China's Financial System: The Perils of Riding the Wave

By James R. Barth and Gerard Caprio, Jr.

The pace of development in China in recent decades has been nothing short of astounding. Since 1978, the economy has grown at an annualized rate of 9.4 percent – three times the global average, leading to an eight-fold increase in per capita income. And while the benefits of that increase have not been spread uniformly, rapid growth has certainly brought hundreds of millions of Chinese out of poverty.

However, as might be expected, growth accomplished by layering a market economy on top of the old centrally planned one has left key institutions straining to catch up. In particular, the transition from a
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The financial system long devoted to providing favored state-owned enterprises with plentiful capital (and, more recently, to driving export-led growth) to one that is a sophisticated intermediary for channeling savings into the most productive uses has been fraught with problems.

THE SOURCES OF CHINA'S GROWTH

While China managed an extraordinary growth rate of 10.7 percent last year and 11.1 percent in the first quarter of 2007, even a cursory glance at the sources of that growth suggests the pace is not sustainable. Investment, the primary driver, is largely financed with the retained earnings of firms and loans from banks, which capture most savings. All told, investment represented a remarkable 43 percent of GDP in 2004, leading many to fear that what goes up so high must eventually come down. Indeed, China's prime minister, Wen Jiabao, worried out loud last year that superheated investment was leading to industrial overcapacity, weakening both enterprise viability and the balance sheets of industry's creditor banks.

The evidence bear out. In the past, whenever the investment-to-GDP ratio in China has reached a peak and then fallen, the growth rate declined. The ratio is now the highest it has been for a quarter century.

Exports have grown in parallel with investment. The long export boom has led to tremendous growth and urbanization along China's coast — but at a price. For one thing, the boom has widened geographic income inequality. Government statistical sources, not prone to exaggerate on this sensitive topic, acknowledge that per capita income along the coast is double that of the interior. For another, it has created considerable political friction with the United States.

<table>
<thead>
<tr>
<th>TOP GLOBAL TRADING NATIONS, 2006</th>
<th>TRADE (US$ BILLIONS)</th>
<th>GDP (US$ BILLIONS)</th>
<th>TRADE/GDP (PERCENT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>52,958</td>
<td>513,245</td>
<td>22.3%</td>
</tr>
<tr>
<td>Germany</td>
<td>2,045</td>
<td>2,897</td>
<td>70.6</td>
</tr>
<tr>
<td>China</td>
<td>1,761</td>
<td>2,630</td>
<td>67.0</td>
</tr>
<tr>
<td>Japan</td>
<td>1,330</td>
<td>4,367</td>
<td>28.2</td>
</tr>
<tr>
<td>France</td>
<td>1,021</td>
<td>2,232</td>
<td>45.7</td>
</tr>
<tr>
<td>Netherlands</td>
<td>738</td>
<td>660</td>
<td>114.2</td>
</tr>
<tr>
<td>Canada</td>
<td>747</td>
<td>1,260</td>
<td>58.9</td>
</tr>
<tr>
<td>Belgium</td>
<td>723</td>
<td>394</td>
<td>183.7</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>651</td>
<td>190</td>
<td>343.7</td>
</tr>
</tbody>
</table>

*Source: International Monetary Fund*

CHINA'S GLOBAL INTEGRATION

China began to open its economy to the world in the late 1970s. Both its exports and imports have exploded over the past 25 years, increasing nearly 40-fold and 35-fold respectively. China is now the third largest trading nation in the world when measured by the sum of exports and imports, behind only Germany and the United States.

At the same time that China has been rapidly inserting itself into the world economy through trade, it has been running chronic trade surpluses — mostly with the United States — reaching a record $177 billion in 2006. This, of course, implies that others have been running trade deficits with China. The United States alone was in deficit with China to the tune of $233 billion in 2006.

The United States has responded by complaining to the World Trade Organization that China subsidizes exports, largely by "manipulating" exchange rates. And it is pressur-
The tsunami of export revenues — from sales of everything from socks to honey to giant-screen TVs — has been complemented by a flood of foreign investment.

dollar, and a slightly wider band within which the yuan could fluctuate against a larger basket of foreign currencies. To date (May 2007), the yuan has appreciated by about 7 percent against the dollar.

The tsunami of export revenues — from sales of everything from socks to honey to giant-screen TVs — has been complemented by a flood of foreign investment. The most stable source of private capital flowing into China has been foreign direct investment, in which foreigners build their own plants and infrastructure. China is now the largest recipient of this type of investment in the world — $70 billion in 2006 and a whopping $680 billion since Deng Xiaoping declared that it doesn’t matter if a cat is black or white, so long as it catches mice.

Foreign companies often form joint ventures with Chinese enterprises, which supply the land and labor. These foreign-invested enterprises now account for over half of China’s exports. Indeed, by one solid estimate, China’s overall GDP growth rate would have been about a third lower if foreign direct investment had not been forthcoming.

The broad strategy here is plain: China has chosen to liberalize its capital controls with respect to direct investment, which provides much-needed technology and managerial skills that can spread to domestic firms throughout the country. Thus, just a few months ago, GM’s Chinese manufacturing partner, the Shanghai Automotive Industry,
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currency pegs, even when foreign currency reserves were melting away. Several countries in East Asia suffered severe recessions as a result. But China did not.

A big difference is that these other countries – Thailand, Malaysia – had not only adopted pegged exchange rate regimes, but also had liberalized their capital controls. While this liberalization facilitated a surge in capital inflows to finance investment, it made the economies vulnerable to “hot-money” outflows. Investors were able to scramble for the exits when they decided that the currency pegs were not sustainable.


With no trade deficit to offset the cash influx from foreign direct investment, China has been accumulating foreign exchange reserves at quite a pace. As of April 2007, China’s central bank held about $1.2 trillion, making it the world’s top holder of foreign exchange (ahead of second-place Japan). Once China allows the yuan to become fully convertible for purposes of investment, this mountain of foreign currency will help assure foreign investors that the country can withstand an attack on the yuan, making a return of the East Asia currency crisis far less likely.

The lion’s share of China’s foreign exchange reserves is invested in U.S. Treasury securities, which has helped keep down interest rates in the United States despite large, chronic budget deficits and weak domestic savings. Thus, changes in China’s management of foreign exchange could have substantial repercussions in world securities markets. And such changes do seem to be in the works: the newly created State Foreign Exchange Investment Corporation has been directed to diversify assets, buying foreign equities, as well as currencies other than the dollar.

At the moment, the securities that China has been accumulating with its growing stock of foreign-exchange reserves are assets on the balance sheet of the People’s Bank of China. By shifting the composition of the portfolio to higher-yielding investments – including its signal $3 billion investment in the Blackstone Group private equity firm – the People’s Bank of China could increase the earnings on its assets. Needless to say, however, the riskiness of its portfolio will also increase.

The buildup in foreign exchange at the People’s Bank of China follows from the government’s policy to soak up inflows of foreign currency, lest they exacerbate inflation by stimulating excessive bank lending. The bank has been buying foreign currency with yuan, then selling bonds denominated in yuan in order to mop up the bank liquidity created in the process. This type of central bank operation is very profitable for the People’s Bank of China, because the interest it earns on foreign currency assets (mostly U.S. Treasuries) exceeds the interest it pays on domestic bonds. Indeed, in 2006 the People’s Bank reportedly earned $44 billion in interest on its foreign securities, while it had expenses of just $11.5 billion in interest payments on its debt and on interest paid on commercial bank reserves.

The problem here is that the People’s Bank of China is increasing its profits at the expense of commercial banks – banks focused
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on profits would not endure this arrangement for long. And in other countries, commercial banks haven’t the requirement that Japanese banks lend money to the government at below-market rates drove the political movement to deregulate the Japanese banking system in the early 1980s.

Chinese banks are vulnerable to slowing in loan growth because they derive virtually all of their income from the net interest margin.

The People's Bank of China is, in essence, serving as a financial intermediary, channeling a large portion of the public’s savings into U.S. Treasury securities—but, in the process, keeping most of the profit for itself. Consider the financial statements of the China Construction Bank, a government-controlled bank. As of June 2006, borrowers were paying an average of 5.34 percent interest—a nice markup from the 1.49 percent the bank pays on deposits. But fully one-third of the bank’s assets consist of People’s Bank of China bonds that yield a paltry 2.84 percent. The result is an overall interest margin of just 2.7 percentage points. This means that Chinese banks are vulnerable to slowing in loan growth because, unlike their counterparts in the United States, they derive virtually all of their income from the net interest margin.

The huge amount of foreign-exchange reserves that are denominated in U.S. dollars also poses a problem for China. Assume for purposes of illustration that $700 billion of the government’s reserves are denominated in dollars. This means that the roughly 7 percent appreciation of the yuan against the dollar means that any appreciation of the yuan creates capital losses for the People’s Bank of China. Dollar depreciation also creates problems for Chinese exporters who earn revenue in dollars, but have bank debts denominated in yuan.

Chinese officials are well aware of the tensions resulting from external surpluses. But they are also acutely aware of the risks associated with relaxing capital controls and widening the trading band for the yuan—and are attempting the delicate task of pursuing sustainable economic growth without the ability to use conventional monetary policy tools to prevent excessive growth in both money and credit. Instead, China is relying on various micromonetary tools to prevent serious disruptions to investment and export growth that would worsen unemployment.

THE STRUCTURE, PERFORMANCE AND RISKS OF CHINA’S FINANCIAL SYSTEM

China’s financial system is much more bank-centered than highly evolved systems like that in the United States. Indeed, one of the great strengths of the U.S. system is the ease with
which firms can find alternatives to bank credit. This difference is not surprising: arm’s- length finance, such as corporate debt and equity, requires a more sophisticated, timely and reliable information network than does bank finance. As a result, these parts of the financial system usually develop later, leaving most developing economies heavily dependent on banks.

Beijing recognizes the value of promoting alternatives to bank finance, and has taken actions to develop its capital markets. For example, in the last few years, laws were changed to strengthen minority shareholders’ rights. And all shares in state-owned enterprises listed on China’s two stock exchanges will soon be converted into tradable shares, which will ease the overhang of government ownership. Also, the Ministry of Finance issued new standards last year that will bring Chinese accounting practices in line with international standards.

To protect bondholders (and bank lenders), the government promulgated a new bankruptcy law in 2006. In the past, employees were first in line when cash was short. The new law requires payment to creditors before employees.

From the formation of the People’s Republic in 1949 until the late 1970s, the People’s Bank of China functioned as both a central bank and as the nation’s primary commercial bank. It engaged in deposit-taking and lending activities in accordance with the central plan of the government. This legal monopoly ended in 1979, when the People’s Bank gave up part of its commercial operations to the newly formed Agricultural Bank of China and the Bank of China. Four years later, the People’s Bank of China ceded the remainder of its commercial banking operations to the new China Construction Bank and the Industrial and Commercial Bank of China.

These institutions, known as the Big Four, simply continued to provide the commercial banking functions previously provided by the People’s Bank of China, with the Agricultural Bank specializing in agricultural finance, the Bank of China in foreign exchange and trade, the Commercial Bank in construction and infrastructure and the Industrial and Commercial Bank in urban commerce. The People’s Bank of China was left with its hats as the nation’s central bank and the regulator of the banking system.

### COMPARATIVE FINANCIAL SYSTEMS

<table>
<thead>
<tr>
<th>2005</th>
<th>CHINA</th>
<th>INDIA</th>
<th>U.S.</th>
<th>JAPAN</th>
<th>EU 25</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>$44.8 trillion</td>
<td>5.0%</td>
<td>1.7%</td>
<td>28.1%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Population</td>
<td>6.5 billion</td>
<td>20.2</td>
<td>17.9</td>
<td>4.6</td>
<td>20.0</td>
</tr>
<tr>
<td>Bank Assets</td>
<td>$590 trillion</td>
<td>6.3</td>
<td>0.9</td>
<td>14.4</td>
<td>12.0</td>
</tr>
<tr>
<td>Equity Market</td>
<td>$35.2 trillion</td>
<td>2.0</td>
<td>1.2</td>
<td>44.8</td>
<td>13.2</td>
</tr>
<tr>
<td>Bond Market</td>
<td>$58.0 trillion</td>
<td>1.1</td>
<td>0.5</td>
<td>40.4</td>
<td>14.7</td>
</tr>
<tr>
<td>Total Financial Assets</td>
<td>$152.0 trillion</td>
<td>3.3</td>
<td>0.8</td>
<td>31.4</td>
<td>13.3</td>
</tr>
</tbody>
</table>

*Source: International Monetary Fund, Standard & Poor’s, and the Bank for International Settlements*

Within a decade, the Big Four were allowed to invade each other’s turf. Beginning in the late 1980s, new commercial banks and other financial institutions were established to develop a more modern financial system. This included joint-stock commercial banks with nationwide licenses and urban banks with licenses within designated geographic areas. Then, in 1994, three policy-development banks, the China Development Bank, the Export-Import Bank of China and the Agricultural Development Bank of China, were established to take over the “social” lending functions of the Big Four—the task of keeping insolvent state-owned enterprises on life support and meeting political demands for infrastructure.

Next, in 1995, the Big Four were ordered to operate more like genuine commercial banks;
the same law segregated the operations of banks, securities firms and insurance companies. This separation led to the establishment of regulatory agencies to oversee each industry: the China Securities Regulatory Commission (1992), the China Insurance Regulatory Commission (1998), and the China Banking Regulatory Commission (2003).

If the transition from planning to a socialist market economy was to be successful, the banks — in particular, the Big Four — had to be relieved of the mountain of non-performing loans accumulated over the years as a result of government-directed investments in near-defunct state enterprises. Strengthening the financial condition of the Big Four became especially important once China became a member of the World Trade Organization in 2001 and was required to open its banking market to foreign competition within five years. After all, the Big Four could not hope to compete with foreign banks unless they were able to shed non-performing loans and find sources of capital to bolster their balance sheets.

To these ends, the government created four special asset-management companies in 1999 — Huaxi, Great Wall, Oriental and Cinda — with one initially assigned to each of the Big Four banks. At that time, $169 billion of non-performing loans were transferred from the Big Four to the asset-management companies in exchange for 10-year bonds paying 2.25 percent interest. Overall, from 1999 to 2006, $200 billion in non-performing loans were transferred to the asset-management companies or sold to other entities. In addition, $80 billion in new capital was injected into the Big Four. Foreign firms have also invested capital in Chinese banks through the acquisition of shares — although the total foreign ownership in a bank is limited to less than 20 percent for a single investor and to less than 25 percent for all foreign investors.

As a result, the ratio of non-performing loans to total loans at each of the Big Four has declined sharply since 2001. However, while three of the banks have seen their ratios fall below 5 percent, the fourth, the Agricultural Bank of China, still has an enormously high ratio of 26 percent.

The table on the next page shows the quantities of non-performing loans transferred to the asset-management companies, as well as how much has been disposed of and what value has been received in exchange. As of December 2005, the asset-management companies had liquidated $104 billion (of $156 billion) of non-performing loans they had acquired, generating just $22 billion in proceeds. If the asset-management companies are unable to make good on the bonds they gave the Big Four in exchange for the non-performing loans, the government will have to assume this debt. Still, there is the significant risk that even banks whose balance sheets have been scrubbed of substantial amounts of bad debt will continue to get into difficulty. Note, too, that while the Big Four account for 82 percent of all the non-performing loans in the banking sector, the other domestic banks clearly have had their own non-performing loan problems.

To put the condition of the Big Four in better perspective, we compared various performance measures to those of the foreign commercial banks operating in China, as well as those of Citibank. The Chinese bank in the best overall condition is the China Construction Bank, while Agricultural Bank of China is in the worst condition. What is particularly noticeable is that each of the Big Four has loan loss reserves that are less than 100 percent of its non-performing loans, compared to 160 percent for Citibank. Despite this situation, however, the Bank of China, the China
Construction Bank and the Industrial and Commerce Bank have been able to raise substantial amounts of capital. The China Construction Bank went public in 2005 and raised $8 billion, while the Bank of China and Industrial and Commerce Bank of China went public in 2006, selling shares for $11 billion and $22 billion respectively. At the time, the Industrial and Commerce Bank of China offering was the biggest IPO in history.

The biggest concern at the moment for China's banking sector is the rapid growth in bank credit being used to finance various industrial and real estate projects. Loan growth was 21 percent in 2003, 16 percent in 2004, and 15 percent in 2005 – far greater than growth in nominal GDP. A related concern is the sharp run-up in the stock market and the reported increase in the number of first-time buyers. No doubt, some part of the rapid increase in credit is helping to inflate equity values and represents an exposure for the banks that is difficult to quantify.

On the plus side, growth in credit has diluted the relative magnitude of all those vintage non-performing loans. The obvious question, though, is what portion of the loans made in recent years will become non-performing loans as they age. If enough of them are contributing to the “excess production” noted by Prime Minister Wen, China’s banks may again need help disposing of bad debt.

It is worth noting that such a result would not be unique to China. Many transition-economy governments have tried to “commercialize” state-owned banks and then found that it was difficult to produce fundamental change in bank behavior before the banks were fully privatized. Thus, Hungary was forced to recapitalize the state banks annually from 1991 to 1994 before finally selling them to foreigners. Polish authorities, recognizing the problems with reforming their
state banks and yet not willing to sell them all, chose another route. They compensated senior managers with stock options, which can only be exercised after privatization, in order to align managerial incentives with the goal of true commercialization.

The hard reality is that banks cannot be reformed in isolation. To the extent that state enterprises are still losing money, they will still require infusions of credit – and China’s banks may be pressed to comply.

The financial sector in China is the mirror image of the nuts-and-bolts economy, and accordingly cannot be reformed on its own.

China’s banking sector faces yet another fundamental problem in making the transition: the difficulty of developing a “credit culture.” This requires well-trained accountants, lawyers and risk analysts who are capable of implementing a policy in which banks set interest rates on the basis of risk and make loans available to firms of all sizes and ownership structures on equal terms. Similarly, it requires a judiciary that understands financial issues and enforces creditors’ rights. China currently has a shortage of such skilled individuals.

Note, too, that before 2004, the rates charged on loans and paid on deposits at banks were tightly regulated by the government, so as to lock in a predetermined net interest margin. But the data show that lending and deposit rates at the banks are fairly well clustered even after 2004, suggesting that banks have yet to strike out for themselves in soliciting deposits and are not pricing loans fully on the basis of risk. Again, this pattern was seen in other transition economies, with interest rates on loans being driven more by the needs and condition of the enterprise sector than the requirements of commercial banks.

By the same token, there is evidence that credit is not going to the most productive enterprises. Private businesses generate slightly more than half of China’s GDP but receive only about one-fourth of total corporate loans from banks. Small and medium-sized firms, the backbone of the Chinese economic miracle, must often raise capital from informal sources – family and the like.

Financial reform is a formidable challenge in China because the financial sector is the mirror image of the nuts-and-bolts economy, and accordingly cannot be reformed on its own. Since state-owned production is still dominant, the government faces the daunting task of maintaining, reforming or closing “zombie enterprises” that can only exist with ongoing infusions of cash.

The balancing act, then, is to keep managing the economy so that the rapid growth of private business will, one way or another, generate sufficient revenue to cover the losses of the state sector. Growth alone won’t be enough: keeping the system on an even keel until China’s transition is complete will require new sorts of skills – and considerable luck. But so far, China has done a far better job than most would have expected a few short years ago.