Delhi, November.

SELTZ, V. (2003), *China: The Challenges of Financial Transition,* Emerging Markets Research Paper, n.º 2003-01, CDC IXIS, April.

SHIRAI, S. (2002a). *Banks' Lending Behaviour and Firms' Corporate Financing Pattern in the People's Republic of China,* ADB Institute Research Papers Series, n.º 43.

— (2002b). *Banking Sector Reforms in India and China: Does India's Experience Offer Lessons for China's Future Reform Agenda?,* JBICI Discussion Paper Series, n.º 2.

— (2002c). "Banking Sector Reforms in the People's Republic of China – Progress and constraints", *Rejuvenating Bank Finance for Development in Asia and the Pacific,* Chapter 3.

XIAOCHUAN, Z. (2003). "Steadily advancing market-based interest rate reform", Speech of the Governor of the People's Bank of China at the Conference *China: Making Financial Markets Work,* December.

— (2004a). "Some considerations in the study of monetary policy transmission", Speech of the Governor of the People's Bank of China at the high-level seminar on *China's monetary policy transmission* jointly held by the PBC and the IMF, Beijing, 13 April.

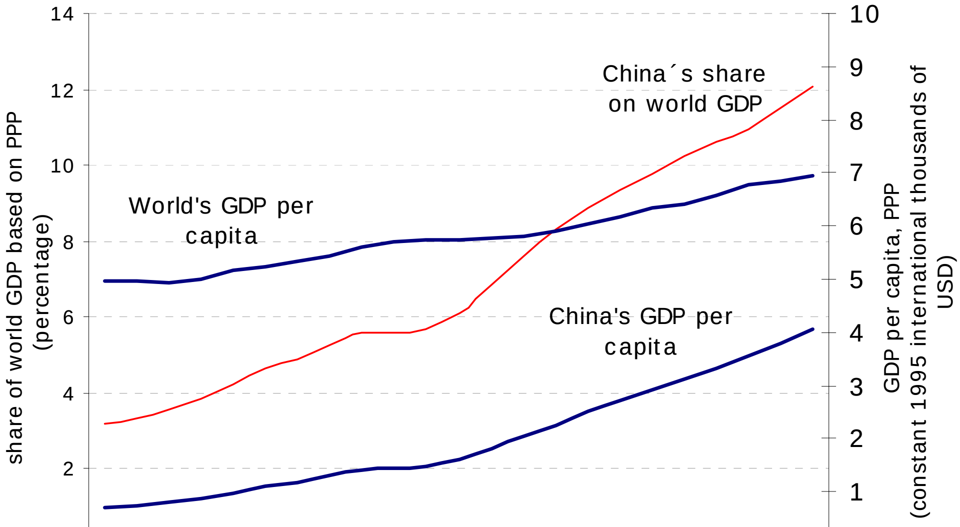
— (2004b). "Some issues concerning the reform of the state-owned commercial banks", Speech of the Governor of the People's Bank of China at the *IIF Spring Membership Conference,* Shanghai, 16 April.

— (2004c). "The current financial situation and development of the financial market in China", Speech of the Governor of the People's Bank of China at the *National Conference for the Work of Foreign-funded Banks,* Beijing, 12 April.

XIAOLIN, W. (2004). "China's monetary and interest rate policy in year 2004", Speech of the Deputy Governor of the People's Bank of China, at the *Forum of Financial Opening and Commercial Bank Reform of China,* Beijing, 17 April.

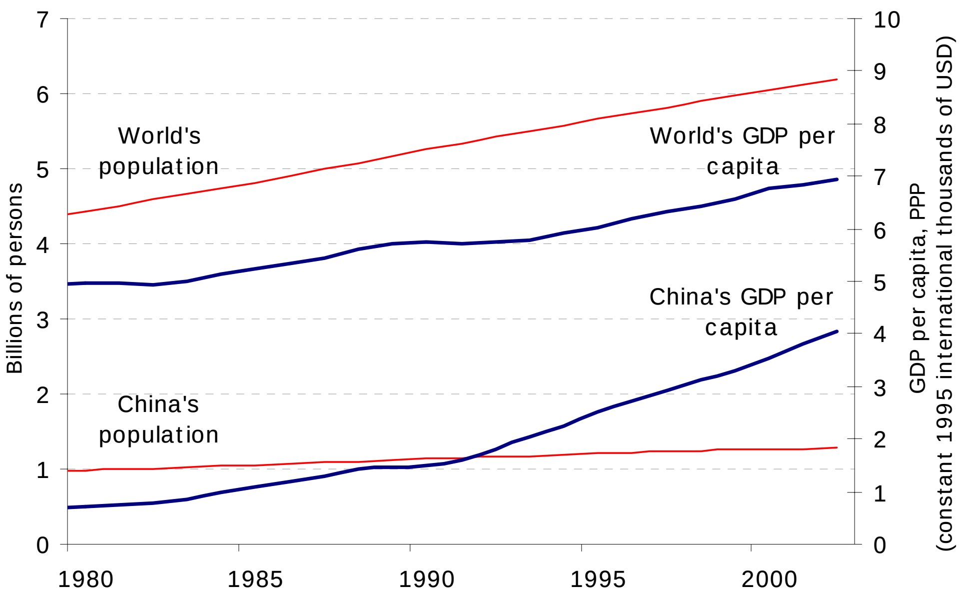
APPENDIX

Graph A-1.GDP per capita and China's share on world's GDP



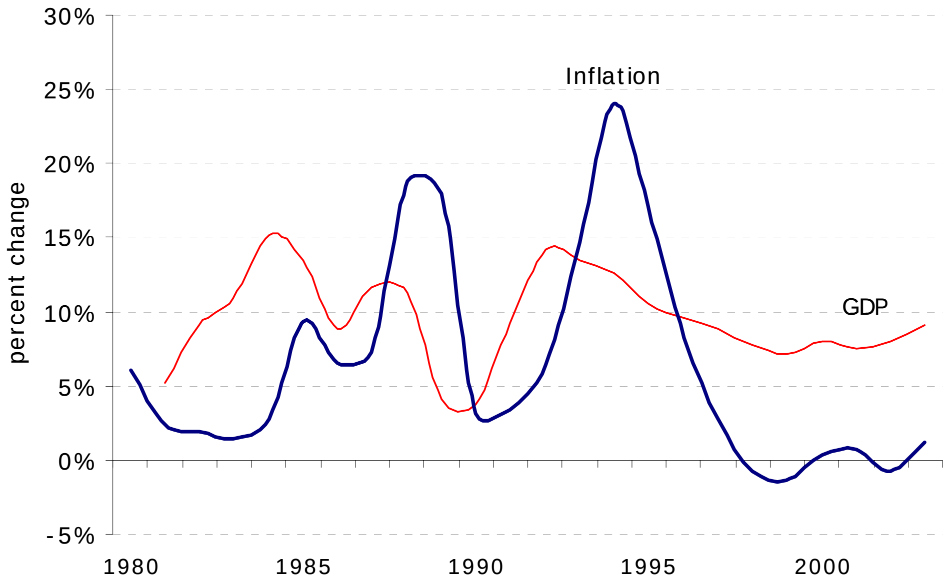
Source: World Bank, WEO (IMF)

Graph A-2. GDP per capita and Population



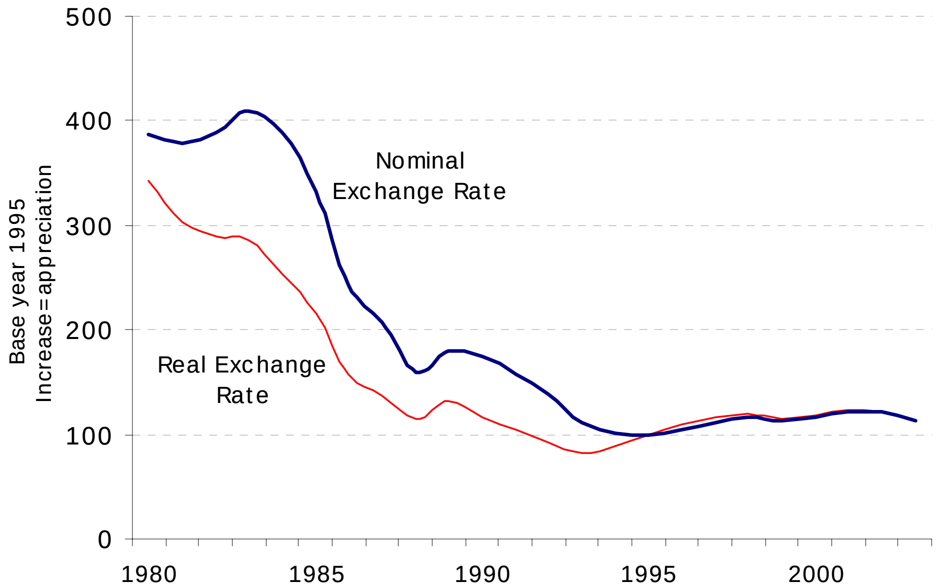
Source: World Bank

Graph A-3. Real GDP growth and inflation rate



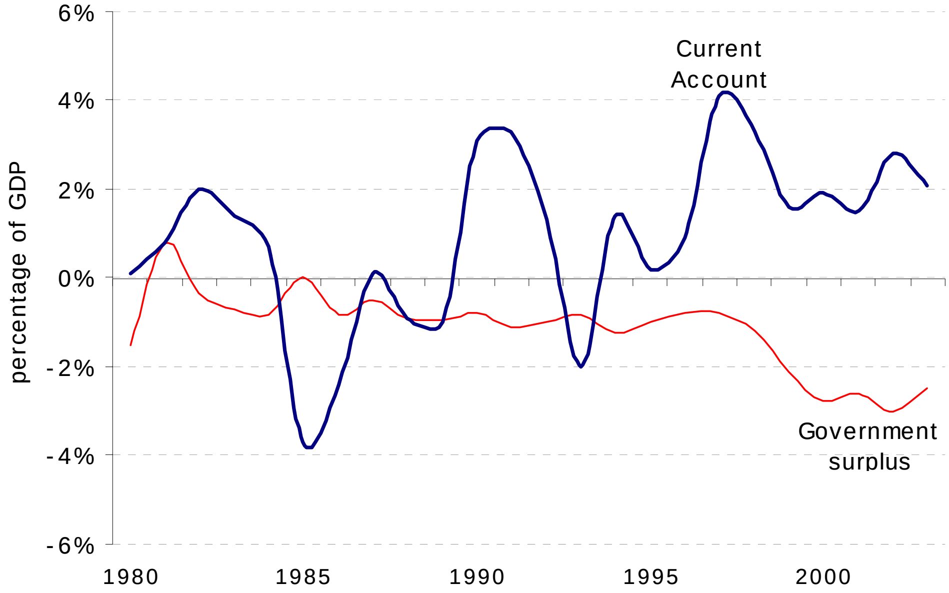
Source: CEIC

Graph A-4. Real and nominal effective exchange rates



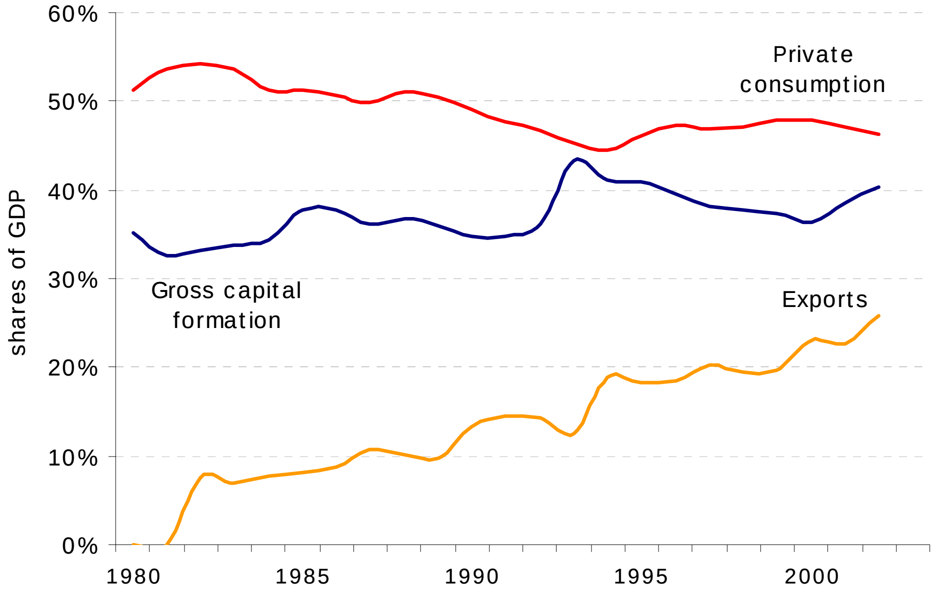
Source: IFS (IMF)

Graph A-5. Government balance and current account balance



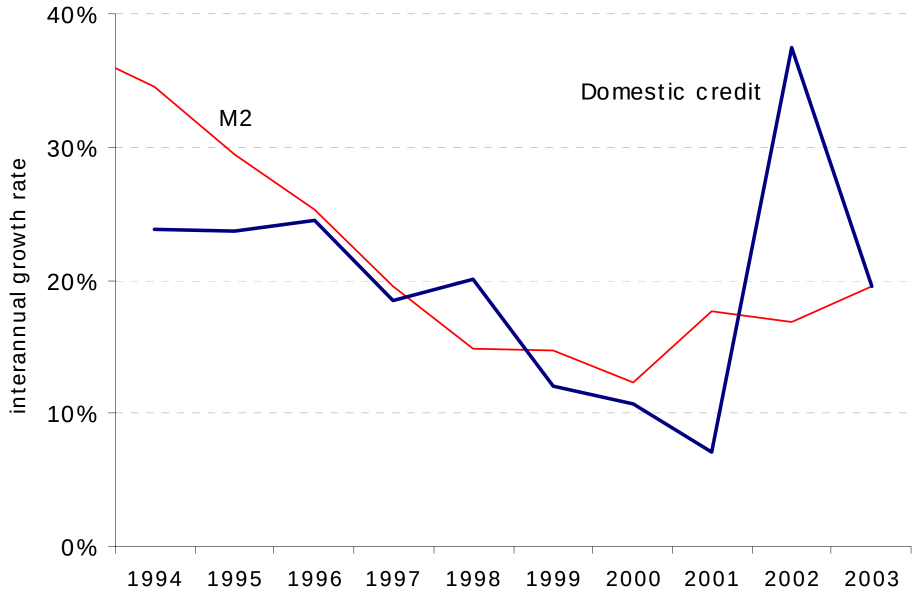
Source: CEIC

Graph A-6. Private consumption, gross capital formation and exports



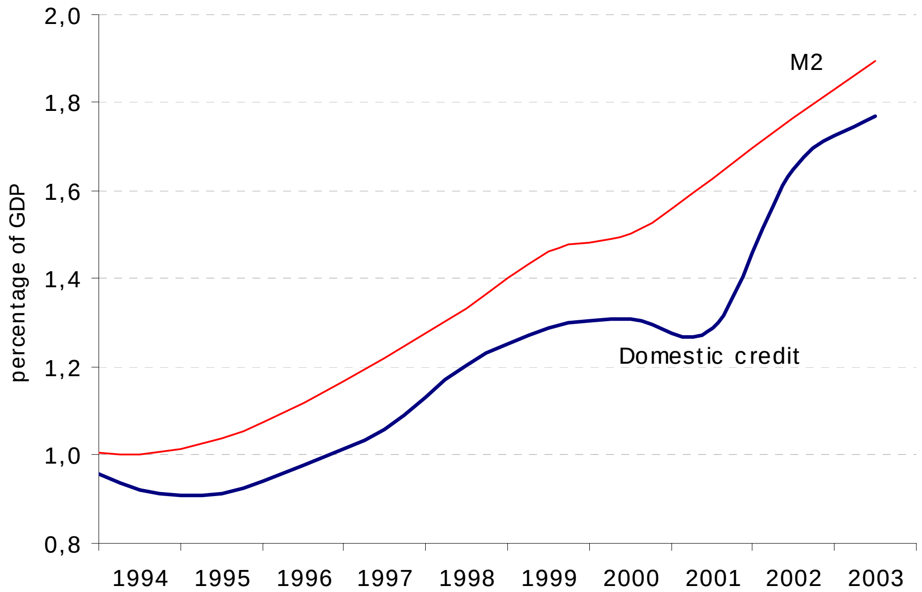
Source: CEIC

Graph A-7. M2 and domestic credit growth



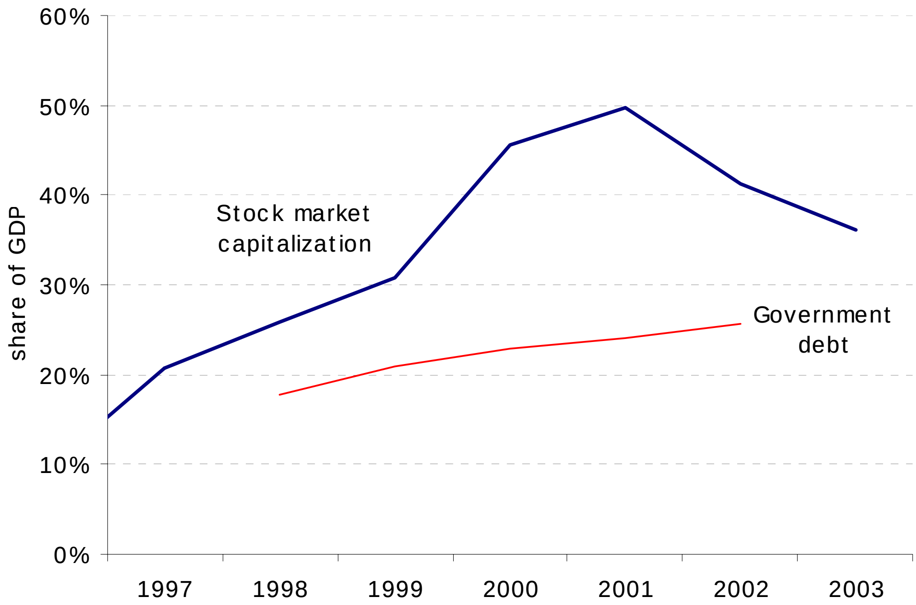
Source: IFS (IMF)

Graph A-8. M2 and domestic credit



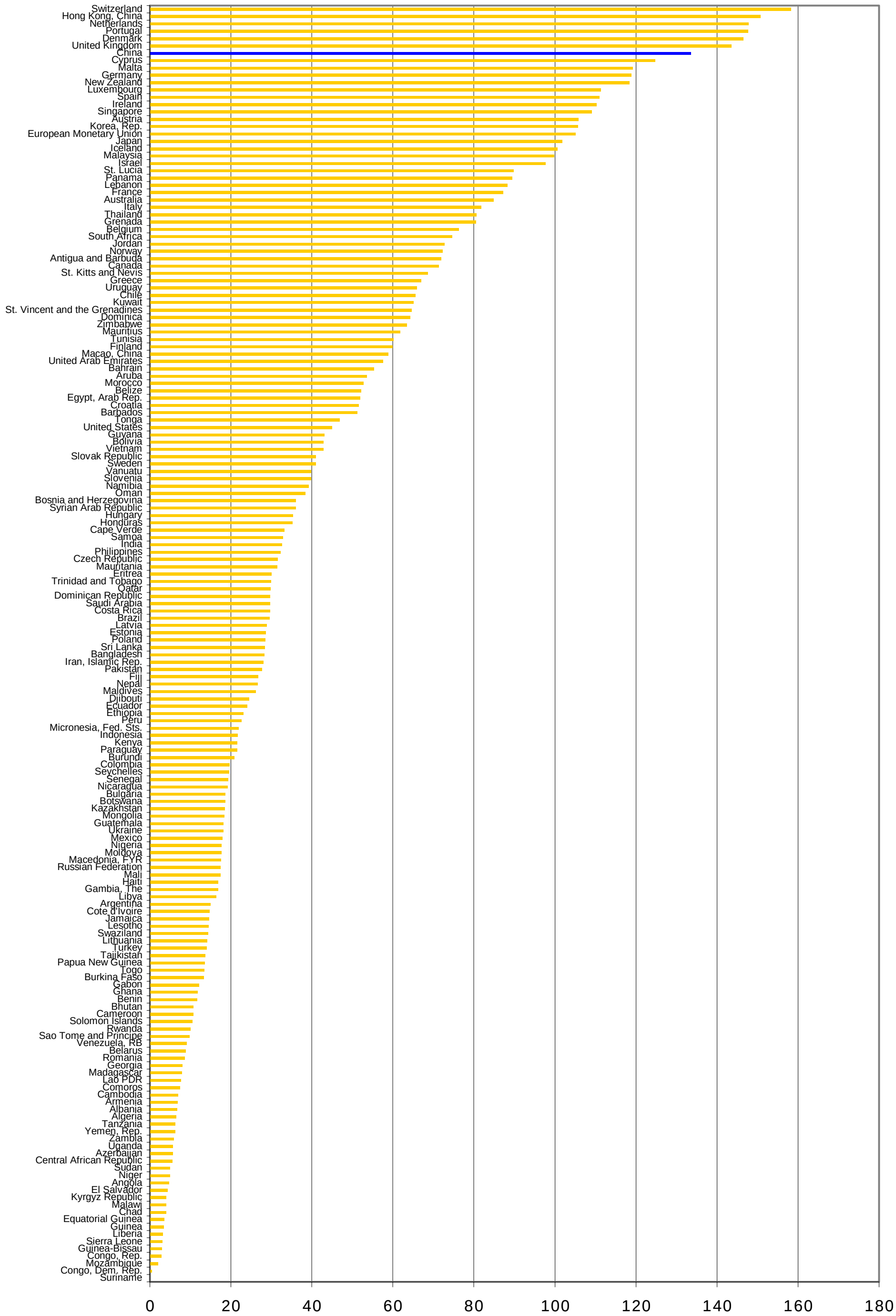
Source: IFS (IMF)

Graph A-9. Government bonds and stock market capitalization



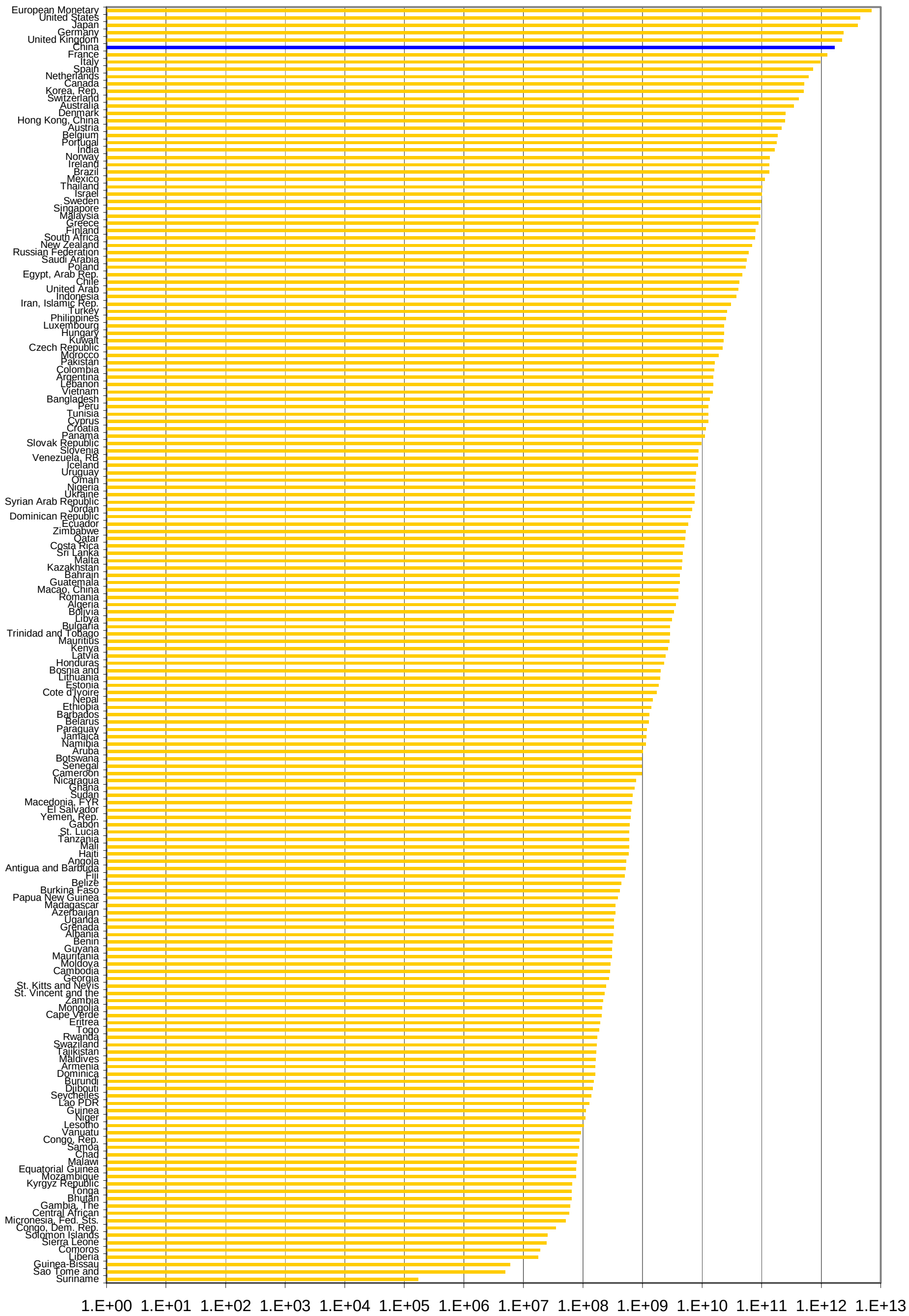
Sources: CEIC and IFS (IMF)

Graph A-10. International comparison of bank credit to the private sector, as a percentage of GDP



Source: IFS (IMF)

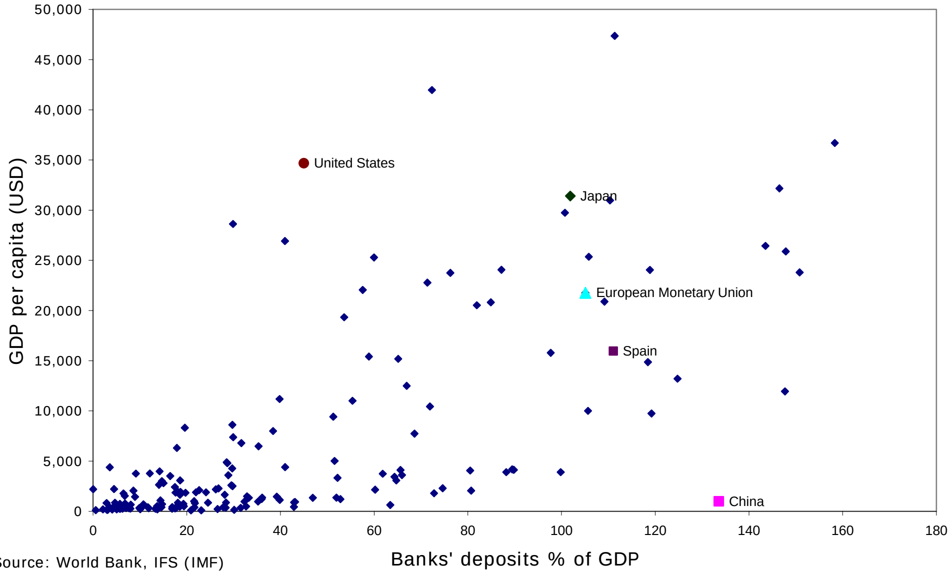
Graph A-11. International comparison of bank credit to the private sector, in USD



Logarithmic scale

Source: IFS (IMF)

Graph A-12. International comparison of GDP per capita versus banks' deposits GDP



Source: World Bank, IFS (IMF)

Table A-1. Selected Indicators of the performance of Chinese banks[21]

	1995	1996	1997	1998	1999	2000	2001	2002
Return on average assets (ROAA) (%)	0.47	0.48	0.47	0.24	0.21	0.26	0.22	0.22
State-owned commercial banks	0.27	0.27	0.19	0.09	0.13	0.22	0.16	0.18
Other Commercial banks	1.27	1.26	1.20	0.78	0.48	0.41	0.39	0.36
Joint Stock Commercial Banks	-	1.01	0.97	0.63	0.42	0.40	0.37	0.33
Other	-	1.27	1.59	1.03	0.58	0.43	0.46	0.47
Policy banks	0.02	0.08	-0.14	0.07	0.06	0.14	0.26	0.01
Return on average equity (ROAE) (%)	10.11	10.68	10.52	4.42	3.53	4.67	4.20	4.45
State-owned commercial banks	8.07	8.57	6.15	2.08	2.35	4.07	3.16	3.78
Other Commercial banks	17.16	17.64	17.02	11.13	7.28	6.90	8.00	9.24
Joint Stock Commercial Banks	-	17.62	17.18	11.62	8.64	9.26	9.31	9.23
Other	-	14.06	16.85	10.67	6.04	4.69	6.18	9.27
Policy banks	0.35	1.80	-3.02	1.40	1.21	2.97	4.99	0.23
Net interest margin (%)	1.91	3.10	2.17	2.09	1.91	2.23	1.91	1.93
State-owned commercial banks	2.09	2.59	2.47	2.47	2.07	2.35	1.98	2.02
Other Commercial banks	2.31	2.80	2.82	2.60	2.29	2.27	2.01	2.07
Joint Stock Commercial Banks	-	2.33	2.74	2.66	2.23	2.32	2.18	2.07
Other	-	2.65	2.97	2.50	2.39	2.18	1.57	2.06
Policy banks	0.26	6.44	-0.07	0.02	0.81	1.63	1.47	1.01
Cost to Income Ratio (%)	65.47	80.02	55.17	65.55	65.09	58.61	56.84	58.07
State-owned commercial banks	66.41	63.82	49.55	66.45	59.26	56.47	56.37	53.79
Other Commercial banks	47.15	51.74	49.78	60.14	71.07	64.59	54.90	53.31
Joint Stock Commercial Banks	-	52.93	53.45	61.68	62.78	57.82	54.45	53.98
Other	-	49.60	43.13	57.24	83.09	77.96	56.59	50.88
Policy banks	3.93	101.13	67.53	34.25	48.49	23.47	6.23	64.93
Equity / Total Assets (%)	4.61	4.33	4.56	6.03	5.67	5.51	5.16	4.53
State-owned commercial banks	3.29	3.11	3.15	5.61	5.28	5.32	5.04	4.59
Other Commercial banks	7.38	6.99	7.13	6.93	6.25	5.63	4.19	3.75
Joint Stock Commercial Banks	-	5.75	5.60	5.31	4.53	4.10	3.79	3.49
Other	-	9.03	9.78	9.63	9.50	8.79	5.59	4.67
Policy banks	4.53	4.70	4.60	4.73	4.59	4.72	5.98	2.81
Capital Funds / Liabilities (%)	4.84	4.53	4.78	6.42	6.01	5.83	5.44	4.75
State-owned commercial banks	3.40	3.21	3.26	5.94	5.57	5.62	5.31	4.81
Other Commercial banks	8.00	7.51	7.68	7.45	6.67	5.97	4.38	3.90
Joint Stock Commercial Banks	-	6.10	5.93	5.61	4.75	4.28	3.94	3.62
Other	-	9.93	10.83	10.65	10.50	9.64	5.92	4.90
Policy banks	4.74	4.93	4.82	4.97	4.81	4.96	6.36	2.90
Loan Loss Reserve / Gross Loans (%)	1.39	1.13	1.03	1.25	1.65	1.51	1.81	1.81
State-owned commercial banks	1.59	1.16	1.00	1.12	1.52	1.24	1.66	1.82
Other Commercial banks	1.79	1.69	1.72	2.28	3.53	3.97	2.94	2.40
Joint Stock Commercial Banks	-	0.88	0.98	1.54	3.17	4.30	3.56	2.73
Other	-	3.13	2.96	3.64	4.35	3.18	0.68	1.06
Policy banks	0.74	0.71	0.73	1.06	0.79	0.73	1.64	1.02
Loan Loss Provisions (USD millions)	13	454	2197	2957	3775	7062	10284	10324
State-owned commercial banks	0	402	2109	2409	3203	5565	7989	8798
Other Commercial banks	13	45	74	113	484	847	1015	1527
Joint Stock Commercial Banks	-	45	74	113	469	765	849	1135
Other	-	-	0	0	15	82	166	392
Policy banks	0	0	0	436	89	650	1281	0

Source: Bankscope

21. Bankscope is not an exhaustive database although the coverage of the banking system tends to be very large. In the case of China, it amounts more than 82% of the total bank assets.

Table A-2. Asset Structure of the Chinese Banking Sector

(as a percentage of total assets)

	1995	1996	1997	1998	1999	2000	2001	2002
Interbank assets (net) + call loans	6.0	9.5	9.1	7.7	7.9	7.6	8.4	8.2
State-owned commercial banks	8.1	11.3	10.6	8.4	8.2	7.6	8.3	8.4
Other Commercial banks	1.3	7.9	10.2	8.9	11.0	10.7	11.3	10.2
Joint Stock Commercial Banks	-	11.4	14.7	11.9	13.3	12.2	11.8	10.4
Other	-	2.2	2.4	3.9	6.6	7.8	9.8	9.2
Policy banks	3.2	3.5	2.2	2.0	2.1	1.3	0.7	2.3
Other liquid assets	23.8	17.2	15.1	13.4	12.2	10.8	7.6	6.3
State-owned commercial banks	23.5	16.9	15.1	13.2	11.8	10.1	7.6	5.8
Other Commercial banks	38.7	29.1	26.1	24.2	22.2	19.9	10.1	8.5
Joint Stock Commercial Banks	-	20.4	18.7	15.9	15.3	14.6	10.8	9.1
Other	-	43.7	38.7	38.0	35.2	30.9	7.3	6.4
Policy banks	6.1	2.2	1.4	1.3	0.6	0.5	0.8	1.5
Loans	55.8	59.3	62.6	62.2	59.8	57.5	57.3	58.8
State-owned commercial banks	52.4	57.6	60.7	61.1	57.6	55.9	56.8	57.9
Other Commercial banks	49.0	48.0	48.9	48.5	47.0	47.6	52.7	55.2
Joint Stock Commercial Banks	-	49.8	48.6	50.6	49.7	49.8	52.9	56.8
Other	-	44.9	49.3	44.8	41.9	42.9	52.1	49.8
Policy banks	85.7	88.7	93.2	89.7	92.2	89.2	81.7	93.5
Other risky assets	12.9	12.3	11.3	14.9	18.2	22.2	24.7	24.7
State-owned commercial banks	14.4	12.2	11.4	15.2	20.3	24.3	25.2	26.0
Other Commercial banks	10.0	14.1	13.7	17.2	18.2	20.3	24.3	24.8
Joint Stock Commercial Banks	-	17.6	16.8	20.2	19.9	21.8	23.0	22.5
Other	-	8.3	8.4	12.0	15.0	17.1	28.9	33.2
Policy banks	4.9	5.4	3.0	6.8	4.9	8.5	16.6	1.7
Fixed Assets	1.5	1.7	1.9	1.9	2.0	2.0	2.0	1.9
State-owned commercial banks	1.6	1.9	2.2	2.0	2.1	2.1	2.1	1.9
Other Commercial banks	0.9	0.9	1.2	1.3	1.6	1.5	1.6	1.3
Joint Stock Commercial Banks	-	0.9	1.1	1.3	1.7	1.6	1.5	1.3
Other	-	0.9	1.2	1.2	1.3	1.3	1.8	1.3
Policy banks	0.1	0.1	0.2	0.3	0.3	0.5	0.3	1.0

Source: Bankscope

Table A-3. Liability Structure of the Chinese Banking Sector

(as a percentage of total liabilities)

	1995	1996	1997	1998	1999	2000	2001	2002
Deposits	72.8	77.9	87.4	87.4	85.7	88.4	88.0	92.7
State-owned commercial banks	72.7	77.8	92.0	94.1	94.4	95.4	95.7	96.2
Other Commercial banks	83.4	89.4	92.5	92.3	83.1	83.8	83.4	82.6
Joint Stock Commercial Banks	-	86.3	90.4	90.3	77.6	79.2	81.6	81.7
Other	-	94.9	96.2	95.6	94.1	93.8	89.7	85.5
Policy banks	70.4	68.4	67.9	52.9	50.2	47.6	5.4	85.0
Borrowings	19.5	15.1	6.2	6.8	7.5	5.9	6.3	1.6
State-owned commercial banks	19.6	15.0	1.3	0.8	0.8	0.6	0.6	0.4
Other Commercial banks	8.2	3.5	0.7	0.7	1.8	1.7	1.8	2.5
Joint Stock Commercial Banks	-	4.6	1.0	0.9	2.1	1.8	0.7	0.8
Other	-	1.7	0.3	0.2	1.1	1.5	5.6	8.6
Policy banks	22.9	25.6	28.5	40.2	45.2	49.1	90.2	12.1
Capital plus reserves	4.8	4.5	4.8	6.4	6.0	5.8	5.4	4.7
State-owned commercial banks	3.4	3.2	3.3	5.9	5.6	5.6	5.3	4.8
Other Commercial banks	8.0	7.5	7.7	7.4	6.7	6.0	4.4	3.9
Joint Stock Commercial Banks	-	6.1	5.9	5.6	4.7	4.3	3.9	3.6
Other	-	9.9	10.8	10.7	10.5	9.6	5.9	4.9
Policy banks	4.7	4.9	4.8	5.0	4.8	5.0	6.4	2.9

Source: Bankscope

Table A-4. Income and Expenditure Structure of the Chinese Banking Sector

(as a percentage of total income and expenditure respectively)

	1995	1996	1997	1998	1999	2000	2001	2002
Interest income	89.7	81.4	90.9	91.5	92.2	93.3	92.6	89.1
State-owned commercial banks	95.9	94.7	96.5	96.7	95.1	95.5	94.6	93.4
Other Commercial banks	85.5	86.0	87.2	90.8	94.2	94.6	95.4	95.2
Joint Stock Commercial Banks	-	82.9	83.5	87.9	95.9	95.2	95.0	94.7
Other	-	91.2	92.3	94.2	92.2	93.8	96.8	96.9
Policy banks	98.8	50.5	88.4	85.8	95.4	98.4	97.7	97.5
Commission Income	1.9	2.3	2.4	2.5	4.2	4.3	4.4	4.3
State-owned commercial banks	2.3	2.8	2.5	2.8	3.6	4.2	4.8	4.8
Other Commercial banks	1.3	4.2	4.5	3.6	4.1	4.4	4.0	4.0
Joint Stock Commercial Banks	-	2.0	2.5	2.1	2.9	3.6	4.4	4.7
Other	-	7.9	7.4	5.5	5.7	5.7	2.4	2.0
Policy banks	1.2	0.2	0.3	0.7	4.5	1.3	1.7	2.4
Other Income	8.4	16.3	6.7	6.0	3.6	2.4	3.0	6.5
State-owned commercial banks	1.8	2.5	1.0	0.5	1.2	0.4	0.7	1.8
Other Commercial banks	13.2	9.8	8.3	5.6	1.6	0.9	0.7	0.8
Joint Stock Commercial Banks	-	15.2	14.0	10.0	1.2	1.2	0.6	0.7
Other	-	0.9	0.3	0.3	2.1	0.5	0.9	1.0
Policy banks	0.0	49.3	11.3	13.4	0.1	0.2	0.6	0.0
Interest Expenditure	74.8	60.1	75.8	70.7	65.5	63.3	54.4	45.4
State-owned commercial banks	79.5	77.7	76.4	68.6	64.9	64.4	54.5	46.0
Other Commercial banks	72.8	70.6	70.5	68.0	61.1	58.8	54.4	48.8
Joint Stock Commercial Banks	-	68.6	64.4	59.4	59.1	54.7	53.1	47.5
Other	-	73.9	78.9	78.0	63.4	64.4	58.9	53.1
Policy banks	97.3	16.7	92.2	91.2	89.3	81.1	70.0	78.2
Personnel Expenditure	-	-	0.9	1.1	1.7	2.9	3.9	4.8
State-owned commercial banks	-	-	1.5	1.6	2.5	3.9	4.8	6.1
Other Commercial banks	-	-	0.1	0.2	0.7	0.9	2.2	2.4
Joint Stock Commercial Banks	-	-	0.2	0.2	1.3	1.5	2.8	3.2
Other	-	-	-	-	-	-	-	-
Policy banks	-	-	-	-	-	-	-	-
Other Expenditure (1)	25.2	39.9	23.3	28.3	32.7	33.8	41.7	49.7
State-owned commercial banks	20.5	22.3	22.1	29.8	32.6	31.7	40.6	47.9
Other Commercial banks	27.2	29.4	29.4	31.8	38.2	40.4	43.4	48.8
Joint Stock Commercial Banks	-	31.4	35.3	40.4	39.6	43.8	44.1	49.3
Other	-	26.1	21.1	22.0	36.6	35.6	41.1	46.9
Policy banks	2.7	83.3	7.8	8.8	10.7	18.9	30.0	21.8

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

Source: Bankscope

PUBLICACIONES DEL BANCO DE ESPAÑA

OCCASIONAL PAPERS

0301 GIANLUCA CAPORELLO AND AGUSTÍN MARAVALL: A tool for quality control of time series data. Program TERROR.

0302 MARIO IZQUIERDO, ESTHER MORAL AND ALBERTO URTASUN: Collective bargaining in Spain: an individual data analysis. (The Spanish original of this publication has the same number.)

0303 ESTHER GORDO, MARÍA GIL Y MIGUEL PÉREZ: Los efectos de la integración económica sobre la especialización y distribución geográfica de la actividad industrial en los países de la UE.

0304 ALBERTO CABRERO, CARLOS CHULIÁ AND ANTONIO MILLARUELO: An assessment of macroeconomic divergences in the euro area. (The Spanish original of this publication has the same number.)

0305 ALICIA GARCÍA HERRERO Y CÉSAR MARTÍN MACHUCA: La política monetaria en Japón: lecciones a extraer en la comparación con la de los EEUU.

0306 ESTHER MORAL Y SAMUEL HURTADO: Evolución de la calidad del factor trabajo en España.

0307 JOSÉ LUIS MALO DE MOLINA: Una visión macroeconómica de los veinticinco años de vigencia de la Constitución Española.

0308 ALICIA GARCÍA HERRERO AND DANIEL NAVIA SIMÓN: Determinants and impact of financial sector FDI to emerging economies: a home country's perspective.

0309 JOSÉ MANUEL GONZÁLEZ-MÍNGUEZ, PABLO HERNÁNDEZ DE COS AND ANA DEL RÍO: An analysis of the impact of GDP revisions on cyclically adjusted budget balances (CABS).

0401 J. RAMÓN MARTÍNEZ-RESANO: Central Bank financial independence.

0402 JOSÉ LUIS MALO DE MOLINA AND FERNANDO RESTOY: Recent trends in corporate and household balance sheets in Spain: macroeconomic implications. (The Spanish original of this publication has the same number.)

0403 ESTHER GORDO, ESTHER MORAL Y MIGUEL PÉREZ: Algunas implicaciones de la ampliación de la UE para la economía española.

0404 LUIS JULIÁN ÁLVAREZ GONZÁLEZ, PILAR CUADRADO SALINAS, JAVIER JAREÑO MORAGO E ISABEL SÁNCHEZ GARCÍA: El impacto de la puesta en circulación del euro sobre los precios de consumo.

0405 ÁNGEL ESTRADA, PABLO HERNÁNDEZ DE COS Y JAVIER JAREÑO: Una estimación del crecimiento potencial de la economía española.

0406 ALICIA GARCÍA-HERRERO AND DANIEL SANTABÁRBARA: Where is the Chinese banking system going with the ongoing reform?

BANCO DE ESPAÑA	Unidad de Publicaciones Alcalá, 522; 28027 Madrid Teléfono +34 91 338 6363. Fax +34 91 338 6488 *e-mail:* Publicaciones@bde.es www.bde.es