

Ferri, Giovanni

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## Banking in the People's Republic of China: Are new tigers supplanting old mammoths?

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## **ADB Institute Discussion Paper No. 35**

### **Banking in the People's Republic of China: Are New Tigers Supplanting Old Mammoths?**

**Giovanni Ferri**

**September 2005**

Giovanni Ferri is Professor of Economics at University of Bari, Italy. The views expressed in this paper are the views of the authors and do not necessarily reflect the view or policies of the Asian Development Bank Institute.

# Banking in the People's Republic of China: Are New Tigers Supplanting Old Mammoths

Giovanni Ferri\*

## Introduction: Why the People's Republic of China Needs Better Banking

On Friday April 22<sup>nd</sup> 2005 the Chinese government intervened with 15 billion dollars to save the Industrial and Construction Bank of China (ICBC), the largest bank of the country, in a liquidity crisis. Such intervention followed the injection, at the end of 2003, of 22.5 billion dollars in support of other two state owned banks: Bank of China and China Construction Bank.<sup>1</sup>

Why is there a banking crisis in an economy which has been growing at an average rate of 9% over the last 25 years? Usually, we expect a banking crisis to happen when the entire economy of that country suffers a crisis and the Chinese case seems a puzzle. In reality, this puzzle is only apparent, not actual. To grasp this, we need to go back to the special features of the People's Republic of China (PRC)'s transition. This helps us understand how strong growth of the economy and a banking crisis are not contradictory but the natural outcome of policy choices. Differently from the experience of most formerly planned economies and well before the others followed their "shock therapy" to the market, opted for a gradual transition strategy. As most economists now concur, such a choice was far-sighted because it obtained two major results, unavailable to the shock therapy: (i) it avoided the acute tensions (e.g. mass unemployment and destructive disorder of productive processes) linked to the abrupt phasing out of state enterprises; (ii) it allowed some institution building before privatizing some key sectors of the economy, where otherwise PRC risked moving from the problems of state ownership to those of private monopoly (Stiglitz, 2002; Black and Tarassova, 2002; Lau, Qian and Roland, 2000). The gradual transition allowed PRC to keep its robust growth while rooting the new domestic private economy (representing now beyond 75% of GDP) in international production networks.

Nevertheless, there was a darker side of the story: State Owned Enterprises (SOEs) survived the plan economy, thanks to the gradual transition, and kept making losses (Oppen, 2001). The four big State Owned Banks (SOBs) took the bulk of those large SOE losses. It is now clear that the unhealthy link between SOEs and SOBs is the chief concern over the future of PRC's economic miracle. Indeed, bringing better banking to PRC is needed on two main grounds. First, to overcome the macroeconomic threat to continued growth coming from the potential systemic instability associated with the fragility of SOBs. Second, to deliver a much needed improvement in the allocation of loans to enterprises. The big question is how to achieve better banking in PRC. A preliminary aspect concerns the role of foreign banks. Even though WTO rules will gradually allow foreign banks to acquire full operational status, the size and complexity of the country make it very unlikely that foreign banks by themselves can solve PRC's banking problem. In other words, as shown by the cases of other big countries, foreign banks can promote competition and better banking indirectly but do not usually take a large share of the market in a big country. This implies that better banking in PRC has to be found at home.

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\* Department of Economics, University of Bari – Via C. Rosalba 53- 70124 Bari (Italy).

E-mail address: [g.ferri@dse.uniba.it](mailto:g.ferri@dse.uniba.it)

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<sup>1</sup> ICBC is about one-quarter of the Chinese banking system's total assets and those 15 billion dollars represent beyond 2% of ICBC's assets and above 1% of PRC's GDP. An analogous percentage on total assets applied to 45 billion dollars in support of Bank of China and China Construction Bank, amounting to 4% of GDP. Foreign currency reserves coming from the People's Bank of China were used for the purpose against banks' equity. See IMF (2004) for an evaluation of the December 2003 intervention and the associated reform steps.

In this respect, we will show that PRC's banking system is not monolithic: on the side of the problematic "Old Mammoths" (as we label the SOBs), a breed of dynamic "New Tigers" (Joint Stock Banks and City Commercial Banks) is rapidly emerging. These banks show clearly better performance, possibly because the state is not their single shareholder as it is for the SOBs. We conclude that even the New Tigers will not be able by themselves to solve PRC's banking problem. As we will show, part of their success seems due not so much to their better corporate governance, as much as to the fact that their business is concentrated in the Eastern belt, the most developed area of PRC. Thus, solving PRC's banking problem goes back to dealing with the SOBs. Even though the Chinese authorities show activism to tackle the issue, the prospects may still be rather murky.

The rest of this paper is structured as follows. In the second section we review the negative impact of state ownership on the corporate governance of banks. We also discuss why the contribution of foreign banks may be only complementary to solving the deep rooted problems of PRC's banks. Then, we provide details on the rapid growth of the New Tigers, the new breed of Chinese banks, also giving a comparison of performance between them and the Old Mammoths (the SOBs). This leads us to ask whether the New Tigers offer PRC an option to grow out of its banking problem. Although extrapolating the New Tigers' growth might lead one to answer that they are rapidly supplanting the Old Mammoths, we posit that an accurate answer to this question requires carefully evaluating the sources of the New Tigers' better performance. Specifically, we need to understand whether this is caused by better corporate governance only, or whether and to what extent the New Tigers are better simply because they do business in the most developed area of PRC, thus through their location avoiding the economic difficulties the SOBs have to live with. The third section sheds light on this issue. We report on the results of a field survey that offers evidence on how far, bank performance of the New Tigers differs depending on the level of economic development of the geographical area where banks do their business. This is exactly the rationale behind looking at City Commercial Banks (CCBs), one of the most vibrant segments of the New Tigers, as these are banks located widely across the country. By focusing on 20 CCBs located in three provinces of PRC featuring diverse levels of economic development, we hope to keep corporate governance (relatively) constant and can, thus, ascribe any significant difference in performance across the provinces to their relative underlying prosperity. After describing the structure of the survey, we show its main results confirming that CCB performance is systematically and positively related to the level of economic development in the provinces in which they are located. Furthermore, the richness of the information obtained through the survey allows us to gain additional insights into other factors affecting bank performance in PRC. Finally, a fourth section summarizes our main findings and briefly discusses policy implications.

## **Problems with the *Old Mammoths* and Growth of the *New Tigers*<sup>2</sup>**

### *The negative impact of state ownership on the corporate governance of banks*

While PRC experienced its unique economic miracle, featuring average annual growth rates of about 9% over some 25 years, not all sectors progressed at the same pace, possibly providing bottlenecks for future growth. Progress has been slowest in the service sector (Dutta, 2005). And within the service sector advancement has been most sluggish in the financial sector. Much of the issue hinges on the link between SOBs and SOEs has received much attention and this raises the important question of the negative impact of state ownership on the corporate governance of banks.

Various papers by La Porta et al. (La Porta et al., 1997, 1998) analyze the nexus between institutional setup and the functioning and development of financial markets. In general, they find that the degree of investor protection is crucial in this respect: the degree

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<sup>2</sup> Some of the arguments presented in this Section were already developed in Ferri (2003).

of investor protection is at a minimum in countries with French origin law, while it is at a maximum in countries in the tradition of the common law, principally the UK and the US. Obviously this introduces also the role of the state, as the state itself is always the key actor in drawing up market rules, from which investor protection derives. Indeed, the authors show that, comparing countries, as state ownership increases investor protection and financial market development decrease. Further according to Pagano and Volpin (2002) the degree of investor protection is negatively correlated with the degree of protection in the labor market. They show that “corporatist” economies (especially with coalition governments) deliver low investor protection in exchange for high labor protection while, on the contrary, in “non-corporatist” economies they find high investor protection and low labor protection. Finally, the more widespread is shareholding, the higher is the level of investor protection chosen by the government, that is there is a “lock-in” effect of privatizations (Perotti and van Oijen, 1999). According to Rajan and Zingales (2001) choices by “interest groups” hinder financial market development, while ruling governments may oppose financial market development since, by raising competition this limits their discretion and their power. They predict that government opposition to financial market development is lower if the economy is open to trade and to capital flows.

What is more relevant here is that in a later paper, La Porta, et al. (2002) directly addresses the issue of government ownership of banks. The authors maintain this is a very special case to verify the “political” theories of the distortions induced by state intervention in financial markets. Their main finding is that, again comparing countries, after state ownership of banks increases, the growth of financial markets, of per capita income and of productivity are all lowered. Thus, the general consensus in the literature is that state ownership of banks is detrimental to bank efficiency, to the development of financial markets and, through these channels, also to economic growth.

In the context of PRC various authors have shed light on the negative impact of state ownership on bank performance. We cite just a few of them. Using city-level data over the early period of 1989-1991, Wei and Wang (1997) find evidence that PRC’s bank loans favored state-owned industrial enterprises and argued that such lending bias diminished the effectiveness of other measures designed to promote the growth of non-state sectors or to induce SOEs to restructure. In line with this, Brandt and Li (2003) find that as a result of discrimination, private firms resort to more expensive trade credits. Using provincial data from 1991 to 1997, Park and Sehn (2001) show that the financial reforms of the mid-1990s were ineffective at lowering policy lending by SOBs, thus negatively impinging on these banks’ performance, while SOB lending did not respond to economic fundamentals. Moreno (2002) points out that banks in PRC traditionally met government policy goals by financing the operations of SOEs, regardless of their profitability or risk, and that while bank exposure to SOEs has tended to decline over time, SOEs still accounted for over one-half of outstanding bank credit in 2000 and that exposure to poor-performing SOEs has had a major impact on bank performance. Chang (2003) argues that PRC’s (mostly unprofitable) SOEs have been kept afloat with loans from the SOBs, while SOBs cannot force SOEs to pay back their loans without causing their collapse and the inevitable political crisis that would ensue, hence SOBs have continued to lend to SOEs. This fact is confirmed by a survey performed by the People’s Bank of China (PBOC) in 2003, finding that of the total non-performing loans (NPLs) of SOBs, 30% was due to intervention by the central and local governments, 30% resulted from mandatory credit support to SOEs, 10% arose from the poor legal environment and weak law enforcement in some regions, and 10% stemmed from industrial restructuring in some enterprises, thus leaving only 20% that originated from the operational decisions of the SOBs themselves (Zhou, 2004a). Cull and Xu (2000) detect signs of SOB loans going increasingly to unproductive SOEs during the 1990s, when these banks increasingly assumed bailout responsibility (Cull and Xu, 2003). A less alarmist view is held by Gordon (2003), who argues a banking crisis might materialize in PRC only with free private capital movements.

Studying PRC’s experience with the asset management corporations (AMCs) introduced to address SOBs’ NPL problem, Ma and Fung (2002) conclude that, while posing

significant quasi-fiscal liabilities, their contribution to the resolution of the NPL problem was only limited. In agreement Bonin and Huang (2001) also criticize the design of these AMC's. Less unfavorable views are held by Zhou (2004b) and also by IMF (2004).

*Foreign banks cannot be the whole answer: a home solution is needed for better banking*

Can foreign banks help bring better banking to PRC? Answers are generally positive, but the next issue is to what extent foreign banks can help PRC. The economic literature holds that the entry of foreign banks benefits emerging economies mostly because foreign banks are likely to be more efficient (and more independent) than domestic banks and, thus, they foster virtuous competition for the recipient banking systems (Claessens, et al., 2001; Focarelli and Pozzolo, 2001; Hawkins and Milhaljek, 2001). Furthermore, it is often argued that the retail entry by foreign banks is more desirable than their wholesale entry, which might even channel to the country "hot money" and favor pro-cyclical swings in capital inflows. Foreign bank penetration may also facilitate FDI inflows.

In relation to PRC Liu (2004) argues that the sequencing in terms of entry of foreign banks adopted by PRC has been able to avoid some of the problems observed in other countries, where a rapid entry of foreign banks has been associated with excessively rapid growth in overall bank lending fuelling speculative excesses. Ma and McCauley (2004) show that, in spite of the fact that PRC's capital account is still closed, interest rate differentials seem to affect the monthly variation in the fraction of foreign currency bank deposits. In their interpretation, this suggests that, behind the official ban on capital outflows, PRC's capital account is already integrated to some extent. They also stress that the non-negligible holding of US dollar deposits by Chinese nationals indicates a more internationalized banking system than conventionally thought. Studying inward FDI to two regions of PRC, He and Gray (2001) find that FDI to each region by non-financial corporations increases sharply following FDI to that region by commercial banks. They argue that this evidence is consistent with two explanations. First, that the newly available expertise in the international financial system allows multinational firms to invest with the assurance that they will have a sophisticated capability to hedge risks. Second, that, since the financial sector is a sensitive sector, permission for multinational banks to enter is a sign of a commitment to a policy of open development by that region.

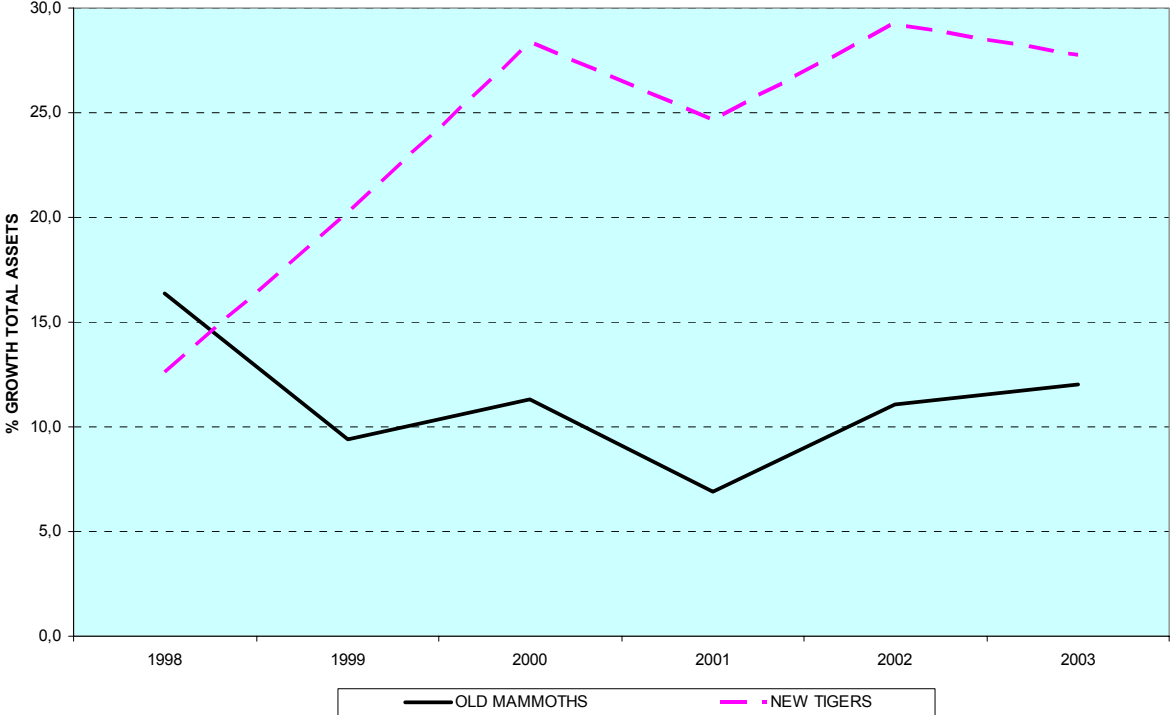
Foreign banks in PRC were initially limited to doing business only in a few cities and to providing foreign currency transactions to foreign companies operating in the country. Since April 2002 some foreign banks were allowed to offer foreign currency transactions to Chinese nationals and firms. From December 2003, the government allowed foreign banks to provide intermediation services in yuan to Chinese firms in 13 cities, extended to four further cities at the end of 2004. Presently, only 84 of the 191 foreign banks operating in PRC hold a license to do business in yuan, but their local business is disadvantaged by the lack of cheap retail deposit funding and by the limits to inter-bank funding (Huang, 2002). According to the WTO agreement, only by 2007 will foreign banks be fully allowed to do business in yuan. However, red tape to obtain licenses and other remaining obstacles may significantly limit the ability of foreign banks to develop retail branching. For instance, foreign banks are required to have had a representative office for three years before they can open a branch, long times are required for them to expand branch networks and they face capital requirement levels that are high by international standards.

In practice, foreign bank entry to PRC is still too recent and limited to make it possible to assess its effects. For instance, it is clearly the case that the few Chinese banks where foreign banks have an ownership share are among the best performing, but it is not clear whether we can draw a causal link. In other words, have these banks significantly improved their performance after the advent of foreign participation or were they high performers already?

Furthermore, the extent to which foreign banks can play a role toward better banking in PRC may be limited by two additional considerations. As argued by Bonin and Huang

(2002), foreign bank competition could mainly be in the form of taking wealthy and profitable clients away from local banks, while foreign banks might shy away from building matching networks in the short-term. In addition, as shown in Ferri (2003), the extent of foreign bank penetration is smaller in larger-sized countries. Arguably, this depends on the fact that even the largest banks find it unpalatable to concentrate their risks too much, which could happen should they take a high share in a very big country.

**Figure 1. Annual rate of growth of total assets: Old Mammoths vs. New Tigers**



Source: Our computations on data derived from Bankscope.

These considerations suggest that the potential for foreign bank penetration in PRC should not be exaggerated. Thus, though it is reasonable to expect that foreign banks' role will be key in various respect (from risk management, to competition, to investment banking), better banking in PRC has to be found at home. In this sense, considering that by the side of the problematic "Old Mammoths" (the SOBs), a breed of dynamic "New Tigers" is growing quickly, it is important to focus on the latter.

### *The New Tigers grow intensely and outperform the Old Mammoths*

The New Tigers are growing very rapidly.<sup>3</sup> Even though truly private commercial banks have been absent from PRC, and in spite of belonging to different institutional categories, the New Tigers share a common trait distinguishing them from the SOBs. Contrary to the situation of the SOBs, which have the state as the single shareholder, the New Tigers have a plurality of shareholders. Some of these shareholders may be themselves public sector shareholders, being part either of the public administration or of the SOE system, but none of them is in the position of a single shareholder in any of the New Tigers. As argued elsewhere,<sup>4</sup> the plurality of shareholders may be important in reducing political interference in a bank's business, thus delivering better corporate governance and better performance.

This conjecture is consistent with what is observed over the years. Namely, the New Tigers are reducing more and more the SOBs' market share, and also the former visibly outperform the latter by conventional indicators. Between 1998 and 2003 the average annual rate of growth of total assets was 11.2% for the SOBs and 23.8% for the New Tigers and the gap became larger between the first sub-period 1997-2000 (12.3 against 20.4%) and the second one 2000-2003 (10.0 against 27.2%; Figure 1). This gap produced a significant erosion in SOBs' market share: over this period they lost 10.5% of the market, whilst the share of the New Tigers almost doubled from 12.8 to 23.3% (Figure 2).<sup>5</sup>

Even more importantly, the New Tigers made such significant gains of market share while achieving much higher returns than the Old Mammoths. Indeed, between 1997 and 2003 the ROA (Return on Assets) of the SOBs halved from the poor 0.15% to 0.077%, while the New Tigers, though suffering a reduction, managed to keep their ROA at about 0.50%, a level which is comparable to that observed for the banking systems of developed countries (Figure 3). A similar indication may be derived looking at the New Tigers' ability to generate remuneration on their own capital: between 1997 and 2003, in spite of their low capitalization, SOBs' ROE (Return on Equity) dropped from 4.3 to 1.6% while, though reducing over time as well, in 2003 the ROE for the New Tigers stood at about 8%, a level not far from that typical of developed countries.

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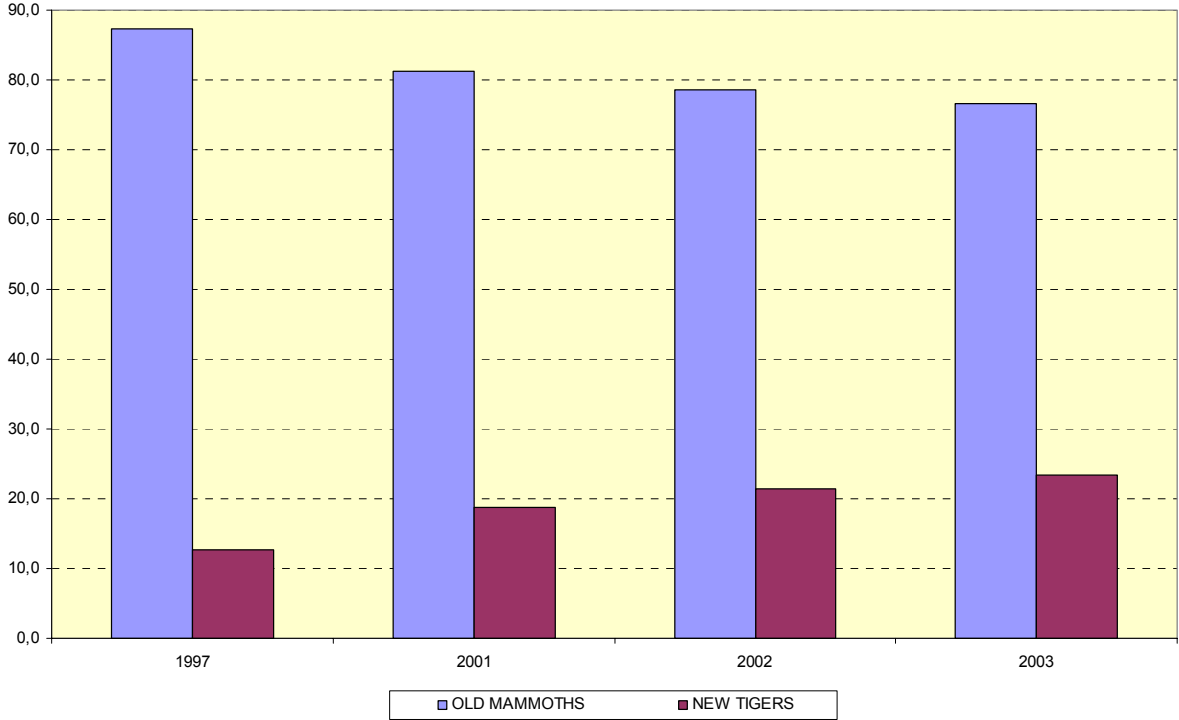
<sup>3</sup> Depending on the availability of data on Bankscope, we include in the group of the New Tigers 35 banks whose size differs greatly: Bank of Communications, China International Trust & Investment Corporation, China Merchants Bank, China Everbright Bank, China Minsheng Banking Corporation, Hua Xia Bank, Fujian Industrial Bank, Ping An Bank, Shenzhen RCCs, Bank International Ningbo, First Sino Bank, Qingdao International Bank, Business Development Bank, Chongqing Commercial Bank, Shandong International Trust & Investment Corporation, Guandong Development Bank, Shanghai Pudong Development Bank, Shenzhen Devlpmnt Bnk, Xiamen International Bank. To this Bank of Shanghai, Beijing CCB, Tianjin CCB, Shenzhen CB, Hangzhou CCB, Changsha CCB, Chengdu CCB, Jinan CCB, Nanchang CCB, Nanjing CCB, Ningbo CB, Wuhan UCB, Wuxi CCB, Xi'an CCB, Xiamen CCB, Zibo CCB. The last 16 of these 35 banks are City Commercial Banks (CCBs), the type of banks we will analyze later, while the other 19 are assorted across the other categories.

<sup>4</sup> See, among others, Ferri (2003), Liu (2002).

<sup>5</sup> We measure market shares here on the sum of the SOBs plus the New Tigers, thus focusing on commercial banks and excluding the postal system and policy banks.

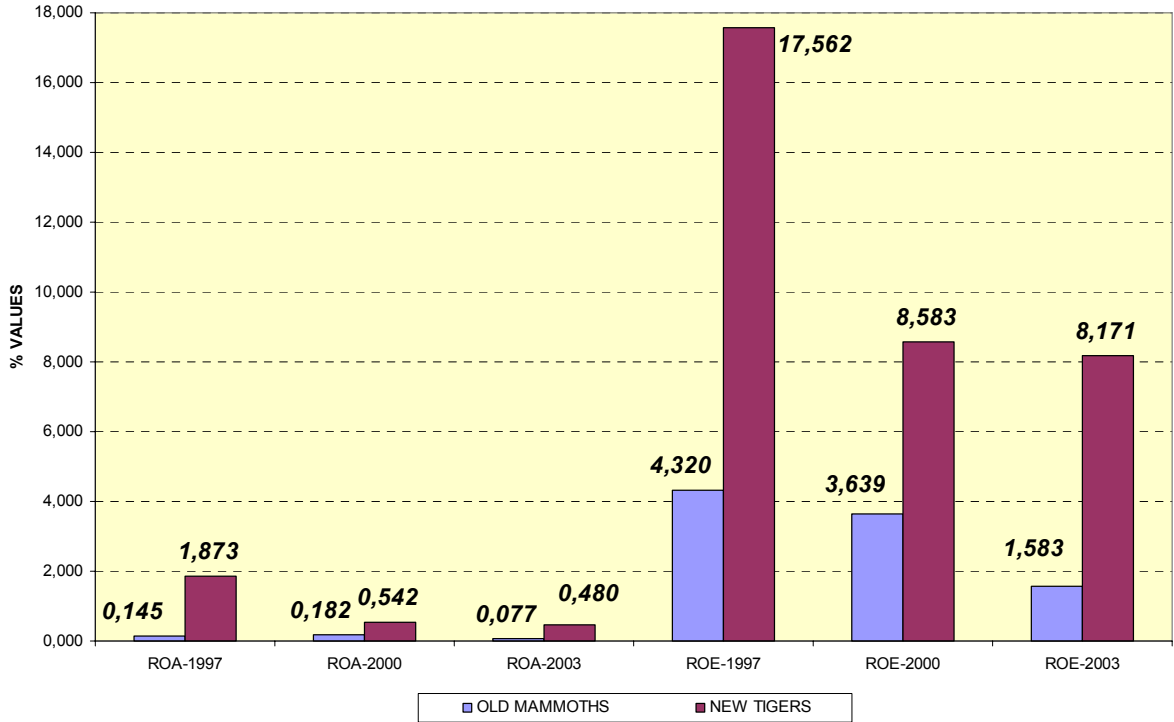


**Figure 2. Percentage market share of the *Old Mammoths* vs. the *New Tigers***



Source: Our computations on data for total assets derived from Bankscope.

**Figure 3. ROA and ROE: *Old Mammoths* vs. *New Tigers***



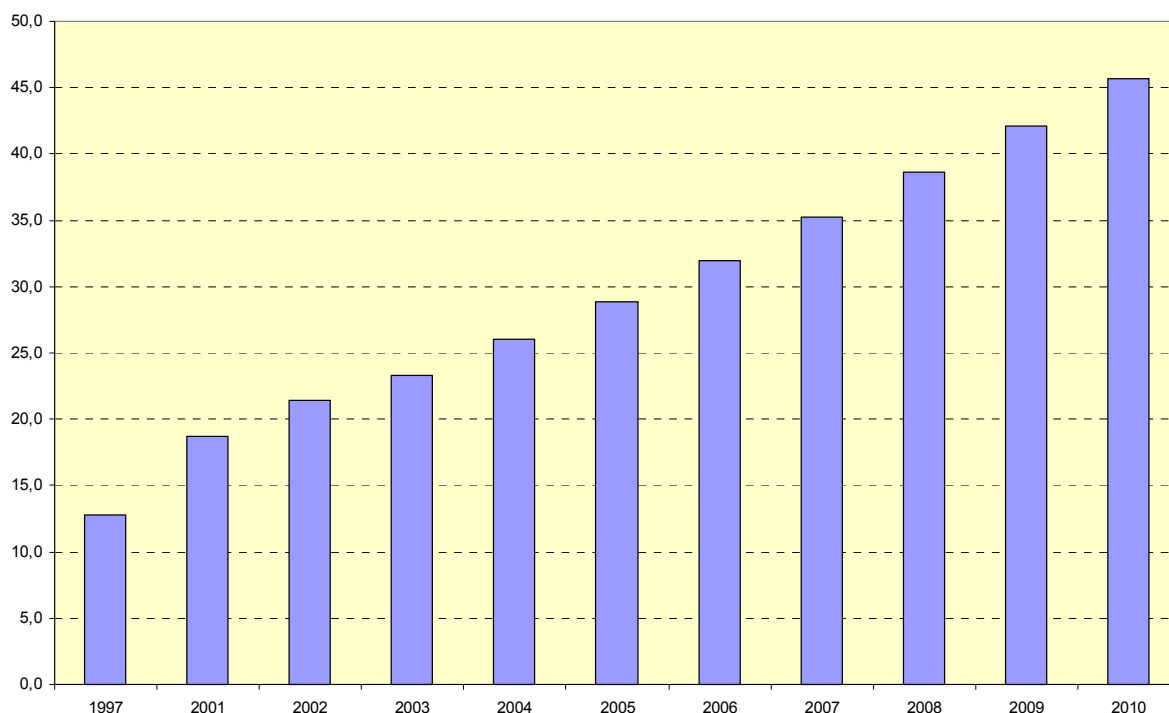
Source: Our computations on data derived from Bankscope.

### *Do the New Tigers offer PRC a “growing out” option?*

In light of their growing market share coupled with better performance, it seems reasonable to ask whether the New Tigers are effectively supplanting the Old Mammoths. And more broadly, do the New Tigers offer PRC a “growing out” option to overcome the difficulties in restructuring its Old Mammoths<sup>6</sup> and, through this, bring better banking to PRC?

There are two answers to this question. The first answer, somewhat mechanical and unsophisticated, may be derived through a simple forecasting exercise. In Figure 4 we report the forecast market share of the New Tigers up to 2010 assuming that they keep growing at the rate experienced on average over 2000-2003 (27.2%), while the SOBs continue expanding at the much lower average rate they achieved over the same period (10.0%). This forecasting exercise is naïve in that it merely projects past trends to the future.<sup>7</sup> It emerges that, under these hypotheses, the New Tigers could reach a market share above 45% by 2010 (Figure 4). Should this come about, then one could deem that PRC’s banking problem would be greatly reduced (if not half solved) in just five years from now.

**Figure 4. Percentage market share of the New Tigers: Growing out forecast exercise**



Source: Our computations on data derived from Bankscope.

However, even though the scenario presented is not unrealistic from a macroeconomic perspective, there is no guarantee that it is also based on solid economic reasoning. To be sure, the continuation of the astonishing growth they experienced over the last few years postulates that the New Tigers really enjoy a competitive edge across the

<sup>6</sup> By the same token, it has been observed that, in the experience of transition economies, more progress is achieved through the entry of new banks rather than through rehabilitating old SOBs (Claessens, 1998).

<sup>7</sup> The only caution we used was to check that the growth of total assets for PRC’s banking system was reasonable. We should stress that rates of growth increase going out to 2010, as the faster growing New Tigers enlarge their market share, but even so the rate of growth by 2010 is 17.2% which does not appear patently unrealistic.

board vis-à-vis SOBs. But is this really the case? One way to address this issue is assessing whether the better performance of the New Tigers is fully attributable to their better corporate governance. It is exactly at this juncture that we notice a second trait distinguishing the New Tigers from the Old Mammoths. The New Tigers concentrate their business in the most developed part of PRC, its vibrant Eastern Belt, while on the contrary, the SOBs operate throughout the whole of the country.. As a result, it is not clear whether the New Tigers' better performance is owed entirely to their better corporate governance or whether geography also gives these banks a great help.. For instance, according to Huang (2002), the SOBs generate 95% of their profits from about half a dozen of the coastal cities, including Shenzhen, Guangzhou, Xiamen, Shanghai, Tianjin, and Beijing. If this is true, then doubts are cast on the possibility that the growth of the New Tigers can provide an effective solution to the banking problem out of the affluent Eastern Belt. As a consequence, to gauge how much of a solution the New Tigers may offer, we need to consider in more depth how far geography (that is favorable bank location) lies behind their strong performance. This is the main task for the rest of the paper.

### **How Important is Geography Behind the Success of the New Tigers**

#### *The rationale behind looking at City Commercial Banks (CCBs)*

We need to understand whether the New Tigers' better performance is caused by better corporate governance only or whether and to what extent the New Tigers are better simply because they do business in the most developed area of PRC, thus by their location avoiding the economic difficulties the SOBs have to deal with. To shed light on this issue, we draw on the results of a field survey commissioned by the Asian Development Bank Institute to check how far, within (a significant segment of) the New Tigers, bank performance differs depending on the economic development of the geographical area where banks do their business.<sup>8</sup> This is exactly the rationale behind looking at City Commercial Banks (CCBs), one of the most vibrant components of the New Tigers, which includes banks located across most of the country..

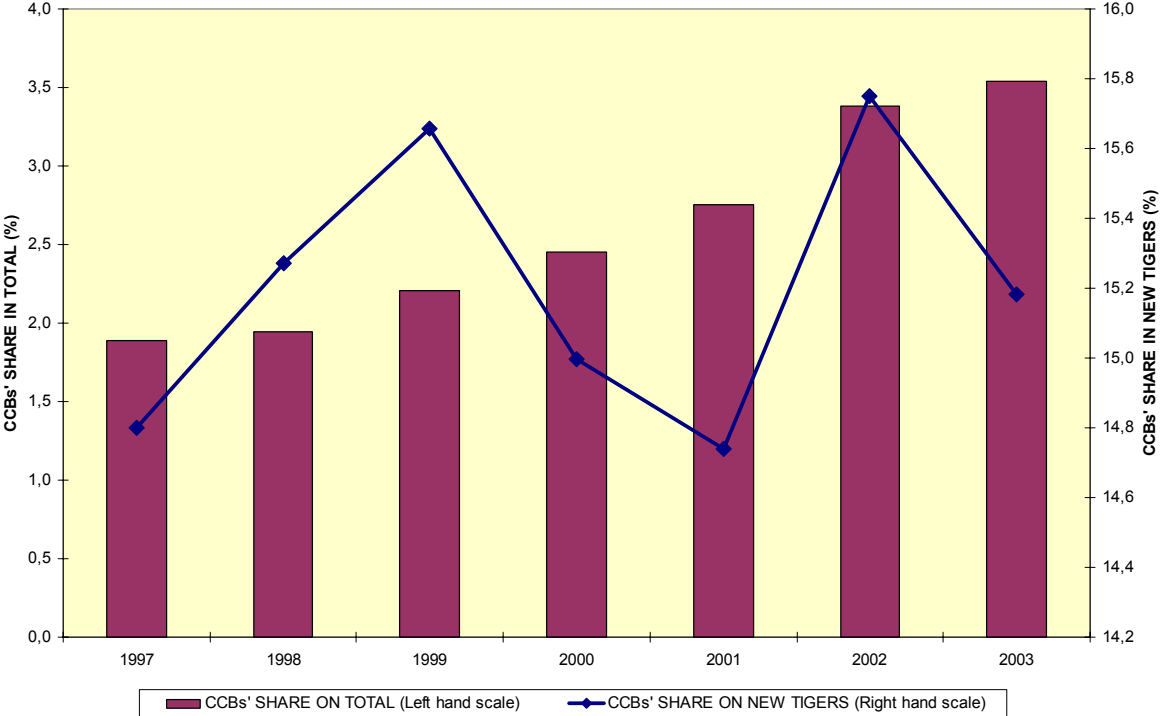
Within our Bankscope sample, CCBs's market share (in terms of total assets) almost doubled, from 1.9 to 3.5% between 1997 and 2003, while their weight within the New Tigers fluctuated around 15% (Figure 5). However, we should point out that Bankscope under-samples CCBs, including only 16 out of 112 of them. Considering all of the 112 CCBs, their total market share is about 5%.

CCBs came about after 1995 when the People's Bank of China put in order NPL-endangered urban credit cooperatives. Urban credit cooperatives were salvaged with the injection of public funds, but at the same time, they were ordered to merge consolidating into the newly formed CCBs, established as joint-stock companies. CCBs inherited from urban credit cooperatives all NPLs formed during the "nonstandard operating period" of 1985-1995. (Girardin and Ping, 1997) At the end of 2003, 39 out of 112 CCBs had an NPL ratio above 20%, some of them even above 70%. CCBs' shareholders include urban enterprises, citizens and local governments (individuals are not allowed to become new shareholders). At present, city commercial banks are distributed in 112 central cities (district-level or above) of PRC – one city, one city commercial bank without exception. Though they almost cover the whole of the country their distribution is uneven. Generally speaking, there are more CCBs in Eastern provinces (for example there are 11 CCBs in Jiangsu Province) than in Western provinces (in Gansu, Qinghai, Xinjiang and Ningxia, CCBs exist only in the capital cities). Since their foundations, the financial authority has required that all city commercial banks offer financial services only within the cities' own administrative districts.

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<sup>8</sup> The survey was conducted during 2004 by the Research Institute of Finance at the Development Research Center of the State Council on behalf of the Asian Development Bank Institute, Tokyo

**Figure 5. Percentage market share of the CCBs: Bankscope sample**



Source: Our computations on data derived from Bankscope.

By end June 2004, the 112 city commercial banks had 5,154 branches, 107,000 employees, and a 5-grade NPL ratio of 14.1%. Among the various categories of financial institutions, city commercial banks rank second in terms of business development, close to joint-stock commercial banks. CCBs focus on three main business lines; providing indirect financial services to SMEs; offering financial services for city residents; financing local government public works,

*Field survey on 20 CCBs from three provinces*

By focusing on 20 CCBs located in three provinces of PRC featuring diverse levels of economic development, we keep corporate governance (relatively) constant and can thus ascribe any significant difference in performance across the provinces to their relative underlying prosperity.

We selected the three provinces to include; one with a level of prosperity just about the national average, this is Hubei province; one ranked amongst the most developed, this is Zhejiang province (with a GDP per capita about double the national average) average; one less affluent, this is Sichuan province (with a GDP per capita about two-thirds of the national average; Table 1).

As shown in the Table 1 not only GDP per capita, but also growth is fastest in Zhejiang, while Sichuan, though less developed, is enjoying faster growth than Hubei. Thus, while Zhejiang stands out in both the level and the dynamics of GDP, Hubei is ranked before Sichuan if we look at GDP per capita, but the order is reversed if we take growth into account. The 20 interviewed CCBs are distributed as follows; 7 in Zhejiang, 5 Hubei, and 8 in Sichuan. For these CCBs the survey collected information on their asset-liability/profit-loss

accounts over 2000-2003 as well as on their business features and several ownership and corporate governance aspects.

**Table 1. Basic Information on the three provinces (2003)**

Province	Population (million)	Economic Growth Rate (%)	Area (10 thousand km)	GDP Per Capita (Yuan/person)	CCBs surveyed in the province
<b>Chekiang</b>	46.13	14.0	10.2	19,944	<b>7 CCBs:</b> Jinhua, Huzhou, Hangzhou, Jiaxing, Wenzhou, Shaoxing, Taizhou
<b>Hubei</b>	59.75	9.3	18.6	9,031	<b>5 CCBs:</b> Yichang, Jingzhou, Wuhan, Xiaogan, Huangshi
<b>Sichuan</b>	86.40	11.8	48.5	6,315	<b>8 CCBs:</b> Leshan, Luzhou, Panzhihua, Deyang, Zigong, Nanchong, Chengdu, Mianyang
<b>Total</b>	192.28	—	77.3	—	<b>20 CCBs</b>
<b>PRC</b>	1,276.27	9.1	960	9,143	<b>112 CCBs</b>

Overall, the 20 interviewed CCBs have 13,400 employees over 1,160 branches, with 12 employees per branch on average. The largest (smallest) CCB is that of Wuhan in Hubei province (that of Zigong in Sichuan province) with almost 1,800 employees (with just 210 employees). CCBs business is largely concentrated in the city of establishment (on average 98.2% of the loans are granted there).

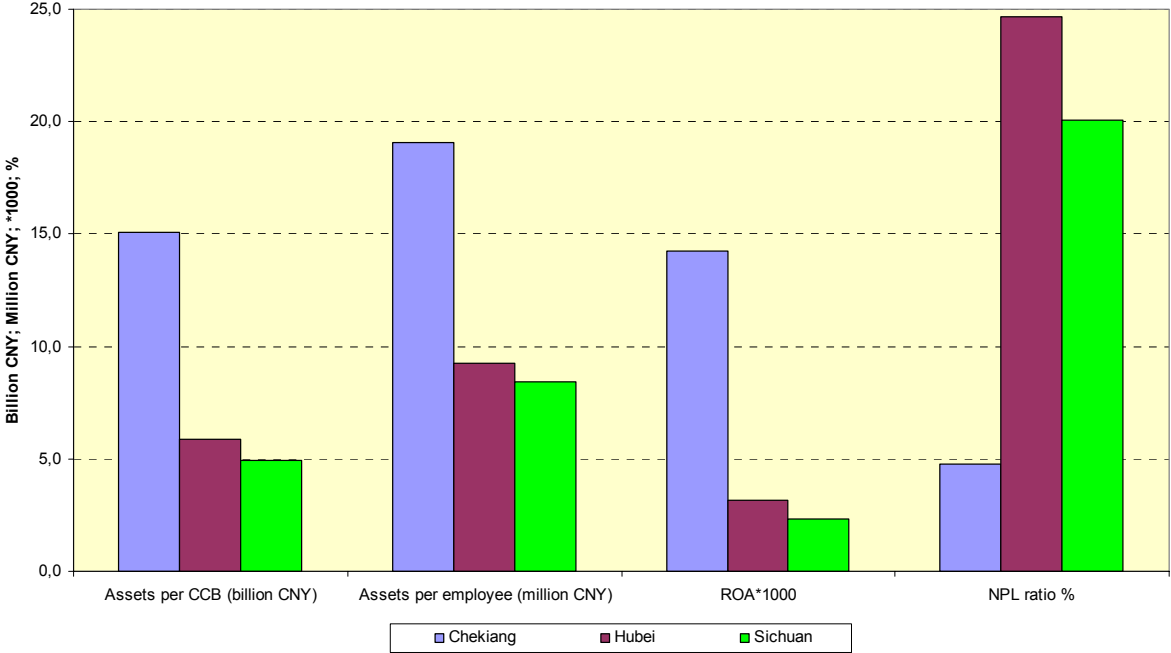
*Different patterns of performance in more vs. less developed provinces*

Over the 4 years 2000-03, total assets of the CCBs expanded by 1.58 times in Hubei, by 2.15 times in Sichuan, and by 2.75 times in Zhejiang. Such ranking of the expansion of the banking business across the three provinces seems consistent with GDP growth.

Both size and performance of CCBs improve on average when we move from the less affluent Sichuan and Hubei to the most prosperous Zhejiang. The average size of Zhejiang CCBs is three times as large as that in the other two provinces (Figure 6). Assets per employee, one of the basic indicators of productive efficiency, is twice as large in Zhejiang as in Hubei and Sichuan. The average ROA is close to 1.5%, which is five times as large as in the other two provinces. In addition, the NPL ratio is just below 5% in Zhejiang, which is 20% of that in Hubei and 25% of that in Sichuan.

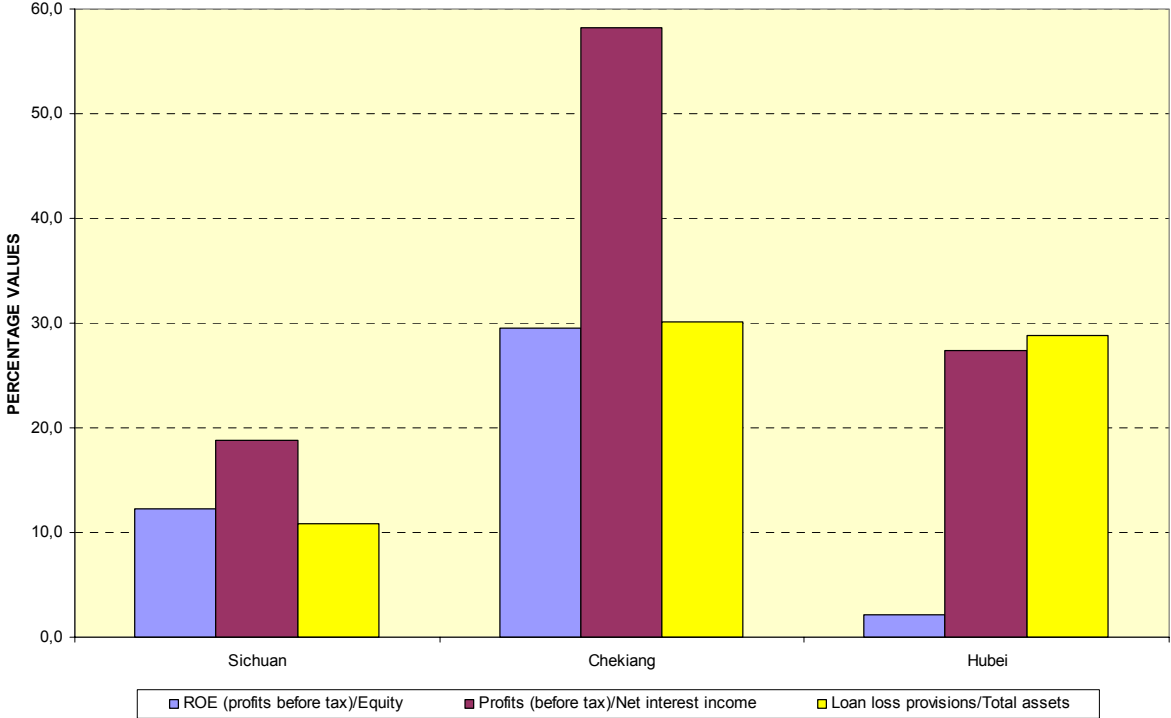
Zhejiang CCBs stand out also in terms of ROE as well as in terms of their ability to generate profits out of net interest income. ROE is three times as large for them as in Sichuan, while Hubei CCBs are barely able to generate positive returns (Figure 7). Profits/net interest income is close to 60% in Zhejiang, twice as large that in Hubei and three times that in Sichuan.

**Figure 6. Average size and performance indicators of CCBs by province**



Source: Our computations on data for end 2003 derived from the field survey.

**Figure 7. ROE, profits and loan loss provisions of CCBs by province**



Source: Our computations on data for 2003 derived from the field survey.

Zhejiang CCBs achieve higher profit efficiency in spite of larger loan-loss provisioning, where loan-loss provisions are very low in Sichuan and intermediate in Hubei. All in all, loan-loss reserves are probably insufficient; in 2003 the loan-loss reserves of the

surveyed CCBs were merely 1.25% of total loans, well below their average 14% NPL ratio. In addition, CCBs have high loan concentration ratios; some CCBs overly pursue prime customers; insiders and big shareholders cause problems of loans to their related enterprises; and risk management systems are still not fully developed.

Before moving on to comment the additional information we gather from the survey, it is useful to check whether the different in performance across the three provinces are statistically significant. We test this running some basic econometric specifications where the dependent variable is, in turn, one of the standard performance measures: ROA, ROE, and the NPL ratio. In the light of the few observations we have, we only consider as regressors bank size (controlling for possible economies of scale) and two province dummies (identifying any specific effect for Hubei and Zhejiang, respectively the provinces with the intermediate and the highest level of development).

The results of these regressions are reported in Table 2. While larger bank size is generally associated with better performance, the hypothesis that performance varies among the provinces cannot be rejected. Specifically, both ROA and ROE are significantly lower for CCBs located in Hubei, the province which displays the lowest GDP growth. On the other hand, these performance measures do not appear to differ significantly between Sichuan and Zhejiang. Finally, the NPL ratio is significantly smaller in Zhejiang, whilst no significant differences emerge between Hubei and Sichuan.

**Table 2. Regression on the impact of government shareholding on CCBs' performance**

We estimate three equations where various measures of performance are taken as the dependent variable and are regressed against bank size and two provincial dummy variables. The equations have the following form:

$$\text{PERFORMANCE} = \alpha_1 + \alpha_2\text{SIZE} + \alpha_3\text{DUHU} + \alpha_4\text{DUZE}$$

As dependent variable we consider alternatively ROA, ROE, NPL. Among the explanatory variables we consider: the total assets of the CCB (SIZE); a dummy variable taking value 1 for the CCBs located in Hubei and zero otherwise (DUHU); a dummy variable taking value 1 for the CCBs located in Zhejiang and zero otherwise (DUZH). Reported t-statistics are obtained via OLS and are Huber-White heteroskedastic consistent. The superscripts \*\*\*, \*\* and \* indicate that the coefficient is different from zero respectively at the 1%, 5% and 10% confidence level.

**PANEL 2A - ROA**

Dependent Variable:	General specification		Preferred specification	
	Coefficient	t-stat	Coefficient	t-stat
SIZE	0.0077		1.88*	2.08*
DUHU	-75.2405	-1.85*	-72.3413	-2.27**
DUZH	-6.3432	-0.16	---	---
CONSTANT	34.5866	1.32	32.6923	1.53
No. obs.	19		19	
F	(3, 15) 2.59*		(2, 16) 3.99**	
R2	0.549		0.548	

**PANEL 2B - ROE**

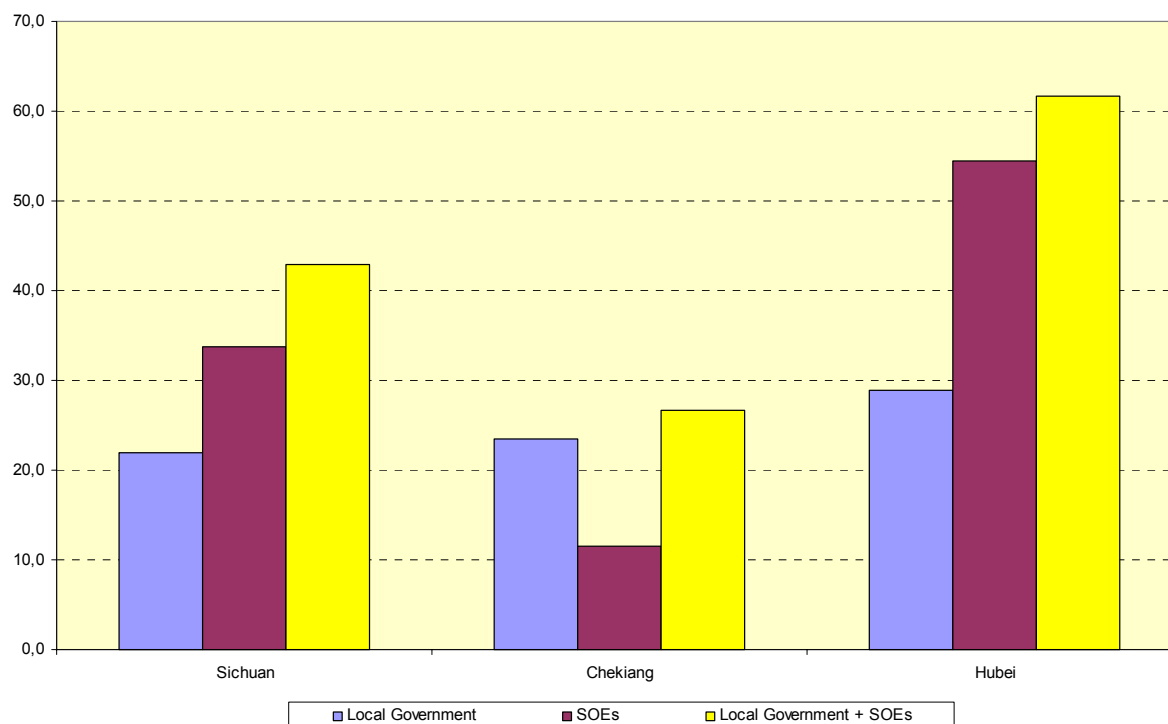
Dependent Variable:	General specification		Preferred specification	
	Coefficient	t-stat	Coefficient	t-stat
SIZE	0.1614		1.80*	2.16**
DUHU	-1761.0780	-1.78*	-2013.3350	-3.26***
DUZH	511.0940	0.49	---	---

CONSTANT	597.8713	0.76	748.3873	1.28
No. obs.	18		18	
F	(3,14) 6.43***		(2,15) 5.60**	
R2	0.508		0.499	

### PANEL 2C - NPL

Dependent Variable:	General specification		Preferred specification	
ROA	Coefficient	t-stat	Coefficient	t-stat
SIZE	-0.0043		-0.26	---
DUHU	764.5838	1.32	---	---
DUZH	-1495.0260	-3.06***	-1783.0830	-4.64***
CONSTANT	2025.6600	3.58***	2259.4170	6.34***
No. obs.	18		18	
F	(3,14) 22.30***		(1,16) 21.49***	
R2	0.480		0.429	

**Figure 8. Local governments and SOEs shareholding in CCBs by province**



Source: Our computations on data for 2003 derived from the field survey.

#### *Further evidence from the field survey*

CCBs are basically controlled by local government and their internal governance structures still need considerable improvement; on average, direct share-holding by the local government is 24.2%, but adding indirect shareholding brings to some two-thirds the share of total equity controlled by state capital; domestic private shareholders stand at 23.7%. The

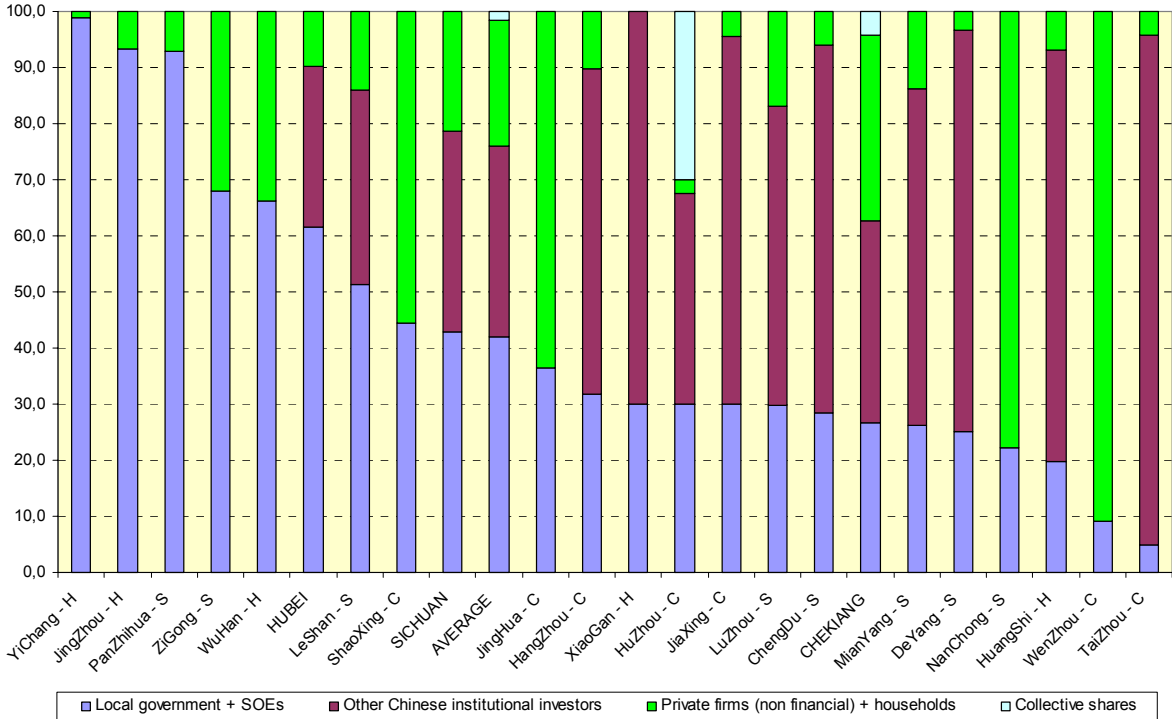


situation differs across the three provinces. While direct shareholding by local government is not very different, the picture changes drastically once we add shareholding by SOEs to that by local government. On average this sum reaches above 60% in Hubei, above 40% in Sichuan, whilst it is below 30% in Zhejiang (Figure 8).

We also learn from the survey that the local government has the final influence in selecting the chairman and president of CCBs, who are in charge of key decisions. It appears that related party loans to finance local government initiatives (such as for infrastructure) may be a problem (also this could hide quasi-fiscal liabilities): 4 of the 20 CCBs declare that a share between 10 and 20% of their loans is in response to the intervention of the local government (the level escalates to between 30 and 40% for one of the CCBs, while 3 CCBs do not answer this question), reportedly augmenting NPLs.

The survey offers novel information on the ownership structure and on some key corporate governance aspects. On average, the largest shareholding belongs to the local government plus SOEs (43.7%), followed by other Chinese institutional investors (29.7%), by private non-financial firms plus households (24.8%), while only in one CCB are there collective shares and none of our CCBs has participation by foreign capital (Figure 9A). The situation however varies across the CCBs and among the provinces. As expected based on its relative affluence, in Zhejiang on average the shareholding by the local government plus SOEs is lowest (26.7%) and that of private non-financial firms plus households is largest (33.0%), while the situation is reversed in Sichuan and, even more so, in Hubei.

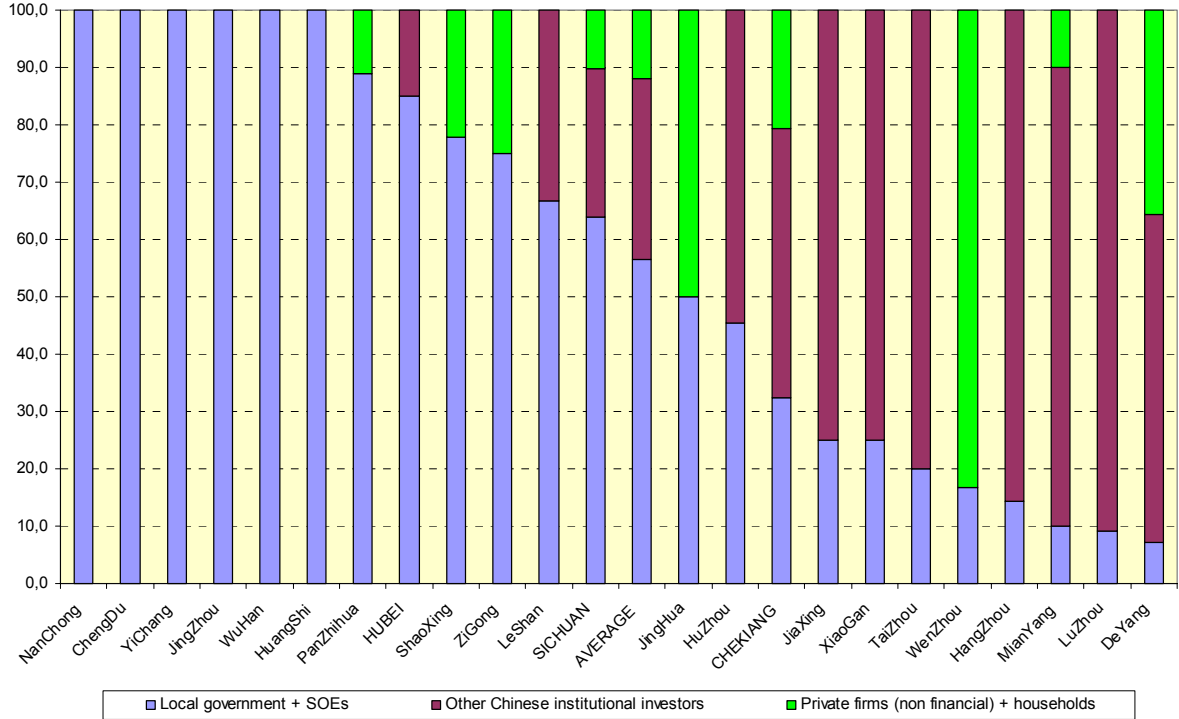
**Figure 9A. Distribution of shareholding of CCBs**



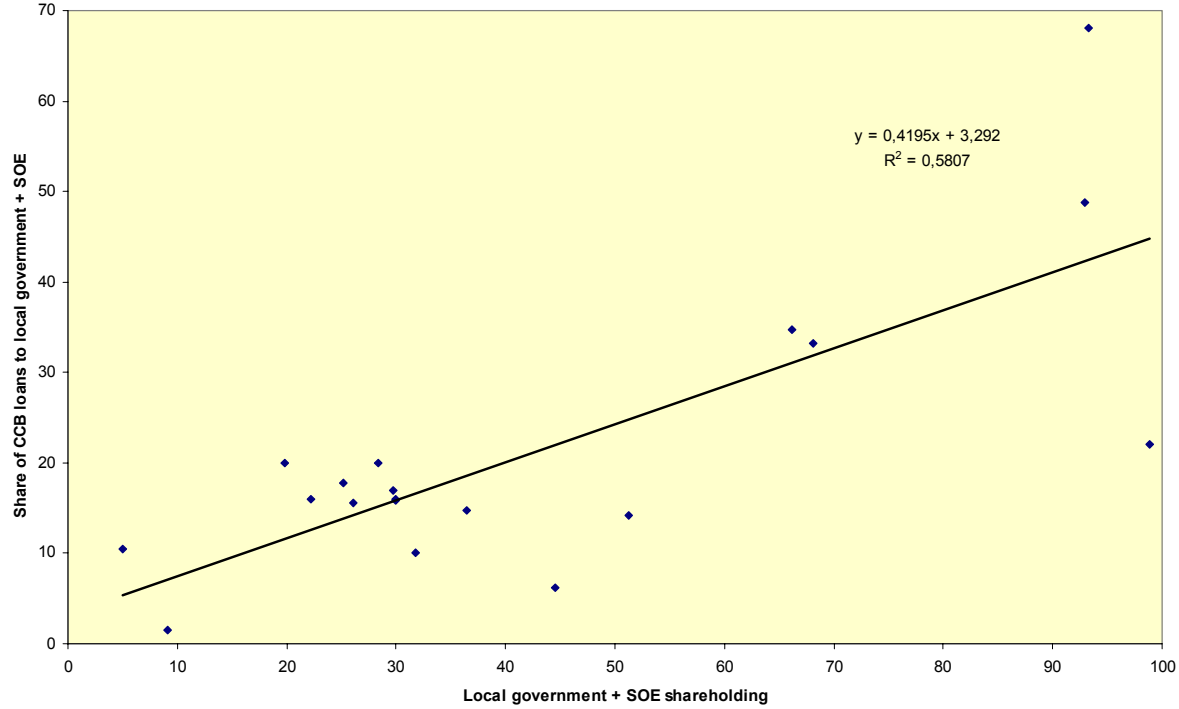
The influence of the various parties on bank conduct may, however, differ with respect to their nominal weight as shareholders. This is revealed by examining who appoints the bank directors. As reported in Figure 9B, the local government plus SOEs appoint 56.5% of the directors, well above their shareholding, while private non-financial firms plus households appoint only 11.9% of the directors, well below their shareholding. Across the three provinces, private shareholders' ability to appoint directors relative to their shareholding is minimal in Hubei (no director vis-à-vis 9.7% of private shareholding), intermediate in Sichuan (10.3% of the directors vis-à-vis 21.3% of private shareholding), and the maximum

in Zhejiang (20.7% of the directors vis-à-vis 33.0% of private shareholding). This suggests that the ability of private shareholders to affect bank conduct may be less than indicated by their nominal shareholding. We will return to this later.

**Figure 9B. Distribution of directors' appointments of CCBs**



**Figure 10A. Local governments and SOEs shareholding and CCB loans to them**

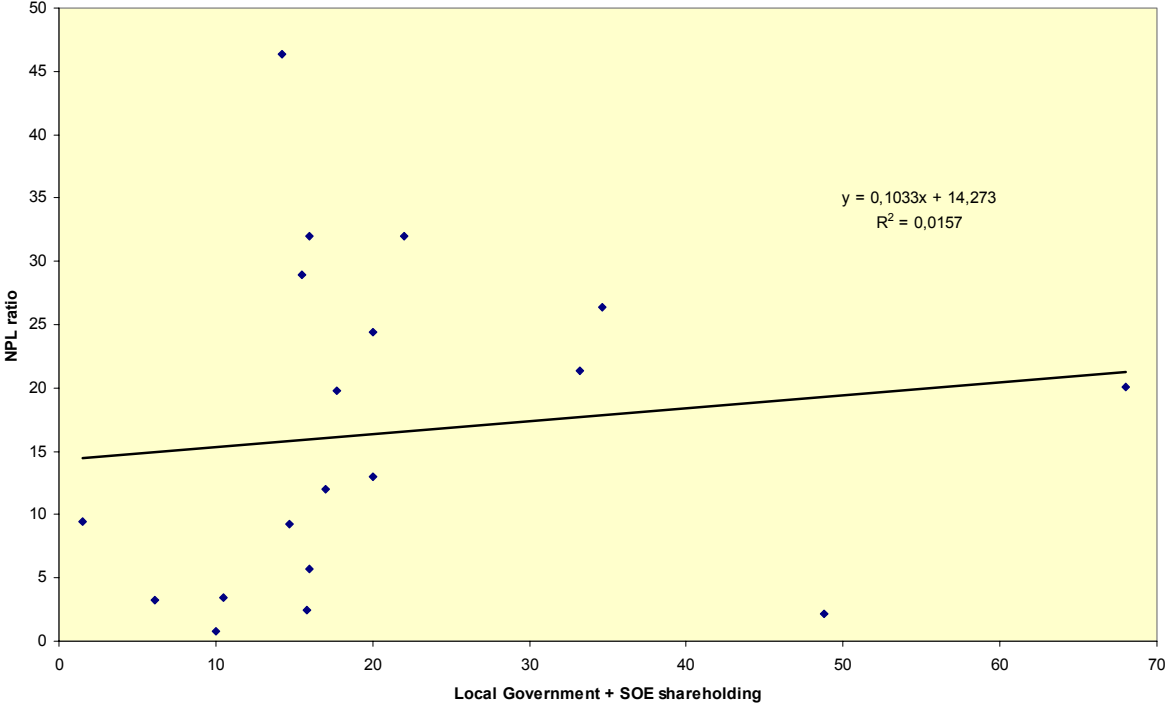


Source: Our computations on data for 2003 derived from the field survey.

A further point worth stressing hinges on the potentially dangerous link between large shareholding by the local government and SOEs, whereby CCBs might be captured by political influence. The survey offers some evidence on this. First from individual bank data, there is a strong positive correlation between the weight of the local government together with SOEs as shareholders and the share of CCB loans going to the local government plus SOEs (Figure 10A).

This is consistent with the hypothesis that CCBs may be captured the local government plus SOEs: When these are large shareholders, it may be very difficult for the banks to deny them credit. Second from individual bank data there is also a positive correlation, , between the share of loans to the local government plus SOEs and NPL ratios(see Figure 10B) although the correlation is very much weaker than in the first relation.

**Figure 10B. Loans to local governments and SOEs and NPL ratios**



Source: Our computations on data for 2003 derived from the field survey.

To take this analysis a little further, we run some econometric specifications on this issue. Given the limited number of observations, this analysis can only be exploratory. The results are reported in Table 3. Clearly, bank size is an important determinant of performance if we consider ROA (Panel 3A) and ROE (Panel 3B), possibly stemming from the presence of economies of scale. Neither the province of operation nor the presence of private shareholders significantly affect performance (all panels). The weight of the local government together with SOEs as shareholders impacts neither ROA (Panel 3A) nor ROE (Panel 3B) directly. However, we can identify two channels through which government ownership negatively affects performance indirectly. First, the NPL ratio proves a significant determinant of both ROA (Panel 3A) and ROE (Panel 3B). In turn, as the weight of the local government together with SOEs as shareholders of the CCB increases, the NPL ratio increases significantly also (Panel 3C). This happens even though the share of loans going to the local government and SOEs –which is positively related to the weight of the local government plus SOEs as shareholders– does not significantly affect the NPL ratio (Panel 3C). The second channel through which government ownership worsens performance is via the allocation of loans at the banks. We detect that, as expected, a larger share of loans going to manufacturing improves CCB performance, at least in terms of ROE (Panel 3B). In

this respect, we identify a significant negative link between the share of loans going to manufacturing and that going to the local government plus SOEs (Panel 3D), and, at the same time, the latter share increases with the weight of government ownership (Panel 3D). Accordingly, it seems that by shifting the distribution of loans towards the government itself and SOEs, government ownership crowds out manufacturing loans and, through this, weakens CCB performance.

It seems that the extent of local government ownership has a direct impact on the NPL ratio and on the share of manufacturing loans, and through these it worsens performance indirectly. It is also possible that, beside these two channels, government ownership induces general inefficiencies in the CCB business conduct, but we have no direct evidence on this.

Finally, we consider a non-standard measure of performance, namely the share of loans targeted to small enterprises (defined in PRC as firms with fewer than 100 employees). A high value of this share seems advantageous in view of the desirability to promote the transition by supporting new business formation. We regress this share against the usual explanatory variables (Panel 3.E). As expected –in light of the positive correlation between bank and firm size found in the literature– we show that larger CCBs are less prone to support small business. In addition, we find that the extent of ownership by the local government plus SOEs has a negative effect on such a share. Thus, even within the CCBs we detect indications consistent with the findings of Wei and Wang (1997) that government ownership tends to disfavor (smaller) private business.

### Table 3. Regression on the impact of government shareholding on CCBs' performance

We estimate several equations where various measures of performance are taken as the dependent variable and are regressed against the extent of shareholding by the local government plus SOEs and/or other explanatory variables. The equations have the following forms:

$$\text{PERFORMANCE} = \alpha_1 + \alpha_2\text{LGOVTSH} + \alpha_3\text{SIZE} + \alpha_4\text{PROV} + \alpha_5\text{PRIVATE}$$

$$\text{PERFORMANCE} = \alpha_1 + \alpha_2\text{NPL} + \alpha_3\text{SIZE} + \alpha_4\text{LOAMAN} + \alpha_5\text{PRIVATE}$$

As dependent variable we consider alternatively ROA, ROE, NPL, LOAGOV (the share of CCB loans going to the local government + SOEs), and LOASE (the share of CCB loans targeted to small enterprises). Among the explanatory variables we consider (not all at the same time for reasons of few observations): the logarithm of the shareholding of the CCB by the local government + SOEs (LGOVTSH); the total assets of the CCB (SIZE); a variable controlling for the province where the CCB operates (PROV; to be more parsimonious we used here a graduated dummy taking a value of 1 for Sichuan, 2 for Hubei and 3 for Zhejiang), a dummy variable identifying CCBs with private shareholding above 50% and/or the fact that some of the directors are appointed by private shareholders (PRIVATE) and, where applicable, LOAGOV and the share of CCB loans going to manufacturing (LOAMAN). Reported t-statistics are obtained via OLS and are Huber-White heteroskedastic consistent. The superscripts \*\*\*, \*\* and \* indicate that the coefficient is different from zero respectively at the 1%, 5% and 10% confidence level.

#### PANEL 3A - ROA

Dependent Variable:	General specif. 1		Pref. specif. 1		General specif. 2		Pref. specif. 2	
ROA	Coeffic	t-stat	Coeffic	t-stat	Coeffic	t-stat	Coeffic	t-stat
LGOVTSH	9.6761	0.46	---	---	---	---	---	---
SIZE	0.0086	2.04*	0.0076	1.91*	0.0063	1.73	0.0063	1.79*
PROV	-35.7360	-1.25	---	---	---	---	---	---
PRIVATE	5.9971	0.18	---	---	---	---	---	---
NPL	---	---	---	---	-0.0290	-2.04*	-0.0290	-2.10*
LOAMAN	---	---	---	---	-0.0001	-0.01	---	---
CONSTANT	-8.4265	-0.05	16.8941	0.74	75.1636	1.79*	74.7970	2.32**

No. obs.	18	19	18	18
F	(4,13) 2.26	(1,17) 3.65*	(3,14) 2.52*	(2,15) 4.02**
R2	0.531	0.445	0.5866	0.587

### PANEL 3B - ROE

Dependent Variable:	General specif. 1	Pref. specif. 1	General & Preferred specification 2
ROE	Coefficient	t-stat	Coefficient t-stat Coefficient t-stat
LGOVTSH	268.9953	0.44	---
SIZE	0.2004	2.11*	0.1685 1.90* 0.1533 1.97*
PROV	-587.4227	-0.76	---
PRIVATE	638.7012	0.73	---
NPL	---	---	-0.5860 -2.25**
LOAMAN	---	---	0.3100 1.75*
CONSTANT	-1287.3340	-0.25	627.3720 0.72 161.5951 0.20
No. obs.	17	18	17
F	(4,12) 2.36	(1,16) 3.60*	(3,13) 3.43**
R2	0.457	0.386	0.576

### PANEL 3C - NPL

Dependent Variable:	General specif. 1	Pref. specif. 1	General specif. 2	Pref. specif. 2
NPL	Coefficient	t-stat	Coefficient t-stat Coefficient t-stat Coefficient t-stat	
LGOVTSH	464.5980	1.32	577.8603 2.10**	---
SIZE	-0.0508	-1.52	---	-0.0345 -1.01 -0.0402 -1.27
PROV	-103.7221	-0.23	---	---
PRIVATE	-1012.7012	-1.35	---	---
LOAGOV	---	---	0.1026 0.67	---
LOAMAN	---	---	0.0830 0.51	---
CONSTANT	-1107.7540	-0.39	-3026.8710 -1.45	1324.8150 1.54 1933.3950 4.85***
No. obs.	18	19	19	19
F	(4,13) 1.77	(1,17) 4.40*	(3,15) 0.78	(1,17) 1.61
R2	0.291	0.117	0.095	0.069

### PANEL 3D - LOAGOV

Dependent Variable:	General specification	Preferred specification
LOAGOV	Coefficient t-stat	Coefficient t-stat
LGOVTSH	1170.6090 2.16*	1317.9780 2.46**
SIZE	-0.0441 -1.45	---
PROV	418.4829 0.86	---
PRIVATE	-176.6351 -0.37	---
LOAMAN	-0.2335 -1.83*	-0.1898 -1.75*
CONSTANT	-6757.4650 -1.51	-7786.0260 -1.92*
No. obs.	18	19
F	(5,12) 1.65	(2,16) 3.14*
R2	0.594	0.518

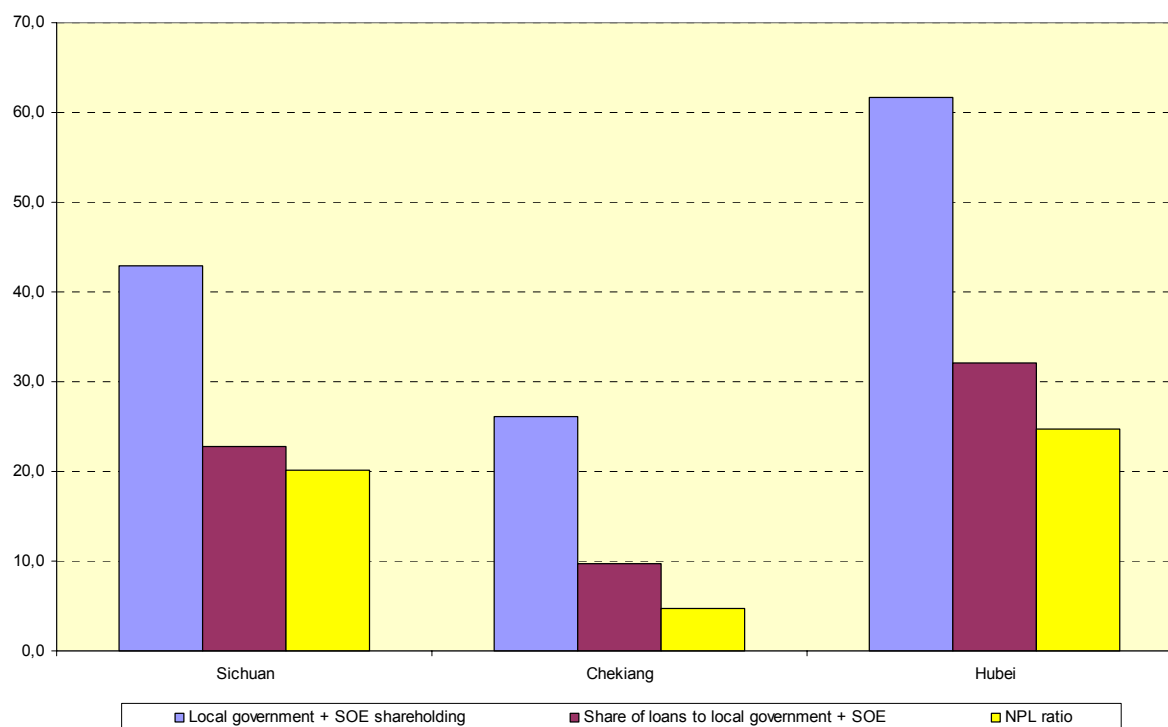
### PANEL 3E - LOASE

Dependent Variable:	General specification		Preferred specification	
LOASE	Coefficient	t-stat	Coefficient	t-stat
LGOVTSH	-676.3516	-2.31**	-692.9525	-2.57**
SIZE	-0.0415	-1.32	-0.0456	-1.86*
PROV	264.8331	0.86	---	---
PRIVATE	345.1122	0.71	---	---
CONSTANT	6528.5770	2.62**	7378.7230	3.25***
No. obs.	16		17	
F	(4,11) 1.88		(2,14) 4.68**	
R2	0.278		0.277	

This evidence is consistent with the results of the above mentioned PBOC survey on the causes of NPLs at SOBs (Zhou, 2004a).

The hypothesis that captive CCBs are potentially endangered by political interference may also explain why, performance is relatively poor in Hubei province with respect to what one might expect from its level of development indicated by a GDP per capita on par with the national average.. As reported in Figure 11, Hubei CCBs stand out at the top in terms of both shareholding by local government plus SOEs and share of loans allocated to them. Unsurprisingly, Hubei CCBs are at the top also in terms of the NPL ratio.

**Figure 11. The influence of local governments and SOEs on NPL ratios by province**



Source: Our computations on data for 2003 derived from the field survey.

Thus, it seems that, keeping corporate governance (relatively) constant, geography is a strong determinant of performance, although it should be noted that in our regression analysis provincial dummies are sometimes not significant. Accordingly, the view that the New Tigers are the solution to bring better banking to PRC seems too simplistic. To be sure, we have remarked that corporate governance differs even within CCBs, where those CCBs more exposed to political influence are worse performers. It is possible that higher

development induces better governance by decreasing the role of local government and SOEs. However this implies that corporate governance is to some extent endogenous and, in any event, what works in PRC's affluent Eastern Belt may not work in less developed areas. This casts doubt on the possibility that the New Tigers may offer an effective national solution to deal with the country's banking problem and, as a result, forces policy makers to turn again to consider improvements to the situation of the NPL-endangered SOBs.

## Conclusions

We tried to delve into the manifest problems of the banking system, currently posing a threat to the continuation of the Chinese economic miracle. We argued that the persistence of a latent banking crisis in a country experiencing average annual growth around 9% for some 25 years is only an apparent puzzle. We claimed that the crux of the banking problem stems from the unhealthy link between loss-making SOEs and SOBs, which we labeled the "Old Mammoths" and still dominate banking in PRC. We posited that this SOE-SOB nexus did not materialize by chance but, rather, was the negative side of the policy choice for gradual transition, which left unprofitable SOEs in business while, due to political interference, SOBs could not discontinue their lending to them and, later, had to bear the losses created by their inefficient operations.

Next we discussed how to bring better banking to PRC. First, we reached the conclusion that foreign banks will only play an ancillary, though very important, role in this. Given PRC's size, it is unlikely that foreign banks can manage retail banking throughout the country. Then, we asked whether the emergence of a new breed of dynamic banks (the "New Tigers") can be the answer. We provided details on the growth of the New Tigers, giving a performance comparison between them and the Old Mammoths (the SOBs). We considered whether the New Tigers offer PRC an option to "growing out" of its banking problem. Although extrapolating the New Tigers' growth might lead one to answer that they are rapidly supplanting the Old Mammoths, we posited that an accurate answer requires carefully evaluating the sources of the New Tigers' better performance. Specifically, we need to understand whether this is caused by better corporate governance only or to what extent the New Tigers are better simply because they do business in the most developed area of the country. To address this we drew on the results of a field survey to check whether amongst the New Tigers, performance differs by the development level of their area of location. This was exactly the rationale behind looking at City Commercial Banks (CCBs), one of the most vibrant segments within the New Tigers, which include banks located throughout the whole of the country. By focusing on 20 CCBs located in three provinces featuring diverse levels of development, we kept corporate governance (relatively) constant and could, thus, ascribe any significant difference in performance across the provinces to their relative underlying prosperity. We confirmed that CCB performance is systematically and positively related to the level of economic prosperity in their provinces.

The main result of our analysis suggests that the New Tigers may be unable by themselves to bring better banking to the whole of the country. Thus, it seems that the authorities are right in stressing the need to restructure and rehabilitate the Old Mammoths. While the authorities' push to corporatize the SOBs goes in the right direction, it is not clear that their listing on the stock exchange can really, per se, improve the SOBs' corporate governance. Given their size and considering that the government could continue to be the largest shareholder, it is legitimate to doubt that simple listing will change SOBs' conduct. Perhaps, as suggested by Huang (2002), it would be advisable for PRC's authorities to consider breaking up its Old Mammoths. Such a measure would help streamline the SOBs and could also facilitate the processes of introducing foreign strategic investors and public listing.

## References

Black, B. and A.S. Tarassova (2002), "Institutional Reform in Transition: A Case Study of Russia", Stanford U., mimeo;

Bonin, J. P., & Huang, Y. (2001), "Dealing with the bad loans of the Chinese banks", Journal of Asian Economics 12: 197–214.

Bonin, J. P., & Huang, Y. (2002). Foreign entry into Chinese banking: does WTO membership threaten domestic banks?, The World Economy.

Brandt, Loren and Hongbin Li (2003), "Bank discrimination in transition economies: ideology, information, or incentives?", Journal of Comparative Economics 31:387–413.

Chang, Chun (2003), "Progress and peril in China's modern economy", Federal Reserve Bank Of Minneapolis. *The Region*. 17(4): 26-30, Dec.

Claessens, Stijn. (1998). "Banking Reform in Transition Countries." Journal of Policy Reform 2(2): 115-33.

Claessens, S., A. Demirgüç-Kunt, and H. Huizinga. (2001). "How Does Foreign Entry Affect Domestic Banking Markets?" Journal of Banking and Finance 25(5): 891-911.

Cull, Robert and Lixin Colin Xu (2000), "Bureaucrats, State Banks, and the Efficiency of Credit Allocation: The Experience of Chinese State-Owned Enterprises", Journal of Comparative Economics 28: 1–31

Cull, Robert and Lixin Colin Xu (2003), "Who gets credit? The behavior of bureaucrats and state banks in allocating credit to Chinese state-owned enterprises", Journal of Development Economics 71: 533–59.

Dutta, M. (2005), "China's industrial revolution: challenges for a macroeconomic agenda", Journal of Asian Economics 15 1169–1202.

Ferri, Giovanni. (2003). "Corporate Governance in Banking and Economic Performance - Future Options for PRC." Asian Development Bank Institute Discussion Paper No 3, August. available at [www.adbi.org](http://www.adbi.org)

Focarelli, Dario, and Pozzolo, Alberto F. (2001). "The Patterns of Cross-Border Bank Mergers and Shareholdings in OECD Countries." Journal of Banking and Finance, 25(12): pp. 2305-37.

Girardin, E., and Ping, X. (1997). "Urban Credit Co-operation in China." OECD Technical Paper No. 125.

Gordon, M.J. (2003), "Is China's financial system threatened by its policy loans debt?", Journal of Asian Economics 14: 181–8.

Hawkins, John and Dubravko Milhaljek (2001), "The banking industry in the emerging market economies: competition, consolidation and systemic stability – an overview", in The banking industry in the emerging markets, BIS Papers No. 4, pp. 1-44.

He, Qiang, H. Peter Gray (2001), "Multinational banking and economic development: a case study", Journal of Asian Economics 12: 233–43.



- Huang, Y. (2002), "Is meltdown of the Chinese banks inevitable?", China Economic Review 13: 382–387
- IMF. (2004). People's Republic of China: 2004 Article IV Consultation—Staff Report; Staff Statement; and Public Information Notice on the Executive Board Discussion – November.
- La Porta, R., F. López-de-Silanes, A. Shleifer, and R. Vishny (1997), "The Legal Determinants of External Finance", Journal of Finance, 52.
- La Porta, Rafael, López-de-Silanes, Florencio, Shleifer, Andrei, and Vishny, Robert. (1998). "Law and Finance." Journal of Political Economy, 106: pp. 1113-1155.
- La Porta, R., F. López-de-Silanes, and A. Shleifer (2002), "Government Ownership of Banks", Journal of Finance, 57: pp. 265-301.
- Lau, L.J., Y. Qian, and G. Roland (2000), "Reform without Losers: An Interpretation of China's Dual-Track Approach to Transition", Journal of Political Economy 108(1): 120-43.
- Liu, Li-Gang. (2002). "Dead End Ahead for China's Dual Track Approach to Further Economic Transition", ADB Institute, mimeo.
- Liu Tinghuan (2004), "The entry of foreign banks into the Chinese banking sector", BIS paper No. 4.
- Ma, Guonan and Robert McCauley (2004), "Opening China's capital account amid ample dollar liquidity", BIS paper No. 15.
- Ma, Guonan and Ben S C Fung (2002), "China's asset management corporations", Monetary and Economic Department, BIS Working Papers No. 115, August.
- Moreno, Ramon (2002), "Reforming China's Banking System", FRBSF Economic Letter No. 2002-17, May 31.
- Opper, S. (2001), "Dual-Track Ownership Reforms: Lessons from Structural Change in China, 1978-1997", Post Communist Economies 13(2): 205-27.
- Pagano, Marco, and Volpin, Paolo. (2000). "The Political Economy of Finance", Oxford Review of Economic Policy 17(4): pp. 502-19.
- Park, A., and K. Sehrt (2001), "Tests of Financial Intermediation and Banking Reform in China", Journal of Comparative Economics 29, 608–644.
- Perotti, E.C. and P. van Oijen (1999), "Privatization, Political Risk and Stock Market Development", CEPR Discussion Paper: 2243 September.
- Rajan, R., and L. Zingales (2001), "The Great Reversals: The Politics of Financial Development in the 20th Century", University of Chicago, mimeo.
- Stiglitz, J.E. (2002), Globalization and Its Discontents, W.W. Norton & Company, June.
- Wei, Shang-Jin and Tao Wang (1997), "The Siamese Twins: Do State-Owned Banks Favor State-Owned Enterprises in China?", China Economic Review 8(1): 19-29.

Zhou Xiaochuan (2004a), Some issues concerning the reform of the state-owned commercial banks, Speech by the Governor of the People's Bank of China, at the IIF Spring Membership Conference, Shanghai, 16 April.

Zhou Xiaochuann (2004b), Preventing future accumulation of large NPLs by the commercial banks after the present round of reform, Speech by the Governor of the People's Bank of China, at the China Summit of the 7th Beijing International Science Industry Expo, Beijing, 21 May.