Competition in China's Domestic Banking Industry

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Once China has been accepted into the World Trade Organization, all the business and geographical limitations that previously restricted the activities of foreign banks in China will be removed gradually. China is expected to allow foreign banks to conduct foreign currency business for all foreign customers immediately, to allow them to conduct foreign currency business involving Chinese clients beginning one year after accession, and to allow them to conduct wholesale renminbi business two years after that. Five years later, foreign banks will be able to offer individual services to Chinese citizens, and all geographic restrictions will be eliminated.

WTO entry implies an increase in competition in China's banking industry. In this paper we examine the level and conditions of competition that have existed within the domestic banking industry since 1994. We show that existing institutional arrangements have inhibited effective and efficient competition in the industry. Competition within the industry is weak, and its role in improving banking efficiency has been limited. Fundamental institutional changes must be made before China can reap the full benefits of increasing competition once it has attained membership in the WTO.

Historical Background

Before China's 1978 reform, it had a mono-bank system. The People's Bank of China (PBOC) combined the roles of central and commercial banking. The whole banking industry was regulated by strict cash and credit plans that were set in accordance with the production

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plans laid down by the State Planning Commission.[1] Banks were part of the administrative hierarchy; they ensured that the national production plans would be fulfilled, and they had no incentive to compete with each other.

Between February 1979 and January 1984, the Agriculture Bank of China (ABC), the People's Construction Bank of China (PCBC), the Bank of China (BOC), and the Industrial and Commercial Bank of China (ICBC) were split from the PBOC. The PBOC formally became the country's central bank. Each of the four specialized banks was to provide services to a designated sector of the economy. The ABC's main responsibility was to receive deposits in rural areas and extend loans to agricultural production projects and township industries. The PCBC focused on appropriating funds for capital construction from the state budget through the Ministry of Finance. The BOC focused mainly on deposits and loans for foreign exchange and international transactions, and the ICBC focused on the financing of commercial and industrial activities in urban areas. This arrangement prevented competition among the newly established state specialized banks.

The specialized banks began competing with one another in 1985, when the restrictions limiting each to its own designated sector were lifted. The four banks were allowed to expand their scope of business and to compete with each other in providing loans and deposit services. Competition among them was very limited from the mid-1980s to the mid-1990s, however, because they served mainly as policy-lending conduits for the government. They lacked the requisite autonomy to compete with each other.

Competition among the four banks increased in 1994, when China established three policy banks to take over from the specialized banks the task of extending policy loans. The China Development Bank (CDB) was chartered to provide long- and medium-term lending to finance construction projects in infrastructure, and in basic and pillar industries. The Export-Import Bank of China was to provide loans for the export and import of capital goods. The Agricultural Development Bank of China (ADBC) was responsible for agricultural lending. With the establishment of the policy banks, the state specialized banks were officially named "commercial banks." They were expected to operate on market principles and to improve their profitability. The rules governing the new commercial banks were laid out within the

[1]Under the cash plan, households obtained their wages in cash from their work units through banks. Under the credit plan, banks were obliged to provide working capital and investment funds to enterprises.

Commercial Bank Law, which was passed in March 1995. The most important feature of the law is that it grants all commercial banks operational independence except in the case of a national emergency. The separation between policy banks and commercial banks was, however, far from neat and complete. The policy banks lacked sufficient branch networks or capital to engage in the level of policy lending previously provided by the specialized banks, and the commercial banks continued to engage in policy lending in one form or another in response to pressures from central and local governments.

Although policy lending straitjacketed competition among state commercial banks, the entry of new banks created a new source of competition in the industry. The Bank of Communications (BOCOM) was reestablished in 1986 after 38 years of inactivity in China. In 1987, the Shenzhen Development Bank (SDB) and the China Merchants Bank (CMB) were established. The SDB is a joint-equity bank that was formed by consolidating six rural credit cooperatives. It is listed on the Shenzhen stock exchange. The CMB also came into existence in Shenzhen and was solely funded by the China Merchants Group.[2] The Guangdong Development Bank (GDB) was set up in 1988 and was converted into a shareholding bank in 1992. Its shareholders are the Ministry of Finance, the Bank of China Group in Hong Kong, and the Hong Kong Chinese Banking Group. In 1996, the China Minsheng Banking Corporation was founded. Shareholders representing private industry own the bank, making it the only private bank in China. Since 1986, 14 joint-equity commercial banks have been established.[3] In 1998, the Hainan Development Bank was shut down by the PBOC because the former was unable to pay its debts.[4]

[2]In 1998, the ownership of the bank has been diversified to include 107 shareholders, see Xiao (1999).

[3]These are the Bank of Communication, Shenzhen Development Bank, Guangdong Development Bank, China Merchants Bank, China Everbright Bank, China Minsheng Banking Corporation, Hua Xia Bank, Pudong Development Bank, CITIC Industrial Bank, Fuijin Industrial Bank, Hainan Development Bank, China Investment Bank, Yantai Housing Saving Bank, and Bengbu Housing Saving Bank.

[4]The Hainan Development Bank was founded in August 1995. The Hainan Provincial government held a 30 percent stake in the bank; other shareholders included state-owned enterprises such as China North Industries and China Ocean Shipping. In 1996, the bank made pretax profits of 125 million yuan and boasted deposits of 4.1 billion yuan. In 1997, the Hainan provincial government asked the bank to merge 28 credit unions that were plagued by serious bad-debt problems. The credit unions that the bank took over had assets (virtually all loans) of 13.7 billion yuan and liabilities of 14.2 billion yuan; about two-thirds of the loans were nonperforming. The PBOC allocated 4 billion yuan to cover the credit unions' bad loans, leaving another 4 billion yuan shortfall on the bank's doorstep. The credit unions finally brought the bank down, even though the bank's performance in 1997 was

In March 1999, China Everbright acquired the commercial operations of the ailing China Investment Bank from the State Development Bank. By the end of 1999, there were 12 joint-equity commercial banks, with total assets of RMB 1,447.7 billion, total deposits of RMB 1,031.4 billion, and total loans outstanding of RMB 695.7 billion (PBOC 2000).

In addition to establishing the joint-equity commercial banks, the central government allowed local governments to establish local banks in the mid-1990s. Consolidating local urban cooperatives formed the local banks. They take the form of shareholding banks; their business scope is restricted to their own localities. They were first called city cooperative banks and later became known as city commercial banks. As of the end of 1999, 90 such banks were operating in China, with total assets reaching RMB 554.7 billion, deposits outstanding reaching RMB 441.3 billion, and loans outstanding reaching RMB 271.1 billion (PBOC 2000).

Competitive Conditions: Quantitative Evaluation

Over the past two decades, significant structural changes have taken place in China's domestic commercial banking industry. It has evolved from a mono-bank system to a more diversified one that includes four wholly state-owned commercial banks, 12 joint-equity commercial banks, and 90 city commercial banks.[5] Have the structural changes made the domestic banking industry more competitive? The answer to this question depends on the dimensions we measure.

In term of assets, deposits, and loans, there was only a slight decrease in overall concentration during the 1994–98 period. The four largest banks in China are the state-owned commercial banks. They have taken up the majority of total assets, deposits, and loans, with four-firm concentration ratios decreasing from 93.04 percent, 90.14 percent, and 93.24 percent, respectively, in 1994, to 84.93 percent, 84.26 percent, and 88.51 percent, respectively, in 1998 (Table 1).

The Herfindahl indexes for assets, deposits, and loans show that the market structure of China's domestic banking industry is oligopolistic

respectable. The PBOC closed the bank on June 21, 1998. It was the first bank in the country to be shut down since the establishment of the People's Republic of China in 1949. The bank, however, was not declared bankrupt. Instead, the central government called in the ICBC to pay in full all the bank's overseas and domestic creditors. The government also insured depositors (Bruce 1998).

[5]In addition to the official banks, dozens of illegal banks have sprung up in provinces such as Guangdong, Liaoning, and Hubei. It is reported that in the city of Chonqing alone, 162 illegal banks have been set up since 1993 (Johnson 2000).

TABLE 1

Concentration of Assets, Deposits, and Loans:
Four-Bank Concentration Ratios, 1994–98

	Concentration Ratio (%)		
	Assets	Deposits	Loans
1994	93.04	90.14	93.24
1995	92.00	89.54	92.39
1996	88.90	87.08	90.42
1997	87.03	85.20	88.70
1998	84.93	84.26	88.51

Source: Calculated by the authors based on data obtained from *Almanac of China's Finance and Banking*, various years.

in nature, with approximately four banks of equal size (Table 2).[6] With respect to assets and liabilities, China's banking industry is still dominated by the four state commercial banks.

A very different picture, however, emerges when we look at the banks' profitability. The overall concentration of bank profits has apparently decreased sharply, with the four-firm concentration ratio declining from 83.64 percent in 1994 to 55.33 percent in 1998 (Table 3).[7] From 1994 to 1996, the four largest profitmakers were the BOC, BOCOM, ICBC, and the Construction Bank of China (CBC). In 1997, the China Merchants Banks replaced the CBC and became the fourth-largest profitmaker in the industry.

The reciprocal of the Herfindahl index for profits shows that there is a significant decrease in the level of concentration in the industry

[6]The Herfindahl index is the sum of the squares of individual firms' market shares expressed as a decimal fraction. So calculated, the index could take on values ranging from 0 to 1. It gives a single-firm monopoly an index value of 1, and an industry of five equal-sized firms gets an index of 0.2. The reciprocal of the Herfindahl index has been used as a number-of-firm equivalent, indicating approximately the number of equal-sized firms in an industry. The computation of the "full" Herfindahl index needs shares of all firms in an industry. Owing to the lack of information on the assets and liabilities of each city commercial bank, the indexes have been calculated by excluding the city commercial banks and treating the domestic commercial banking industry as consisting only of the state commercial banks and the joint-equity commercial banks. The indexes, therefore, are "truncated" ones that overestimate the level of concentration in the industry. The overestimation should not be great because all city commercial banks' total assets, outstanding loans, and outstanding deposits made up less than 5 percent of the whole industry in 1998.

[7]Owing to the lack of information on the profits of city commercial banks, the concentration ratios in Table 3 have been computed by excluding those banks. The ratios, therefore, overestimate the concentration of profits in the industry.

TABLE 2
Concentration of Assets, Deposits, and Loans:
Reciprocal of the Herfindahl Index

	1/Herfindahl Index		
	Assets	Deposits	Loans
1994	4.203	4.235	4.092
1995	4.197	4.503	4.272
1996	4.155	4.611	4.358
1997	4.161	4.636	4.431
1998	4.785	4.689	4.486

Source: Calculated by the authors based on the data obtained from *Almanac of China's Finance and Banking*, various years.

(Table 4). The number of domestic banks with comparable profit-making capacities increased from 4.2 in 1994 to 9.3 in 1998. Given that profits earned by city commercial banks have been excluded from the calculation of the index, the decrease in the level of concentration should be even greater.

Competitive Conditions: Institutional Analysis

The concentration indexes that we have calculated show that the deposits-and-loans market is dominated by state-owned commercial banks. Those banks, however, fail to capture a comparable share of the profits. The quantitative analysis provides important information on the market structure of the industry. The data, however, do not answer the important questions of (1) how and why such a market structure has emerged and (2) how the market structure affects the efficiency of the banking industry. In this section, we tackle those issues by examining the underlying rules that have governed competition among banks in China. The institutional investigation not only enriches our understanding of the industry's competitive conditions but also provides insight as to how to improve them.

Rules Governing Competition in the Deposits Market

The most important determinant of the level and nature of competition in China's deposit market has been the central bank's control over interest rates. The PBOC has strictly controlled interest rates for different kinds of deposits, thus effectively ruling out price competition in the deposit market. Consequently, market competition has

TABLE 3

CONCENTRATION OF PROFITS: FOUR-BANK CONCENTRATION RATIOS

	1994	1995	1996	1997	1998
Top four profitmakers (% share of profits)	BOC (41.7) BOCOM (17.6) ICBC (14.66) CBC (9.68)	BOC (28.38) CBC (16.84) BOCOM (15.35) ICBC (12.74)	BOC (28.38) ICBC (14.22) BOCOM (14.15) CBC (11.83)	BOC (22.03) BOCOM (19.58) ICBC (11.44) CMB (10.77)	BOC (16.74) ICBC (16.40) BOCOM (12.69) CMB (9.51)
Concentration ratio (%)	83.64	73.3	68.51	63.8	55.33

SOURCE: Calculated by the authors based on the data obtained from *Almanac of China's Finance and Banking*, various years.

TABLE 4

Concentration of Profit: Reciprocal of the Herfindahl Index

	1994	1995	1996	1997	1998
1/Herfindahl Index	4.166	6.004	6.463	7.707	9.339

Source: Calculated by the authors based on the data obtained from *Almanac of China's Finance and Banking*, various years.

been in the form of nonprice competition. Under nonprice competition, banks that capture a larger share of deposits may not be the most profitable and efficient ones.

When nominal interest rates paid on deposits by different banks are identical, depositors' choice of banks depends essentially on banks' financial fundamentals and on the quality of services they provide. For risk-averse depositors, putting deposits in a bank with poor financials means a higher level of risk and hence a lower expected return on deposits. Putting money in a bank that provides better services, however, means a higher actual return on deposits. When interest rates are controlled, market forces will dictate that deposits be concentrated in banks with sound financial fundamentals and better services.

Banks' financial fundamentals, however, have not been an important set of rules determining the distribution of deposits among domestic banks in China. As we have shown in the previous section, deposits have been concentrated in the four state commercial banks, which have poor financials. Those banks are saddled with an extensive portfolio of nonperforming loans. According to the Chinese government, nonperforming loans account for 20 to 25 percent of the banks' total lending; international observers estimate that the nonperformance rate actually exceeds 40 percent (EIU 1999). Joint-equity commercial banks, on the other hand, exhibit lower nonperforming loan ratios than the big four (Table 5).

The returns of joint-equity commercial banks are much higher than those of state commercial banks, with returns on assets exceeding 1 percent while returns on equity are close to 20 percent (Table 6).

Depositors care about banks' financial fundamentals only when different financials imply different levels of risk. Depositors in China have put their deposits in state commercial banks because those banks provide more protection. In order to maintain public confidence in state commercial banks, which have shouldered the important responsibility of keeping state-owned enterprises alive, China's

TABLE 5

NONPERFORMING LOANS OF JOINT-EQUITY COMMERCIAL BANKS AS A PERCENTAGE OF TOTAL LENDING

Bank	1997 (year end)	1998 (year end)	1999 (June)
China Merchants Bank	9.1	10.5	14.5
Bank of Communication	13.9	19.3	22.41
China Everbright Bank	7.7	13.7	20.9
CITIC Industrial Bank	11.2	15	17.84
China Minsheng Bank	2	6	10.93
Hua Xia Bank	4.3	5.7	6.64
Pudong Development Bank	6.7	8.9	10.07
Guangdong Development Bank	15	21.5	23.28
Shenzhen Development Bank	15.4	20.4	30.67
Fuijin Industrial Bank	12.3	14	14.08
Average	11.8	13.5	17.13

SOURCES: China Merchants Bank (1999a, 1999b).

central government has explicitly guaranteed state-owned commercial banks' deposits. The government guarantee means that large state banks will never be allowed to fail.

On the other hand, the government's guarantee to joint-equity banks remains implicit and vague. There is a general belief that joint-equity banks are much riskier than state commercial banks. The demise of the Hainan Development Bank in 1998 reinforced that conception. Even though all deposits have been paid in full by the government, deposits have shifted from joint-equity commercial banks to state commercial banks because of depositors' loss of confidence in the former (An and Yang 1999).

Even if depositors in China have an incentive to put their deposits in banks with good financials, it is very difficult for them to ascertain banks' true status. Analyzing the financial conditions of state commercial banks is difficult. The financial statements they disclose are highly aggregated. Their unconventional accounting standards also render their reported assets and earnings highly suspect. For example, they record interest income on overdue loans as received income even though it has not actually been received.

The disclosure of some joint-equity banks is more transparent and detailed than that of state commercial banks. Minsheng publishes both international- and domestic-standard accounts, both of which

TABLE 6

Performance of State Commercial Banks and Joint-Equity Commercial Banks

	Return on Assets (%)	Return on Equity (%)	Return on Paid-in Capital (%)
1994			
State	0.28	7.35	15.39
Joint equity	1.71	26.33	52.36
1995			
State	0.34	10.49	13.92
Joint equity	1.43	23.52	51.28
1996			
State	0.34	10.63	13.90
Joint equity	1.44	24.92	51.15
1997			
State	0.13	3.9	5.11
Joint equity	1.52	21.78	39.16
1998			
State	0.09	1.68	2
Joint equity	1.07	17.08	36.54

Source: Calculated by the authors based on the data obtained from *Almanac of China's Finance and Banking*, various years.

are audited by PriceWaterhouseCoopers. Arthur Andersen audits China Everbright's accounts. The BOCOM's disclosure, however, lags behind that of other joint-equity banks; it produces financial reports similar to those of the state commercial banks. The overall quality of information provided by domestic banks in China is far below international standards and does not provide good signals to depositors.

As far as services to depositors are concerned, state commercial banks have a number of advantages over other banks, even though state banks are less efficient in their overall operation. Some of the advantages are derived from the state banks' established networks. Some, however, come from the restrictive policies imposed by the government on joint-equity commercial banks and city commercial banks.

The four state commercial banks established their branches along the country's administrative structure, with branches in every province, city, and county. In 1998, they operated about 145,000 branches across the country and employed more than 1.6 million workers

TABLE 7
NUMBER OF BRANCHES AND WORKERS

	Number of Branches	
	State Commercial Banks	Other Commercial Banks
1996	153,070	3,748
1997	153,704	4,675
1998	144,148	4,501
	Number of Workers	
	State Commercial Banks	Other Commercial Banks
1996	1,686,883	85,505
1997	1,563,542	95,537
1998	1,667,784	92,034

SOURCE: *Almanac of China's Finance and Banking,* various years.

(Table 7). The administrative approach to branching is not consistent with economic logic, and some researchers indicate that state commercial banks are operating beyond their efficient scales (Huang 1998; Wei and Wang 2000). The wide network, however, gives them an immense advantage in absorbing deposits, especially in terms of accessibility.

Joint-equity commercial banks, however, have only a small number of branches. Some of those banks are local banks with branches only in their own localities. The networks of so-called national joint-equity commercial banks are also not extensive; they have branches only in the economically advanced regions of the country. The limited presence of joint-equity commercial banks is due mainly to the control imposed by the PBOC. Each year, the PBOC imposes quotas on the number of new branches that each joint-equity commercial bank can set up. The quotas have effectively slowed the network building of the joint-equity commercial banks and have hindered their ability to compete with state commercial banks.

In addition to restrictions on setting up branches, there are also a number of artificial barriers limiting competition in the deposit market. Each domestic enterprise in China is allowed to open a basic account for handling daily transactions. The account usually has to be opened in the bank that provided loans for the enterprise. That rule favors state commercial banks because they provide most enterprise loans. After the closure of Hainan Development Bank, each administrative and nonprofit unit was allowed to open only one special deposit account for accumulated revenue and one special deposit account for charge of extra-budgetary funds. The accounts must be opened in state commercial banks.[8] As a consequence, many ministries, departments, big enterprises, and local governments give similar orders requiring their subordinate units to open their accounts in state commercial banks (Chen 2000).

Rules Governing Competition in the Loan Market

Interest rates in the loan market are controlled by the PBOC, as they are in the deposit market. Currently, loan interest rates must be within a range set by the central government. Price competition, therefore, has been restrained in the loan market. The interest rate control has not only denied banks in China a means to compete for low-risk borrowers, but has also limited the flow of funds to high-risk borrowers.

While there is no limit on the total amount of deposits that state commercial banks can absorb, the amount of loans they can extend has been restricted by the PBOC's credit controls. Before 1998, the central bank attempted to control state commercial banks' credit by setting mandatory credit quotas. Although the PBOC imposed the quota system for the purpose of monetary control, the quantity restrictions in effect reduced state commercial banks' ability to compete with other banks.

Joint-equity commercial banks and city commercial banks have not been subject to credit controls. Their expansion in the loan market, however, is constrained by restrictions on their fundraising. They have not been allowed to issue bonds internationally. The PBOC has been discriminating against them in its lending policy; it extends only a very small portion of its loans to them. The PBOC's loans to the joint-equity banks accounted for less than 1 percent of its total outstanding loans from 1994 to 1998 (Table 8).

In addition to having their funding restricted, joint-equity commercial banks and city commercial banks have been limited in the loan services they are permitted to provide. For loans backed by securities, all state commercial bank branches, together with the head offices, can conduct business. Such business can, however, only be handled at the head offices of joint-equity commercial banks. City commercial banks are totally excluded from that business. Joint-equity commer-

[8]Although the PBOC introduced that measure to monitor the cash flows of the units, the measure has been used to hinder the ability of joint-equity commercial banks and city commercial banks to compete for deposits.

TABLE 8

Loans from Central Banks to Commercial Banks (100 Million RMB)

	1994	1995	1996	1997	1998
State commercial banks	10,182.2	11,095.2	14,088.5	13,885.1	11,867.2
Other commercial banks	92.6	43.7	81.2	59.7	77.8
Share of other commercial banks (%)	0.9	0.39	0.57	0.43	0.65

Source: *Almanac of China's Finance and Banking*, various years.

TABLE 9

PERCENTAGE OF LOANS TO PRIVATE SECTOR

	State Banks[a]			All Financial Institutions[b]		
	Loans to Township & Village Enterprises	Loans to Foreign-Funded Enterprises	Loans to Private Enterprises and Individuals	Loans to Township & Village Enterprises	Loans to Foreign-Funded Enterprises	Loans to Private Enterprises and Individuals
1994	—	2.27	0.16	—	1.94	0.38
1995	—	2.28	0.08	—	1.97	0.39
1996	—	2.56	0.11	—	2.20	0.46
1997	2.57	2.89	0.27	6.72	2.52	0.52
1998	2.56	3.25	0.30	6.44	2.87	0.55

[a] State banks include state commercial banks, policy banks, the BOCOM, and the CITIC Industrial Bank.
[b] All financial institutions include policy banks, state commercial banks, joint-equity commercial banks, city commercial banks, and all nonbank financial institutions.
SOURCE: *Almanac of China's Finance and Banking*, various years.

cial banks have to pay a much higher licensing fee in order to enter the credit card business (Chen 2000).

In a market economy, banks tend to compete for borrowers who are creditworthy. That has not been the case in China's loan market. The majority of China's bank loans have gone to state-owned enterprises with poor financial viability (Table 9). Furthermore, debt-laden state-owned enterprises have been able to ignore interest and principal payments on the grounds that they are impossible to foreclose. The failure to harden the budget constraints of state-owned enterprises has finally adversely affected domestic banks' credit risk and profitability.

There are two reasons for the composition of bank loans in China. First, it is a result of directed credit lending. Although the Commercial Bank Law grants commercial banks operational independence and freedom of choice in their lending decisions, the majority of the domestic banks lack the autonomy to choose their customers. They are under pressure from both central and provincial authorities to make loans to favored sectors and enterprises. Before 1998, the central government influenced the lending decisions of state commercial banks through its credit control plan. The plan not only established a credit ceiling for the banks but also specified how funds should be used. State commercial banks therefore lacked the independence to decide on the allocation of credit among different sectors. When banks allocated the specified credit quota to local branches, the branches also lacked the freedom to choose borrowers. As local governments strongly influenced the senior appointments of local banks, those governments were able to exert strong pressure on the banks to extend loans according to the governments' preferences. Two decades of policy lending created a large burden in the loan portfolio of the four state-owned commercial banks and placed them at a huge disadvantage in relation to their competitors.

Directed lending is not unique to China's state commercial banks. Joint-equity commercial banks and city commercial banks are not immune from state interference as long as their major shareholders are local governments and state institutions. The level of state interference in the banks is critically dependent on the relationship between the shareholders and the government. Banks with a close relationship with central and local governments tend to be more susceptible to political pressures in their lending decisions.

Among the joint-equity commercial banks, the Huaxia is owned by enterprises covering the metallurgy, tobacco, energy, petrochemical, transportation, and building industries. The shareholders are scattered in 10 provinces and municipalities and lack a close identification or affiliation with the central government or any particular local government. The bank is relatively free from the influences of central and local governments, and it has one of the cleanest balance sheets among joint-equity commercial banks. By the end of 1999, the bank's nonperforming loan ratio was only 6.64 percent, whereas the average of all commercial banks' ratios had climbed to 17.13 (see Table 5). On the other hand, locally based joint-equity commercial banks such as the GDB and the SDB tend to have a close relationship with their local governments; their nonperforming loan ratio trails behind that of other joint-equity banks (see Table 5).

The role of direct lending in determining the distribution of loans in China has been diminishing, especially since the abolition of the credit plan in 1998. In recent years, the central bank has encouraged domestic banks to offer consumer credit and to expand credit to private enterprises. Its efforts, however, have been hampered by the lack of credit-tracking tools, a national accounting standard, and a sound legal framework including collateral and bankruptcy legislation. While all those are of little use when most banks' credits are directed to state-owned enterprises, they are badly needed when banks start to act as commercial entities.

Owing to the poor national accounting standards and the lack of credit history records, it is very difficult for domestic banks in China to obtain a fair assessment of loan applications, except for those of state-owned enterprises that have long-term connections with the banks. Domestic banks simply do not have sufficient information to select trustworthy and efficient new fund users and to monitor their behavior. The deficiencies in the enforcement of collateral and bankruptcy legislation further increase credit risks. The high credit risks explain why the banks, which have been relatively free from policy lending, also have high nonperforming loan ratios. For example, Mensheng's exposure to debt-laden state enterprises is low; more than 85 percent of its loans went to the private sector in 1998 (Xiao 1999). The banks' nonperforming loan ratio, however, increased from 2 percent in 1994 to 10.93 percent in 1999. One of the most serious consequences of high credit risks has been the low incentive to extend loans to privatized and new start-up enterprises and to consumers. This low incentive has held back financial deepening in China, with negative implications for the development of the banking industry and the growth of the economy.[9]

[9]Bossone (1999) has built a theoretical model to analyze how financial-sector development is affected by incomplete trust. For how the low level of trust has blocked financial intermediation in China, see Bureau of National Affairs (1999).

Recent Developments

Empirical evidence and institutional analysis show that market discipline has yet to be established in China's domestic banking industry. Owing to government interference, information problems, and a weak legal infrastructure, deposits have been concentrated in the less-efficient state commercial banks, and loans have been extended to ailing state-owned enterprises. China's existing institutional arrangements have not only reduced the level of competition in the industry, but have also generated adverse effects for the industry's efficiency.

Spurred on by the lessons of the Asian economic crisis and pushed by market-opening measures laid out in the WTO accession agreement with the United States, China has taken concrete steps to reform the banking industry in recent years. Some of those measures have helped create a more competitive and efficient banking environment.

One of the most important problems restricting and retarding the emergence of market discipline in China's domestic banking industry has been state interference. There have been four major types of government interventions: credit and interest rate controls, directed policy lending, discriminating and restrictive policies, and state guarantees. As far as credit and interest-rate controls are concerned, the PBOC abolished credit quotas in January 1998. Interbank market rates were also liberalized in early 1999.

At the end of 1998, the PBOC replaced its provincial-level branches with regional branches. Instead of having a local branch in each province, municipality, and autonomous region, the streamlined regional branches of the PBOC have been located in nine cities: Shenyang, Tianjin, Jinan, Nanjing, Shanghai, Guangzhou, Wuhan, Chengdu, and Xi'an. Furthermore, local governments no longer determine who should be appointed as senior officials at local branches; the bank's headquarters do that. The reorganization of the central bank is expected to protect commercial banks from local government interference.

Efforts have also been made to clean up the balance sheets of the state commercial banks so as to remove their competitive disadvantage that has resulted from policy lending. In 1999, 270 billion yuan in new capital was allocated to the four state-owned commercial banks. Four asset-management companies were created to help the banks unload their nonperforming loans. The objective of that effort is to restore the financial health of state commercial banks so that they can compete with other banks in a market-driven environment.

In addition to enhancing the competitiveness of state commercial banks, the central bank is preparing to give joint-equity commercial banks and city commercial banks more room to expand. Some joint-equity commercial banks will be allowed to boost their size by listing on local stock markets, an option that had already been taken up by Pudong Development Bank. In April 2000, the central bank pledged to give more financial resources to the city commercial banks to support their payment and lending business.

In order to maintain the public's faith in the banking industry, the central government has continued its explicit guarantee of state commercial banks. Smaller banks have been lobbying for the establishment of a deposit insurance scheme in China so that they can provide the same level of protection to depositors. The issue has been debated intensively. Supporters consider such a scheme a means to enhance competition and deepen financial intermediation. Skeptics, however, worry that it may introduce additional moral hazard, with negative consequences for the health of the financial system.

In addition to reducing government interference, the PBOC has made efforts to tackle the information problems that have limited competition in the industry. In early 1999, all domestic banks were required to adopt a new loan-classification standard scheme with five categories: pass, special mention, substandard, doubtful, and loss. In April 2000, a banking rule requiring true names of depositors took effect, replacing the old system that allowed people to open personal savings accounts under false names. While the system was introduced with an eye toward tax collection and curbing corruption, it could facilitate the establishment of a personal credit record system. In May 2000, the central bank introduced a pilot scheme requiring banks in the Shanghai region to submit lists of defaulters to a national "blacklist." The program is now being expanded throughout the country and has been effective in deterring delinquent debtors (EIU 2000).[10] In February 2000, a comprehensive national credit-rating system was activated that required all financial institutions to submit information on their borrowers to a national database.

Implications for Improving Competitive Conditions

During the past two years, much headway has been made in improving competitive conditions in China's domestic banking industry.

[10]When the Guangzhou PBOC published its blacklist in June 1999, a dozen defaulting companies reportedly took steps to pay up (EIU 2000).

TABLE 10

PERCENTAGES OF STATE COMMERCIAL BANKS' STAFF WITH AT LEAST POST-SECONDARY EDUCATION

	1996	1997	1998
Industrial & Commercial Bank of China	N.A.	34.6	38.99
Agricultural Bank of China	24.3	27.8	32.05
Bank of China	41.3	44.9	48.6
Construction Bank of China	41.2	44.5	48.8

SOURCE: *Almanac of China's Finance and Banking*, various years.

State commercial banks have started to take active measures to enhance their competitiveness in the market. In addition to diversifying their loan portfolio into new markets such as consumer loans and mortgages and loans to small private companies, state commercial banks have made efforts to reduce the number of branches (see Table 7) and to hire better-educated staff (Table 10).

Furthermore, state commercial banks are attempting to enhance their risk-management and credit-analysis capacity by setting up credit and risk-management departments and providing risk-control education and training for staff. All of those changes indicate that state commercial banks are better situated to improve efficiency. Nevertheless, the reforms introduced so far have failed to create a competitive and efficient institutional environment. Effective market discipline can emerge in China only with the introduction of more fundamental institutional changes.

One of the key objectives of the reforms is to transfer decision-making authority to the banks, with the government acting only as a regulator. Yet banks continue to be plagued by government-imposed constraints, including high entry barriers and artificial business restrictions. Moreover, banks have not been completely freed from political obligations. The central government, for example, has attempted to make use of state commercial banks to support state-enterprise reform during the past two years. At the National People's Congress in March 1999, state banks were reminded of their "political responsibility" to lend to money-losing enterprises. In June 1998, the PBOC advised state commercial banks to increase their financial support of ailing state-owned enterprises and to boost economic growth (EIU 1999). It has been reported that state commercial banks have increased their backing of local economic development in different localities (China Business Information Network 1998a, 1998b). The local governments, in their capacities as major shareholders, also continue to interfere with joint-equity commercial banks and city commercial banks.

The competitive conditions of China's banking industry could be improved if China lowered entry barriers, especially for private banks. Experience demonstrates that transition economies' banking sector can benefit by allowing the private banking industry to develop. First, new banks established by state enterprises in transition economies are of poor quality. Second, the institutional capacity of banks in transition economies improves faster when a new or parallel private banking system is allowed to emerge than when the government tries simply to reform existing state-owned banks (Claessens 1996). That is a particularly important lesson for China in light of its banks' poor institutional legacy.

The role of competition in improving resource allocation is limited, or even distorted, if the competitive behavior of economic actors is circumscribed by artificial restrictions. The removal of various restrictions on the provision of deposit and loan services could provide a leveler playing field for different banks so that they could compete with each other through efficiency and innovation. Furthermore, their efficiency could increase if they enjoyed greater autonomy in their management. For example, one of the biggest problems confronting state commercial banks is cutting back on staff. In 1998, the four state commercial banks employed 95 percent of the employees in the domestic banking industry (see Table 7), while the banks' market shares of deposits and loans were only 84.26 percent and 88.51 percent, respectively (see Table 1). Banks' profitability could be enhanced in the long run if employees could be terminated and high-quality staff hired with better remuneration packages.

Domestic banks have been lobbying for listing on the stock exchange on the grounds that the transformation and diversification of the ownership structure could give them operational independence. Listing on the stock exchange is in fact partial privatization. It is a very important step that could pave the way for an even higher degree of privatization by allowing banks to sell more shares to the public.

The experience of joint-equity commercial banks and city commercial banks, however, clearly indicates that commercial banks in China fully shed their roles as policy tools as long as their major shareholders are local governments or state institutions. An effective way to make China's domestic banks independent of state interference is to privatize them, with partial and complete divestiture of the state-held ownership share of the commercial banks.

Argentina has been a leader among developing countries in restructuring its banking industry. The privatization of roughly half of its publicly owned provincial banks has been one of the country's most important reform measures. It has been demonstrated that post-privatization banks show improvements in both their loan-portfolio quality and the efficiency with which they generate income. The provincial banks that remained in the public sector in Argentina did not demonstrate the same performance gains as privatized provincial banks (Clarke and Cull 1998). The level of competition in China's domestic banking industry will improve if China can privatize some domestic banks.

In addition to privatizing state-owned commercial banks, China can further improve its banking industry's competitiveness by deregulating bank interest rates and increasing foreign entry. In late 1999, following the liberalization of interbank market rates, the central bank announced that more discretion would be given to commercial banks to set interest rates. Interest-rate liberalization, if it is implemented, will pave the way for price competition in the industry. On the other hand, China will have to remove many existing restrictions on foreign banks after its accession to the WTO. That will stimulate foreign entry and increase competition between domestic banks and foreign banks. To reap the full benefits of interest-rate liberalization and increased foreign competition, China must remove existing business restrictions on foreign banks rather than erecting new barriers to prevent foreign banks from taking a dominant market position after China's accession to the WTO.[11]

Privatization and liberalization of the banking industry in China should be approached cautiously. Banking crises are more likely to occur in liberalized financial systems where institutions to ensure legal behavior, contract enforcement, and effective prudential regulation and supervision are weak.[12] China must therefore erect a sound legal, regulatory, and supervision infrastructure together with privatization and liberalization. Such an infrastructure will not only help reduce the banking industry's fragility, but will also contribute posi-

[11]In March 2000, the PBOC told some foreign banks that they were not allowed to make local currency loans worth more than eight times their branch capital. Others have been given a limit of just four times their capital. The move raises the concern that China intends to stiff foreign banks by erecting barriers permissible under the WTO framework (see *The Economist* 2000).

[12]A World Bank empirical study on the relationship between banking crises and financial liberalization in a panel of 53 countries for the period 1980–95 shows that the impact of financial liberalization on banking-industry fragility is weaker where the institutional environment is strong (Demirgue-Kunt and Detragiache 1998).

tively to industry efficiency by reducing the transaction costs involved in financial intermediation.

Competition is more than rivalry among economic actors. Whether competition can contribute to economic efficiency depends critically on the set of institutions—including economic, political, and legal institutions—that govern competitive behavior. This study shows that existing institutional arrangements have inhibited effective and efficient competition in China's domestic banking industry. Improving competitive conditions requires fundamental institutional changes. Interest rates and credit controls, directed lending, artificial business restrictions, and state guarantees have to be abolished. More importantly, state-owned banks must be privatized so as to completely insulate bankers' decisions from political pressures. On the other hand, legal and regulatory institutions that support and enhance the efficient functioning of the banking industry have to be developed in tandem.

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