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**Progress in Reforming China's Banks**

by

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# PROGRESS IN REFORMING CHINA'S BANKS

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## Abstract

At a time when the worst global financial crisis since the 1929 Great Depression threatens the very survival of many global financial giants, the relatively better financial performance of Chinese banks stands out. This is commendable considering that these banks were “technically insolvent” not too long ago. This paper reviews China’s banking reform strategy and its implementation and analyzes the financial performance of the four largest listed state commercial banks for the year 2007. The paper shows that banking reform has helped the banks boost profitability. However, the unfolding global financial crisis means that the banks are navigating a much more difficult economic terrain than hitherto. They need to manage risks while seizing the opportunities provided by an economy under restructuring, as well as sustaining the momentum of banking reform.

**Keywords:** China, banking reform, bank balance sheets, foreign strategic partners, public listing.

**JEL Classification No.:** G21, G28, P21.

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## **Introduction**

The World Bank (1997) once claimed that China's financial sector was the soft-belly of the economy. Financial sector reform has long been argued as necessary to raise efficiency in the use of capital and to rebalance the economy towards consumption-based growth, without which the sustainability of China's growth is in jeopardy (see Lardy (1998); Prasad (2007)). Indeed, not too long ago, China's state banks were deemed "technically insolvent" and their survival hinged solely on the nation's abundant liquidity. However, after the launching of banking reform, strong profitability has returned to state commercial banks recently. But it may be too early to declare a complete victory for banking reform, since Chinese state banks embarked on the path of reform only recently. In addition, their strong financial performance has ridden on the back of fast but unsustainable growth. As growth has begun to moderate under the weight of a global recession in 2008, the banks are expected to encounter more difficult economic terrain than hitherto. The aim of this paper is to assess the progress in reforming China's state banks by reviewing their reform strategy and to analyze their recent, impressive, post-reform financial performance.

This paper has three sections. In the first, we review the reform strategy of China's large state banks, which is the main thrust of Chinese banking reform, as well as its implementation. The second section analyzes the financial performance in 2007 of the four largest state commercial banks that have floated shares in the market: the Industrial and Commercial Bank of China (ICBC), the China Construction Bank (CCB), the Bank of China (BOC), and the Bank of Communications (BOCOM).<sup>1</sup> The conspicuous exception in the reform story to date is the Agricultural Bank of China (ABC), which is still in the process of restructuring with the intention of a market listing at an appropriate time. The last section concludes with an assessment of bank performance.

## **I Bank Reform strategy and its implementation**

### **I.1 Bank Reform strategy**

Before reform, the large banks were solely owned by the State and served national economic policy goals.<sup>2</sup> Since they were not wholly profit-making commercial entities, common commercial banking criteria for evaluating their financial performance do not strictly apply. Nevertheless, as soon as the country decided to embark upon the path towards a "socialist market economy" in the October 1992 CCP

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<sup>1</sup> 2007 is the most recent year for which comprehensive banking data are available.

<sup>2</sup> Lou Ping (2006) indicates that state commercial banks dominate China's banking sector, in stark contrast with other developing economies.

Congress, commercialization of the state banks became a foregone conclusion. The goal of banking reform is to turn state banks into commercial entities that are competitive in the marketplace and can provide efficient intermediation of the nation's saving. Given their dominance in financial intermediation, the state banks (SCBs) play a crucial role if the allocation of capital is to be efficient.

### ***Creating the enabling environment for banking reform***

The country's market reform and opening program has been greatly accelerated since 1992 when in October that year the 14<sup>th</sup> CCP Congress declared that the goal of reform and opening was to create a socialist market economy, which effectively ended the experimental nature of economic reform and opening program launched since the late 1970s. The commitment to market-oriented reforms created an enabling environment for a host of further reforms central to the concept of a socialist market economy, including at the forefront banking reform. In early 1994, in response to the inflation threat, the government first launched a program of macroeconomic reform encompassing central banking, exchange rate management, and fiscal policy and taxation. These macroeconomic measures enabled the central authorities to regain macroeconomic control lost to local authorities during the decade of the 1980s under the decentralization policy of "fang quan rang li"<sup>3</sup>. While decentralization ushered in a period of rapid growth, it also generated significant macroeconomic instability. Indeed, one of the objectives of macroeconomic reform was to dampen significantly macroeconomic cycles as was achieved successfully in the 1990s.

Second, in the same year, the government created three policy banks – the State Development Bank, the Agriculture Development Bank, and the China Export-Import Bank – to relieve state commercial banks of their traditional policy mandates.

Third, in 1995 the government promulgated central banking and commercial banking laws to provide the legal foundation for banking reform.

Fourth, beginning from 1996, the government began vigorously to pursue enterprise reform that paved the way for banking reform, even as this resulted in large and painful layoffs of redundant state workers. Pursuing enterprise reform before banking reform was necessary considering that state-owned enterprises were the main clients of state banks and hence their main source of non-performing loans (NPLs), which were at the same time contingent liabilities of the government. Hence, unless the reform of state-owned enterprises took hold, any reform effort of the state banks

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<sup>3</sup> "Fang quan rang li" means transferring authority from the centre to the localities and letting State-owned enterprises retain more of their profits in lieu of repatriating them to the government.

would be in vain. As a consequence, the advancement of state-owned enterprise reform meant that banking reform could no longer be postponed. As state-owned enterprises were restructured, liquidated, merged, or bankrupted, the banks had to recognize the hidden losses on their books. This, in turn, triggered the need to recapitalize the banks, as vast amounts of non-performing loans were written-off.

Fifth, the State Council in February 2002 decided to reform solely state-owned commercial banks into internationally competitive financial enterprises, to transform them into state-controlled, shareholding commercial banks, and to encourage the listing of their shares in the market.

Sixth, the China Banking Supervisory Committee was created in 2003 to raise the regulatory capacity to supervise banks. Finally, adhering to the 2001 WTO accession agreement, the government used the entry of foreign banks into the domestic banking sector to intensify competitive pressures within the local banking industry in order to promote efficiency.<sup>4</sup> From the end of 2006, foreign banks could engage freely in local currency business on the same terms as domestic banks.

### ***Reforming corporate governance and restructuring the balance sheet***

The country's large SCBs have followed several steps in undertaking internal corporate reform. The first has been to reform corporate governance by inviting other (strategic) investors to dilute the sole state ownership, while still retaining overall state control. Specifically, the banks have endeavored to seek foreign strategic partnerships with the view to bringing in modern banking practices and technology. The broadening of ownership also has entailed selling some bank shares in the equity market to make bank management accountable through the discipline of the marketplace. To succeed in wooing outside investors, either as strategic partners or public investors, the banks must advance a credible in-house reform plan and then implement it credibly. Unquestionably, the more appealing their internal reform plans, the greater the likelihood that the SCBs would attract reputable outside partners and strike a better deal with their strategic counterparts and their investors through the equity markets.

Hence, the first step the government undertook was to strengthen the balance sheets of

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<sup>4</sup> Bayraktar, Nihal and Yan Wang (2006) show empirically that opening banks to foreign competition stimulates growth directly by improving access to financial services and indirectly by improving the efficiency of financial intermediaries, both of which reduce the cost of financing, and in turn, stimulate capital accumulation and economic growth. Nicholas Hope and Fred Hu (2006) also argue that the introduction of foreign strategic investment holds tremendous promise for the on-going reform of the Chinese banking system and that both international investors and Chinese banks can potentially forge a mutually beneficial partnership.

the state banks, the credit flows of which had been hampered by inadequate capital and piles of bad debts accumulated under the previous command regime. In 1998, the government issued RMB 270 billion (US\$32.6 billion) worth of 30-year fiscal bonds to recapitalize the balance sheets of the four largest state banks: ICBC, BOC, CCB, and ABC in order to comply with the international capital adequacy standards<sup>5</sup>. Again, on December 30, 2003, the government provided US\$22.5 billion each to CCB and BOC, with US\$15 billion provided later in April 2005 to ICBC to support their respective listings in the Hong Kong stock exchange.<sup>6</sup> Among the four largest state banks, CCB was the first to have its shares successfully listed in the Hong Kong stock exchange and thus the first to have its reform effort pass the market test. In addition, as part of the recapitalization scheme, the banks also issued subordinated debt to the local market: BOC, RMB 60 billion; CCB, RMB 40 billion; ICBC, RMB 35 billion; and BOCOM, RMB 12 billion.

In 1999, the government created four asset management corporations AMCs, one for each of the “big four”: ICBC, CCB, BOC, and ABC, to manage RMB 1.4 trillion of loans purchased from the books of the state banks at face value, of which 1.3 trillion were deemed non-performing (about 15% of GDP). The transaction was financed partly by central bank loans (RMB 573 billion) and partly by treasury bonds (RMB 820 billion). A second transfer of NPLs in the amount of RMB 1.186 trillion to the AMCs took place during the period from June 2004 through June 2006.<sup>7</sup>

The banks also launched reform measures to improve internal management that included strengthening the human resource base, introducing modern risk management practices, and amending the regulations for NPL classification to comply with international standards.

## **I.2 Implementation of reform**

### ***Seeking diversification and attracting foreign strategic partners***

Following the blueprint for reform, the banks have successfully launched and implemented their reform strategies. The ICBC, CCB, BOC, and BOCOM all have their state-ownership stake in the company diluted to below 70% by incorporating non-state ownerships, which includes foreign ownership, domestic legal persons, and public ownership (publicly owned and traded shares). Among non-state owners,

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<sup>5</sup> The capital adequacy requirements, which require banks to fully provision for their nonperforming loans and maintain at least 8% of aggregate capital adequacy, were adopted in 2004 and became binding in 2007.

<sup>6</sup> Central Huijin Investment Limited Liability Company, created in December 16, 2003, made the capital injection in terms of foreign exchange.

<sup>7</sup> BOCOM replaced ABC in this round of transfers of NPLs.

foreign strategic partners typically have the highest stake in the company: ICBC, 7.2%, BOC, 13.9%, CCB, 10.3%, and BOCOM, 18.7% (Table 1).<sup>8</sup>

**TABLE 1**  
Ownership Structure of Four State Commercial Banks, end 2007 (Unit: %)

Bank Name	Restricted Shares				Non-Restricted Public Shares	Foreign Ownership Among the Ten Largest Shareholders
	State Ownership	Domestic Legal Person Ownership	Other Domestic Shares	Foreign Ownership		
ICBC	70.7	4.2	0.9	7.2	17.0	Goldman Sachs: 4.93 Allianz Group: 4.22 American Express Co.: 0.38
BOC	67.5	3.3	0.5	13.9	14.8	Royal Bank of Scotland: 8.25 Fullerton Financial: 4.13 Union Bank of Switzerland: 1.33 Asia Development Bank: 0.20 The Bank of Tokyo-Mitsubishi, Ltd: 0.19
CCB	59.1	8.9		10.3	21.7	Bank of America: 10.95 Fullerton Financial: 5.65
BOCOM	26.9	15.0	6.5	18.7	33.0	The Hong Kong and Shanghai Banking Corporation Limited: 19.15

*Data Source: Bank Annual Reports*

<sup>8</sup> Foreign ownerships in Chinese banks cannot generally exceed 25% in total and any single foreign owner cannot exceed 20% of total bank shares. Foreign ownership in the smaller shareholding commercial banks and city commercial banks is on average higher than in large SCBs.

The participation of foreign and domestic capital as well as public shares in state commercial banks has not only strengthened bank capital, but also exerted a positive influence on corporate governance, especially so, in the case of foreign participation, to the extent that it stems the undue intrusion of government into the banking business. Second, all SCBs have installed modern corporate governance structures encompassing shareholders' congresses, corporate boards with outside directors and supervisors, supervisory boards, and better senior management structures.

By the end of 2007, thirty-three foreign institutional investors had invested in twenty-five domestic banks, with a total capital injection of US\$21.3 billion. These foreign strategic investors entered into various strategic co-operative agreements with domestic partners in widely diversified areas of banking, including retail banking, corporate governance and risk-management, trading, RMB derivatives and currency swaps, foreign exchange structured products, and trade and small-and-medium enterprises (SME) financing. In addition, domestic banks and their foreign partners now share their networks and customer base for providing services and cross-selling financial products. Finally, human resource development programs are a common feature of strategic co-operative agreements, with training courses offered in SME management and financing, wealth management, fund trading, risk management, implementation of the Basel Capital Agreements, and so forth.

### ***Successful Public listings***

After launching internal restructuring and the successful attraction of reputable foreign strategic partners, SCBs were successful in listing their shares in the Hong Kong (H-shares) and Shanghai (A-shares) stock exchanges, thereby for the first time becoming subject to market discipline. The chronology was BOCOM, June 2005; CCB, October 2005; BOC, June 2006; and ICBC, October 2006 (which was the first double listing in both the Hong Kong stock exchange and the Shanghai stock exchange). Public listings of bank shares altogether raised RMB 445 billion (US\$ 60 billion) in the open market, about 26% of combined net capital. In comparison, the funds raised through foreign strategic partnerships amounted to US\$ 15 billion. In 2007, two small shareholding banks were listed in the Shanghai stock exchange, bringing the total listed to seven among twelve shareholding banks. In addition, three city commercial banks based, respectively, in Beijing, Nanjing, and Ningbo were listed in the Shanghai A-share market, paving the way for other city commercial banks to restructure and then seek listing on the stock exchange. Benefiting from rising share prices, ICBC, CCB, and BOC were the first, second, and fourth largest banks in the world by market capitalization at the end of 2007, being valued,



respectively, at, US\$338.9 billion, US\$ 2202.5 billion, and US\$197.8 billion.

### ***Strengthening Capital***

By the end of 2007, banks accounting for almost four-fifths of total banking assets met the capital adequacy standards. The capital adequacy ratios for the four listed SCBs were, respectively, 13.0% for ICBC; 13.3% for BOC; 12.6% for CCB; and 14.1% for BOCOM. The core capital adequacy ratios were, respectively, 11.0% for ICBC; 10.7% for BOC; 10.4% for CCB; and 10.2% for BOCOM.

### ***Building risk management systems***

Since 2006, the CCB and other large SCBs have begun to introduce a vertical risk management system to consolidate risk management into the hands of the newly created chief risk officer. The reform has helped to stem undue interference in the loan-decision process at the local level. At the same time, by taking advantage of information technology, banks have begun to streamline and optimize the operational processes and procedures in order to reduce operational risks. Banks have also begun to use quantitative risk models (stress tests) to gauge and simulate the various risk scenarios they face. The concept of economic/risk capital has been adopted to manage risk quotas, allocate bank resources, and price products. Banks have also strengthened the analysis of market and liquidity risks, while controlling operational risks through improved internal control procedures that employ quantitative tools and models. Last but not least, banks have tried to build new risk and credit cultures.

### ***Pursuing strategic transformation of the business model***

Chinese banks have traditionally focused on corporate business -- wholesale banking, so to speak. However, as the local capital market gradually matures and the income and wealth of Chinese households continue to grow apace, the banks find growing business opportunities in consumer-oriented financial services such as mutual funds, mortgage financing, wealth management, and personal loans. These are also categories of financial services that the newly arrived foreign banks aim to capture with their competitive strengths. Hence, in seeking new sources of profit growth and achieving a more diversified, balanced revenue base, as well as in meeting the competition from foreign banks head on, Chinese banks are compelled to respond to the challenge of strategic transformation of the traditional business model toward retailing banking.

New opportunities provided by retail banking include credit cards, personal loans, wealth management and mutual funds, insurance products and other products

generating fee-based income. Retail banking, in turn, has called for greater investment in information technology to develop efficient systems for processing personal loans and supporting internet banking, and tele-banking, as well as improvements in the efficiency of retail networks to better serve the needs of retail customers. Large SCBs like the CCB have also initiated special programs to cater to the needs of SMEs. In addition, they have started to move steadily toward universal banking, branching out into such new areas of financial services as investment banking, issuance, securities, private banking, and financial leasing. Banks have also started to grow overseas business either by establishing more new overseas branches or through merger with or acquisition of foreign financial entities.

## **II. Financial performance**

This section reports the financial performance of banks in 2007 focusing on the four listed SCBs. Even though a single year's performance does not necessarily establish an underlying trend, it can shed light on the effectiveness of reform, albeit at a still early stage. Since financial performance of the banks depends crucially on their ability to manage assets and liabilities to achieve their financial targets, this section begins with an analysis of the balance-sheet performance of the four SCBs.

### **II.1 Asset-liability management in 2007**

#### ***Managing liabilities***

In 2007, the total liabilities of all financial institutions reached RMB49.6 trillion yuan, about twice China's GDP, representing continuing fast growth of 18.8% (or an increase of 2.2 percentage points as a share of GDP) over the past year. The combined total liabilities of the four SCBs: ICBC, CCB, BOC, and BOCOM grew by 16.8% in 2007 to reach RMB21.8 trillion yuan, or 44% of the total. The four state commercial banks' share in total liabilities declined further in 2007 as smaller shareholding commercial and city commercial banks grew faster than large banks.

Deposits in the four SCBs grew by 14.8% in 2007 to reach RMB20 trillion yuan (80% of GDP), or 91.7% of their total liabilities, (compared with 93% in 2006). The decline suggests that SCBs stepped up their efforts to use the inter-bank market and the capital market more actively, i.e., they employed debt issuance as a funding source more than previously with a corresponding reduction in their reliance on bank deposits.

Corporate deposits were the main driving force for total deposit growth. Having

grown 20.6% in 2007, the share of corporate deposits rose to 45% from 42.7% in 2006. Several factors accounted for this increase. First, the corporate sector was awash with liquidity due to record profits helped by a buoyant economy. World Bank research shows that corporate saving accounted for the sharp increase in the savings/current account surplus since 2005, when the current account surplus first began to surge.<sup>9</sup> Second, the growth in personal/household deposits may have slowed as a result of diversification of personal savings deposits into other investment outlets such as stock mutual funds and entrusted products,<sup>10</sup> just as banks stepped up their retail and investment banking business to offer an increasing array of financial products to bank clients. Nevertheless, stock mutual funds, which were one of the hottest-selling new financial products of 2007 due to the stock market boom, would not necessarily reduce total deposit flows to the banks as commonly perceived, since funds entrusted to the securities companies for stock transactions are likely to be re-deposited in the banks by those companies under a different deposit category. Finally, the widening gap between the growth in corporate profit and household income as reported in the national income accounts may also have caused the divergence in corporate and household deposit flows to the banks.

The central bank raised interest rates several times in 2007 but funding costs to banks rose only modestly, which resulted in higher interest spreads and margins to the banks. There are several underlying reasons for this. First, while the central bank raised interest rates six times over the course of 2007 as inflation took off, it left the rate on the most liquid demand deposits or sight deposits intact.<sup>11</sup> Second, the average maturity date of bank deposits was shortened on account of two factors: first, a wholesale shift from fixed-term saving deposits to sight deposits as the stock market boom was underway, and, second, a large infusion of corporate deposits, which have a higher proportion of short-term deposits than do personal deposits. For instance, the average funding cost for the CCB, which had the highest ratio of sight deposits among large SCBs, was 1.57% in 2007, compared with 2.04% for BOC, which had the lowest share of sight deposits. Needless to say, these rates were far below the rate of inflation, 4.8%. More broadly, this phenomenon also resulted from the persistence of excess liquidity in the economy in spite of the central bank's equally persistent attempts to sterilize the monetary consequences of sustained balance-of-payments surpluses.

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<sup>9</sup> See Louis Kuijs (2005) and Bert Hoffman and Louis Kuijs (2006).

<sup>10</sup> This instrument is often employed to finance an infrastructure project like a highway but, for an investor/saver, it is a fixed income product.

<sup>11</sup> The government also slashed the tax rate on interest earned on bank deposits to 5% from 20% to raise the effective yield on bank deposits. But its effect should be neutral across the spectrum of all deposits.

Faster growth in deposits and the containment in funding costs in 2007 all helped to steepen banks' yield curves and raise banks' net interest income, which still is the largest source of bank revenue. The one factor that worked to reduce net interest income was the decline in the loan/deposit ratio as explained below.

### ***Managing assets***

Matching the strong growth in liabilities, total bank assets grew by nearly 20%, also reaching about twice GDP by the end of 2007. As with liabilities, smaller banks starting with a low asset base and the need to achieve scale economies grew their assets at a much faster pace than those of large SCBs. In 2007, banks' cash balances in total assets increased sharply in the wake of the central bank's hiking of reserve requirements. As a result, banks lowered the shares of both bonds and loans in total assets, even though both classes of assets earn higher yields than cash. But the growth in bank revenue depends not only on the yields of respective asset classes but also on their respective growth rates as well.

The central bank sharply raised the reserve requirement ratio of the banking system, from 9% at the end of 2006 to 14.5% by the end of 2007 in order to drain liquidity from the banks and the economy.<sup>12</sup> As a result, for the four SCBs, the cash/asset ratio approached 13.5%, up from 10% in 2006. Considering the low yield on cash balances, high cash balances are a cost borne by the banks to pay for the central bank's liquidity management operations or stabilization policy.

The second largest bank asset, bonds, saw its share in total assets decline in 2007. For the four listed SCBs, the bond/asset ratio fell to 32.1% by the end of 2007, a decline of nearly 3 percentage points from the previous year. The reasons are several. First, higher reserve requirements tightened overall bank liquidity. Since bonds are a close substitute for cash for liquidity management, their position was reduced to accommodate a higher cash position. The same logic also applies to bank loans, but to a lesser extent. Second, the sub-prime crisis imposed some losses on the ICBC, CCB, and BOC and, as a result, banks reduced their foreign bond positions, in order to raise provisions for losses. Third, bond positions were trimmed also because bonds were exposed to growing interest risks as the central authorities raised interest rates and bank reserve requirements to counter inflation.

Bank loans, the largest asset class, of the four listed SCBs grew by 14.7%, a 3.2 percentage point increase over 2006. Several factors accounted for the rapid growth

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<sup>12</sup> The reserve requirement ratio was further increased to 17.5% in 2008 before it was reduced.

in bank lending. From the supply side, the banks are well capitalized after successful funding efforts in the private equity and stock markets. They are also blessed with continued strong growth in deposits, as discussed above. Second, bank loans are the largest bank asset and the primary source of bank revenue. Net loan yield, or interest margin, is higher than it is for the two other major classes of assets, bonds and cash. In addition, as mentioned earlier, the interest margin has risen since the central bank began to raise interest rates in 2004. Hence, the banks are tempted to grow this class of assets to maximize total return, provided they can manage the greater accompanying risks. From the demand side, with an economy growing at near 12% in 2007 and above 11% over the three years to end 2007, credit demand has been strong from both corporations and individuals/households. Arguably, fast loan growth, in turn, supported the fast economic growth.

In spite of the overall rapid growth in bank lending, its share in total bank assets actually fell in 2007. For the four largest listed SCBs, the loan/asset ratio fell to 47% by the end of 2007, a decline by about 1 percentage point from the previous year. The CCB registered the largest decline -- about 3.1 percentage points over the previous year.

As argued before, the banks faced a growing liquidity constraint as the central bank tightened monetary and credit policy over the course of the year culminating in strict credit restraint in the fourth quarter. Loan sales and experimental securitization also accounted for the decline in loan/asset share, but the overall impact was still marginal. The decline in the loan/asset ratio, however, was largely the story for corporate loans, whereas personal loans, led by mortgages, witnessed nothing short of explosive growth.

Corporate loans grew less than total loans and even more modestly compared with personal loans. For the four SCBs, corporate loans grew by 11.6%, 3 percentage points lower than total loan growth. Consequently, the corporate loan/total loan ratio declined by about 2.1 percentage points from the previous year to 78.7% by the end of 2007. The comparatively modest growth in corporate loans can be attributed to several factors. First, enterprises achieved record earnings and hence had less need for external financing. This was also the reason for the significant increase in corporate deposits on the liability side of the balance sheet discussed before. Second, corporations may have relied more on the cheaper capital market to finance investment in lieu of bank credit, as the stock market boom sharply reduced the cost of equity financing. Third, macroeconomic stabilization, energy conservation and

anti-pollution policies compelled banks to tighten lending standards, as environmental and macroeconomic risks grew. Finally, the strategic transition of the business model of the banks discussed earlier also requires them to focus more on providing retail banking services and generating fee-based incomes, thereby reducing their former single focus on lending. Hence, banks greatly hastened the pace in offering new financial services and products to their corporate clients. For instance, trade-financing products witnessed rapid growth as the demand for them increased along with the rapid expansion in foreign trade.

### ***Managing loan portfolios***

Banks constantly fine-tune their loan portfolios to cope with macroeconomic risks and adapt to evolving business models. Corporate loans, which account for nearly four-fifths of total bank loans, are concentrated in five sectors that receive anywhere from 70% to 90% of total loans depending on the individual bank. For instance, in the case of the CCB, the five largest sectors, which received three-quarters of the loans in 2007, were, in order of magnitude: (1) manufacturing, (2) transportation, postal and communications, (3) suppliers of electricity, water and gas, (4) real estate, and (5) waterworks, environment, and public facility management services. Hence, manufacturing, infrastructure, and housing dominate the CCB's loan portfolio.

Manufacturing is the largest sector in the economy but it is exposed to the growing risk of falling foreign demand and exchange rate appreciation. Although its share in total lending was stable in 2007, ICBC, CCB and other banks have begun to trim exposure to this sector. As the hot housing market begins to cool off, real estate loans, in particular to real estate developers, are also exposed to rising risks. The CCB, which has a relatively high exposure to developers, cut its exposure to 13.8% of total loans in 2007. Banks with a low exposure to this sector, by contrast, may have increased their real estate exposure in 2007; for example, ICBC raised its exposure to the sector to 10.4% of total loans. In general, banks have a high concentration of their loans in infrastructure and natural monopolies, which largely reflect the strong underlying demand for their services and products in national economic development.

As the rate of growth in corporate loans slowed, personal loans grew briskly in keeping up with the strategic transformation of the business model towards retail banking. For the four listed SCBs, personal loans grew by 21% in 2007, 15.4 percentage points higher than the growth in corporate loans and 6.3 percentage points higher than the growth in total loans. As a result, the ratio of personal to total loans rose to 21.3% by the end of 2007 at the expense of corporate loans. Thus, personal

loans increasingly appear to be the preferred asset class for banks.

Residential mortgages constituted the lion's share of personal loans at close to 80% of the total, with auto and student loans comprising the bulk of the remainder; credit card overdrafts accounted for the residual 2-3%. The reason why residential mortgages are becoming an asset class highly favored by the banks is due to the comparatively low associated NPL ratio -- generally below 1%. The steady advance in urbanization, which is still at the relatively low level of about 43% in 2007, also underpins the projected, robust, long-term demand.

## II.2 Operating Income in 2007

Operating income sustained high growth into 2007 on account of rapid increases in both net interest income and fee and commission income. For the four listed SCBs, operating income reached RMB716.6 billion yuan in 2007, an increase of 37.7% from 2006 (Table 2). Net interest income reached RMB623.7 billion yuan, an increase of 34.1% from 2006, on account of both faster loan growth and higher interest margins, though at 2.77% in 2007 up by only 0.01 percentage points from 2006. Net interest income comprised 87.3 % of total operating income in 2007, still the largest source of bank income.

**TABLE 2**

Operating Income of Four State Commercial Banks (Unit: 100 millions of yuan)

Bank Name	2006	2007	Growth Rate (%)
ICBC	1807.05	2541.57	40.7
BOC	1460.74	1806.69	23.7
CCB	1502.12	2194.59	46.1
BOCOM	434.59	623.22	43.4

*Data Source: Bank Annual Reports*

### ***Significant increase in net interest income***

The growth in net interest income was due to several factors. The first, as discussed above, is faster growth in bank deposits and the containment of funding costs as lending rates were raised by the central bank. Second, the effective lending rate was also raised by a lengthening in the average loan maturity resulting from a rapid increase in high-yielding long-term investment, as well as greater bargaining power on the part of banks, as overall credit conditions were tightened. The one factor that

worked to reduce net interest income was the decline in the loan/deposit ratio:  
Growth in net interest income = growth in bank deposits + growth in [average lending interest rate \* (loan/deposit) – average deposit interest rate]

### ***Explosive growth in fee and commission income***

However, non-interest income experienced explosive growth. For the four SCBs, fee and commission income grew by 112.4% in 2007 to reach RMB100.7 billion yuan. As a result, the share of fee and commission income in total operating income rose sharply to 14% in 2007, up by nearly five percentage points from 2006.

The fastest growing component of fee and commission income was “fees for agency services”, which expanded 3.8 fold in 2007 to RMB50 billion yuan or 45.5% of the total, up from 24.5% in 2006. The CCB had the highest share, 50.2%, among the four largest SCBs. Substantial sales in stock mutual funds and insurance products accounted for the improved performance. The former resulted directly from the booming stock market, while the latter benefited from the fast growth in the insurance market overall. The second largest component of fee and commission income was “bank card fees”, which grew by 39.6% in 2007, rising to RMB15.6 billion yuan or 14.1% of the total, but representing a decline in share of 6.5 percentage points from 2006. The wider issuance and usage of bank cards raised the proportion of total retail sales charged on credit cards to 21.9% in 2007, 4.9 percentage points above the level in 2006. “Commission on trust and fiduciary business” also grew briskly in 2007, for ICBC, CCB, and BOCOM, respectively, by 202.7%, 156.0%, and 269.9%. The major businesses in this category were related to securities investment/mutual funds and enterprise annuity. As financial assets continue to grow, trust and fiduciary business holds a great potential to become a major source of revenue in the future.

The other important categories of fee and commission income are “settlement and clearing fees”, “consultancy and advisory fees” and “guarantee and credit commitment fees”. The increase in “settlement and clearing fees” resulted from rapid growth of the economy and foreign trade, the deepening of financial markets, and the deployment of more efficient IT technology and systems. Finally, banks also stepped up efforts to provide a wider variety of wealth management products to their clients including fixed income, entrusted and structural products, and QDII (qualified domestic institutional investors) instruments. As a result, national sales of wealth management products reached more than RMB1 trillion yuan in 2007, up from RMB200 billion yuan in 2005 and RMB400 billion yuan in 2006, with an average annual growth rate exceeding 100% over the three-year period.



The increase in fee and commission income owed more to the growth in personal than in corporate fee and commission income. For instance, for the ICBC, personal fee and commission income grew 146.6% in 2007 and its share in total fee and commission income rose to 68% in 2007, up 10 percentage points from 2006. Similarly, for the CCB, personal fee and commission income grew 183.3% in 2007 and its share in total fee and commission income rose to 64.5%, up 12 percentage points from 2006.

***Strong growth in retail banking income***

As a result of brisk growth in both personal fee and commission income and personal loans, operating income derived from retail banking business gained at the expense of wholesale banking business, except for ICBC (Table 3). In 2007, three of the listed SCBs -- ICBC, BOC, CCB -- derived about one-third of their operating income from their retail banking business. The CCB gained the most in the share of retail banking business in total operating income -- by 5.3 percentage points to reach 34.1%, followed by BOCOM, 2.1 percentage points to reach 13.6%, and BOC, 1.7 percentage points to reach 35.3%. The ICBC lost half a percentage points to 33.9%.

**TABLE 3**

Shares of Corporate and Retail Banking Revenue in Total Revenue (%)

Bank Name	Corporate Banking			Retail Banking			Investment		
	2006	2007	Change	2006	2007	Change	2006	2007	Change
ICBC	50.6	49.2	-1.4	34.47	33.9	-0.5	14.9	16.9	2.0
BOC	49.6	54.3	4.7	33.61	35.3	1.7	16.8	10.3	-6.5
CCB	56.4	54.3	-2.2	28.77	34.1	5.3	14.8	11.7	-3.2
BOCOM	60.0	60.3	0.2	11.55	13.6	2.1	28.4	26.1	-2.3

*Data Source: Bank Annual Reports*

This performance indicates that the banks' strategic transformation toward retail banking services is on track. More fundamentally, it reflects consumers' growing demand for better financial services as their income rises. The trend will continue and may even accelerate in the future.

***Record profit achieved***

The four SCBs were able to control the growth in their costs to below the growth in

operating income. As a result, the cost/income ratio fell again in 2007, by 1.62 percentage points to 37.8% from 39.4% in 2006. As a result, profits before tax (and before provisions for impairment losses) surged to RMB413.6 billion yuan, an increase of 42.5% over 2006, the highest on record in recent years.<sup>13</sup> Net profit (after tax)<sup>14</sup> reached RMB233.8 billion yuan, an increase of 49.5% in 2007. Earnings per share generally exceeded 20 cents for most banks, an increase of at least 20%: ICBC, 0.24 cents (41.2%); BOC, 0.22 cents (22.2%); CCB, 0.3 cents (42.9%); BOCOM, 0.43 cents (59.3%).

In 2007, retail banking profit rose sharply for the ICBC and the CCB, respectively, by 159% and 145%, but more modestly for the BOC, 27%, and accounted for more than a quarter of total profit for the four SCBs. Helped by higher profit margins and capital efficiency, the return on equity (ROE) improved significantly for the banks.<sup>15</sup> The CCB registered the largest growth in ROE among the four banks: 30% in 2007, followed by 19.2% of BOCOM, 6.4% of ICBC, and 0.2% of BOC. By the end of 2007, ROEs for the four SCBs were close to or above 15% with the highest level obtained by the CCB at 19.5%, followed by BOCOM: 17.2%, ICBC: 16.1%, and BOC: 14.2%.

The return on assets (ROA) of all four SCBs rose above unity in 2007 after a year of impressive growth: ICBC, 1.01 (42.3%); BOC, 1.09 (14.7%); CCB, 1.15 (25.0%); and BOCOM, 1.07 (33.8%). These financial indicators compare favorably with some of the global banking giants before the recent crisis.

### ***Asset quality improved***

Both the NPL ratio and the absolute amount of NPLs fell for the four listed SCBs (Table 4). The NPL ratios at the end of 2007 were in the range of 2 - 3%: 2.74% for ICBC; 3.1% for BOC; 2.6% for CCB and 2.1% for BOCOM, far below the average of 6.2% for all banks. The coverage ratios for loan loss provisions were above or near 100%: ICBC, 103.5%; BOC, 108.2%; CCB, 104.4%; and BOCOM, 95.6%.

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<sup>13</sup> Provisions for impairment losses vary according to individual banks. In the case of the CCB, it amounted to RMB275.9 billion yuan in 2007, about 21.5% of net profit.

<sup>14</sup> The marginal tax rate was 33% in 2007 but was reduced to 25% in 2008.

<sup>15</sup> The return to equity is the product of profit margins (profit/revenue), asset turnover (revenue/assets), and the leverage ratio (assets/net equity).

**TABLE 4**

Nonperforming Loan (NPL) and Provisioning Coverage, end 2007

Bank Name	NPL (100 million)		NPL Ratio (%)		Provisioning Coverage Ratio (%)	
	2007	Compared with the last year	2007	Compared with the last year	2007	Compared with the last year
ICBC	1117.74	-259.71	2.7	-1.1	103.5	32.9
BOC	888.02	-94.18	3.1	-0.9	108.2	12.2
CCB	851.70	-92.29	2.6	-0.7	104.4	22.2
BOCOM	226.94	-7.83	2.1	-0.5	95.6	23.2

*Note: Data for BOCOM are impaired loan, impaired loan ratio and impaired provisioning coverage ratio.*

*Data Source: China Banking Regulatory Commission*

#### **IV. Conclusion: Assessment of bank performance**

Judged by their strong financial performance, including the significant increase in fee and commission income that reflects the strategic goal of revenue diversification, the four large SCBs appear to be on track to reform themselves successfully into modern commercial banks. This contradicts the findings of some earlier studies on the effects of banking reform that have yielded ambiguous results. Podpiera (2006) finds that banks do not appear to make their lending decisions on a commercial basis. Dobson and Kashyap (2006) assemble macroeconomic, microeconomic and anecdotal evidence to suggest that the pressure to make policy loans is continuing despite the reforms. However, recent empirical work by Demetriades et al (2008) shows that bank loans were positively correlated with growth in future value added and total factor productivity during 1999-2005, even for state-owned enterprises. Moreover, they find that firms with access to bank loans tend to grow faster in regions with greater banking sector development. Unlike the present study, all the above studies employed data prior to 2005-06 when the four largest SCBs had just begun to list shares in the market and subject themselves to market discipline.

Can this financial performance of banks be sustained? It appears that the good financial performance has resulted from two crucial factors that are difficult to separate. First, as we argue here, the banking reform has raised efficiency and helped to

cap costs, thereby boosting the return on capital.<sup>16</sup> Second, a supportive macroeconomic environment – with growth averaging 10.7% a year in 2003-2007, and a partially liberalized interest rate regime should also have helped to boost bank revenue. However, fast growth, unlike the first factor, can only exert a transitory rather than fundamental impact on bank performance, and thus cannot be expected to sustain revenue growth over the long haul.

Indeed, the growth rates that prevailed over 2003-2007 have proven to be unsustainable. Economic growth slowed sharply in 2008 to 9.9% from 13% in 2007 under the weight of macro-stabilization policies to quash inflation as well as the eruption of the financial crisis since September 2008. As a result, growth in profits (before tax) of the four state commercial banks decelerated in 2008 to an average of about 20% compared with an average of 43% in 2007, although that was still very respectable. As the global financial crisis deepens, the growth slowdown is likely to continue to threaten the asset quality of the banks. Hence, the banks are navigating a much more difficult economic terrain than hitherto. They need to manage risks while seizing the opportunities provided by an economy under vigorous restructuring, as well as staying on the course of banking reform.

Although primary emphasis should rest with banking reform to improve bank performance, there is no reason to be overly pessimistic on the macroeconomic outlook and its implied risks. China enjoys considerable flexibility to stimulate domestic demand through expansionary fiscal and monetary policy to offset faltering external demand. Hence, the global financial crisis offers a welcome opportunity for China to rebalance its economy away from external and toward domestic demand. Optimism stems first from the government's strong fiscal position: the budget was nearly in balance in 2008 (a deficit of 0.4% of GDP) and government debt was a moderate 20% of GDP. Second, the banks are well capitalized and thus well positioned to support the government's stimulus package. Furthermore, the banks are better equipped now than at any time in the past to scrutinize lending derived from the stimulus package to secure their own benefits along with benefit for the economy at large.

Indeed, the government's stimulus package of RMB4 trillion yuan unveiled in November 2008 for 2009-2010 has been supported with dramatic credit growth, with M2 growing at 25.5% at end of March 2009 compared with the target of 17-18% for

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<sup>16</sup> Refer to footnote 15 in which it shows that both profit margin and efficiency of deploying assets are factors determining the return to capital.

the whole year. If properly implemented, the stimulus package should help China to revive short-run growth and, more importantly, restore macroeconomic balance over the medium and long term.

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