Banking and Enterprise Reform in the People's Republic of China after the Asian Financial Crisis: An Appraisal

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Abstract. This paper evaluates recent banking and enterprise reforms in the People's Republic of China since the Asian financial crisis. It argues that the bad debt problem and the losses in state-owned enterprises (SOEs) are highly interdependent, and that both can be traced back to a lack of managerial autonomy, adequate incentive mechanisms, and control structures. However, recent efforts to stabilize the financial system and to reform SOEs do not address these issues, as they are largely redistributive, shifting financial losses between different agents of the economy rather than improving the efficiency of both the financial and real sectors. Major reforms are proposed that properly address the problem of bad debts and SOE losses.

Introduction

eform of state-owned enterprises (SOEs) and the banking system ranks high on the agenda of the Government of the People's Republic of China (PRC). Prior to the Asian financial crisis that began in 1997, SOEs' increasing losses and worsening inefficiencies attracted much attention from both press and academia. But it is the extent of bad debts in the banking system that has since received more publicity. The bad debt problem and the losses of SOEs, however, are not independent issues. Since the fiscal reforms of the mid-1980s, SOEs have relied almost exclusively on state banks for external funds. In the absence

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of substantial financial reform, ready access to bank loans has allowed many SOEs to enjoy a soft budget constraint.1

This paper addresses the question of whether current SOE and banking reforms will resolve the financial crisis in these sectors. We argue that they fail to address some fundamental issues. Rather than reduce financial deficits by stimulating greater efficiency, they simply transfer the financial deficits from one economic agent to another.

Specifically, the PRC's financial reforms have focused on resolving the problem of accumulated bad debts by increasing government debt, rather than on creating incentives for state banks to adopt more market-oriented lending behavior.² SOE reforms have focused on shifting the SOEs' costs of employment, housing, medical care, social security, and other welfare benefits, as well as their debt burden, to the state, rather than on changing the incentives for owners and managers—government departments and the bureaucrats in them—to take market-oriented production and investment decisions. We argue that the intention of the reforms should not be to shift the financial losses between different agents of the economy, but to transform the ownership and governance structure of both SOEs and state-owned banks.

The paper is organized as follows. The second section discusses the extent and causes of bad debts and SOE losses. It is argued that the two problems are simply two sides of the same coin and can be attributed to the fundamental problems of lack of decision-making autonomy and incentives in the state sector as a whole. The third section evaluates current policy measures based on the analysis in the previous section, while the fourth section suggests some policy recommendations. The final section summarizes the paper's main findings and offers some conclusions.

¹The soft budget constraint is a concept that was first proposed by Komai (1980) in his analysis of centrally planned economies. It refers to a syndrome that arises when a seemingly unprofitable enterprise is bailed out by the government or the enterprise's creditors (see Maskin 1999 for a recent survey of the theoretical work on the issue).

The PRC's financial institutions are almost all state-owned. (Those institutions that are not state-owned, such as Minsheng Bank or the rural credit cooperatives, are at least state-controlled). The official term "state bank" covers the central bank, i.e., People's Bank of China; the four state commercial banks, i.e., Industrial and Commercial Bank of China (ICBC), Agricultural Bank of China (ABC), Bank of China (BoC), and Construction Bank of China (CBC); since 1987, Bank of Communications as well as CITIC Industrial Bank; and since 1995, the three development banks, i.e., State Development Bank, Import-Export Bank, and Agricultural Development Bank. The term "state bank" thus excludes the local state-owned banks such as provincial development banks and municipal commercial banks, and the rural credit cooperatives. The four state commercial banks still account for approximately 75 percent of all loans extended in the PRC, and since much of the bad loan data available cover only these four banks, the focus is on these.

Bad Debts and SOE Losses: Causes and Linkages

Extent of Bad Debts and SOE Losses

What is the size of the bad debts and SOE losses? Estimates of the former usually range from 20 percent to about 50 percent. The 20 percent estimate of bad debts tends to cover only nonperforming loans (daizhi daikuan) and loan losses (daizhang daikuan) (see, for example, Chen and Cong 1997), while the higher estimate usually includes overdue loans.3 As early as 1995, an economist at the Central Party School suggested that "according to today's most conservative estimate", the share of nonperforming loans and unpaid interest in all bank loans is about 25 percent; "some scholars even think this figure to be around 47 percent" (Zhou 1995, 1f). For the four state commercial banks, Xia (1996) estimates that the bad debts or "unhealthy assets" (buliang zichan), i.e., overdue loans, nonperforming loans, and loan losses represent some 40 percent of total assets.4 Official estimates suggest an unhealthy loan ratio of about 20 percent in early 1998 with 6-8 percent unrecoverable.⁵ Foreign credit rating agencies usually give higher figures. For example, Moody's offered an estimate for end-1996 of 35-70 percent (see Xinbao 30 July 1998). Standard & Poor's, in mid-1998, gave a figure of \$200 billion, equivalent to approximately 22 percent of total lending by all financial institutions in the PRC (see Xinbao 5 August 1998 and People's Bank of China Quarterly Statistical Bulletin 1998-3, 14).

A purely retrospective categorization of bad debts, limits on creating loan-loss reserves, and a restrictive approval procedure for writing off loan losses all suggest that the bad debt problem may be larger than the numbers imply. Bank accounts are unlikely to reflect the true scale of nonperforming loans as long as banks have few

³Loans are categorized as overdue if they have not been repaid by the due date. They automatically turn into nonperforming loans after two years. Overdue loans also turn into nonperforming loans within the two-year period, if the borrowing unit has already stopped production on an investment project or terminated its business. Nonperforming loans finally turn into loan losses if one of several conditions is met, one of which is enterprise bankruptcy (PBC 28 June 1996, Art. 34).

⁴Technically, unhealthy assets need not all be unhealthy loans. Yet with the state commercial banks prohibited from holding enterprise stocks or bonds, their assets consist primarily of loans and some (secure) government bonds. The PRC's ratio of bad loans compares to a 30 percent bad loan ratio for Mexico at the peak of its bad loan problem. Similar ratios may be reached in Indonesia, Republic of Korea, Malaysia, and Thailand in the aftermath of the Asian crisis (The Economist 17 October 1998). More recent data indeed show that the extent of bad debts at least in Thailand have not been underestimated; for example, The Economist (18 March 2000) reports a 38.7 percent share of nonperforming loans for Thailand.

See Ming Pao (22 April 1998), quoting the central bank governor Dai Xianglong. Another quote of Dai Xianglong in Ming Pao (17 January 1998) estimated total bad debts to be 25 percent. More recent data across the financial sector are not available as the four asset management companies set up in 1999 began to acquire the state commercial banks' bad loans (see below).

⁶The traditional categorization of bad loans is purely retrospective in that loans enter the category "unhealthy" only once they are overdue. In 1998 the central bank adopted the internationally accepted categorization based on five risk categories; loans are categorized according to their perceived quality, independent of whether the repayment period has begun or not. While this new categorization is to be applied to all loans, the traditional classification still dominates in the policy discussions.

Table 1: State Bank Lending

	1978	1980	1985	1990	1995	9661	1997	1998
, , , , , , , , , , , , , , , , , , ,	185.0	2414	620.6	1516.7	3939.4	4743.5	5931.8	6844.2
Total loans (billion yuan) Growth over greations year (percent)	0.001				21.4	20.4	25.0	15.4
3								
Lending to (billion yuan)	2 871	2156	5288	1289.8	3307.7	4004.7	4907.7	5666.8
State-owned enterprises	1100.7	3.5.1	41.7	103.8	1927	236.8	306.3	353.7
Agriculture	11.0	0./1	41.7	103.6	1,72,1	0.000		
Trhan collective-owned enterprises	5.0	7.8	31.1	81.6	100.0	170.0	: ;	: 0
To distant common industrial common of	0.0	0.0	1.1	1.6	3.4	5.4	16.1	20.8
Individual-owned industry and commission			,	;	0.06	121.7	171.6	222.7
Foreign-funded enterprises	:	:	:			0,100	6000	0.03
Others	0.0	0.4	18.0	39.9	239.5	254.9	230.0	73.60
Share in total lending (percent)		6	0	0	0.40	7 70	627	8 68
State owned enterprises	91.1	863	80.9	82.0	0.4.0	t:+0	1.70	0.70
State Cities prises	69	73	19	8.9	4.9	5.0	5.2	5.2
Agriculture	7.0	?	3	, .				
The antenies owned entermises	2.7	3.2	2.0	5.4	7.7	C:7	:	:
OLDAN CONCENT COMING CINCA PASSOS	0	00	0.2	0.1	0.1	0.1	0.3	0.3
Individual-owned industry and commissive	2.5	?	<u> </u>		23	90	5.9	3.2
Foreion-funded enterprises	:	:	:	:	 	i :	i	
	0 0	0.2	2.9	5.6	6.1	5.4	8.9	6.0
Others		!			0.00	(115)	74014	1 6530
Total loans by all financial institutions (billion vuan)	:	:	;	1.68.1	5053.8	6113.3	1491.4	4.7000
tal le				82.8	78.0	9.77	79.2	79.1
Silar of State Carries in the state of the								

and Commercial Bank of China [since 1985], Agricultural Bank of China [since 1980], Bank of China [since 1980], Bank of Notes: State banks comprise People's Bank of China (until 1983 a commercial as well as central bank, since then a central bank only); the four state commercial banks (Industrial ... means data not available.

Communications [since 1990]; CITIC Industrial Bank [since 1990]; and the three development banks (State Development Bank, China Import-Export Bank, and Agricultural Development Bank of China) since 1995.

and lending for investment purposes. Lending to agriculture need not necessarily be limited to state-owned agriculture and has therefore not been included. In 1997 the two categories of material supply enterprises and urban collective-owned enterprises disappeared; loans to these enterprises are likely, since 1997, to have been included in the category lending to industrial production enterprises. Since 1997, loans to state-owned enterprises as reported here thus slightly exaggerate the total volume of lending by Lending to state-owned enterprises comprises lending to industrial production enterprises, material supply enterprises, commercial enterprises, construction enterprises, state banks to state-owned enterprises.

All financial institutions comprise the People's Bank of China, the four state commercial banks, the three development banks, other commercial banks, urban commercial banks, urban credit cooperatives, rural credit cooperatives, post office savings, financial trust and investment companies, finance companies, and financial leasing Lending to agriculture in 1998 is the sum of lending to agriculture and to (a new category) township and village enterprises. Total Joan dara in 1985 is 590.56 billion yuan in the source, but the individual Joan categories add up to 620.62 billion yuan.

Sources: Almanac of China's Finance and Banking (1997, 464, 471; 1998, 508f; 1999, 384f); China Financial Statistics 1952-1996 (1997, 12-14).

incentives to maintain accounts that accurately reflect the quality of their loans, or to prevent the accumulation of bad debts.

The PRC's bad debt problem is directly related to the growth in SOE losses over the past two decades. The banking system was always meant to serve the state-owned sector of the economy, and it did so: in 1978, 91.1 percent of all loans extended by state banks went to this sector. Communal or state agriculture received 6.2 percent, and urban collective-owned enterprises 2.7 percent. Even in 1998, the percentage for SOEs was still 82.8 percent (see Table 1).

The state banks' performance therefore largely depends on the SOEs' performance. Unfortunately, at least one third of SOEs are losing money, and one third barely break even. Table 2 shows the increasing losses of industrial SOEs. Losses increased almost 20 times between 1978 and 1997, giving an annualized growth rate of 17 percent. (The data for 1998 and 1999 are not comparable to earlier data due to a severe statistical break; see note to Table 2.) Profits in the same period fell in absolute terms.

Table 2: Financial Performance of State-owned Industrial	Enterprises
(100 million yuan)	

Year	Fixed				Ratio of Pretax Profits
	Assets	Profits	Losses	Taxes Paid	to Fixed Assets
1978	3193	508.8	42.1	281.9	0.25
1980	3730	585.4	34.3	321.7	0.24
1985	5956	738.2	32.4	595.9	0.22
1990	11610	388.1	348.8	1115.0	0.13
1995	30936	665.6	639.6	2208.6	0.09
1996	34765	412.6	790.7	2324.5	0.08
1997	38351	427.8	831.0	2479.4	0.08
1998	38734	525.1	1023.3	2845.9	0.09
1999	•••	997.9	851.4	3081.2	•••

^{..} means data not available.

Note: Data up to and including 1997 are for state-owned industrial enterprises with an independent accounting system. In 1997, these accounted for 96 percent of gross output value of all state-owned industrial enterprises, with or without an independent accounting system (China Statistical Yearbook 1998, 433, 454). Since 1998 data are for all industrial SOEs with an independent accounting system plus state-controlled shareholding industry. State-controlled shareholding industry in the years 1994 through 1997 was explicitly excluded from the category "industrial SOEs with an independent accounting system." (Shareholding companies first became established in 1993.) In 1997, value added of fully state-controlled shareholding enterprises (guoyou juedui konggu qiye) was equivalent to 17 percent of value added of industrial SOEs with an independent accounting system, and value added of "relatively" state-controlled shareholding enterprises (guoyou xiangdu konggu qiye) was equivalent to another 2.8 percent of value added of industrial SOEs with an independent accounting system (China Statistical Yearbook 1998, 444). Thus, the data for 1998 and 1999 are not comparable to those for the previous years.

Sources: China Statistical Yearbook (1998, 461; 1999, 435; 2000, 417); China Statistical Abstract (various years).

⁷The Third Industrial Census (OTNIC 1997) shows that 33.8 percent of industrial SOEs lost money in 1995 compared with 15 percent for township-owned enterprises (TOEs). In 1999, after extensive privatization of small SOEs and a reclassification of what constitutes an "enterprise," the share of loss-making SOEs was still 41.4 percent (*China Statistical Abstract* 2000, 113).

At first sight, it seems that SOEs' inefficiency has caused the bad debt problem (Wang 1998). This, however, is not the whole story. If the banks had autonomy and incentives to make sound lending decisions, they would not have lent so much money to loss-making SOEs. And if SOEs did not have such easy access to loans, they would either have had to become more efficient to survive, or simply go bankrupt. Therefore, there is also a reverse causality: the banking system's lack of commercial independence and profit incentives have led to a soft budget constraint for SOEs and ultimately to inefficiency in the real economy.

Nature of the Bad Debt Problem

Since the start of economic reforms in 1978, the government has gradually abandoned its tight control over the real economy, though it has not relaxed its grip on monetary matters. On the contrary, the credit planning system has become a central policy instrument. The government has limited lending from financial institutions by imposing lending limits and, depending on the type of loan, quotas for individual projects or enterprises. Government regulations are particularly restrictive for the four state commercial banks, which even today account for approximately 75 percent of all outstanding loans.

Government participation in lending decisions ranges from formal to highly informal arrangements. Thus the government determines the amount of loans to be extended for certain purposes, such as for infrastructure investment or agricultural procurement, with the quotas for individual projects or enterprises then established by banks in conjunction with the Development and Planning Commission or the State Economic and Trade Commission. These are formal "policy loans." On the other hand, a government on a particular administrative tier may simply urge the local bank branch to extend working capital loans to certain favored enterprises (informal policy loans). While the degree of government involvement varies, all policy loans have one thing in common: that the bank is not making independent lending decisions.8

The banks extend these policy loans knowing that repayment is highly unlikely. Examples of working capital policy loans are the "stability and unity" (anding tuanjie) loans of 1989-1990; the loans for increasing inventories at SOEs of the early 1990s (loans that remain on the books but on which no interest is charged); the "turn losses into profit" (niukui zengying) loans of more recent years (Hu and Wang 1998); and the special loans extended by the Industrial and Commercial Bank of China (ICBC) since 1994 to pay a basic living allowance to employees of loss-making SOEs (ICBC 1994).

⁸Data on the extent of policy loans are not publicly available. On the extent of policy loans in 1991 see Xiao (1997, 374). According to his calculations, formal policy loans accounted for 58.0 percent of CBC lending, 51.2 percent of ABC lending, 66.6 percent of BoC lending, and 17.9 percent of ICBC lending.

Local government departments frequently try to influence bank lending decisions to favor the SOEs under their jurisdiction. They exert pressure on banks to lend for capital investment purposes, so as to increase production and thus accelerate economic growth; for regular production; if the enterprise is unprofitable, for social security measures; and finally, even for enterprise tax payments (Xia 1996, Hu and Wang 1998). If bank branches ignore the local government's wishes, they are taking a risk, as the local government is not only crucial in securing the repayment of old loans, but also in a number of respects of personal interest to bank employees, including housing and education for employees' children.

When an enterprise goes bankrupt, local governments frequently prevent banks from exercising the few rights they formally enjoy, and courts may not always act independently of the government (Chen et al. 1997). The bankruptcy law enacted in 1986 is long outdated, and the company law of 1993 is ambiguous about creditors' rights. There are no specific rules regarding their rights when an enterprise goes bankrupt, while government departments enjoy far-reaching powers. The 1993 company law stipulates that liquidation teams be composed of "relevant" shareholders, government departments, and professionals. Creditors have no control rights in liquidation. In practice, government bodies often decide whether to close an enterprise or not. Because of these flaws, many enterprises have tried to evade repaying debts by declaring bankruptcy: according to a nationwide survey of 145 of 1,520 enterprises that were declared bankrupt between 1993 and 1995, the average loan repayment rate of the 101 enterprises that had completed bankruptcy procedures by the survey date was only 9.2 percent (Almanac of China's Finance and Banking 1997, 285).

Overall, these facts suggest a lack of independent lending decisions and the inability of banks to enforce lending contracts. Some progress has been made in more recent years. The "mandatory" credit plan since 1998 has supposedly softened into an "indicative" credit plan. The state commercial banks now enjoy a high degree of decision-making authority on working capital loans, while the overall lending limit is no longer binding; loans for most investment in fixed asset projects are increasingly to be determined autonomously by the banks. Formal policy loans have largely been shifted to the development banks. Yet even the state commercial banks still rely on

⁹The credit plan covers short-term loans (i.e., working capital) as well as long-term loans (for investment in fixed assets). For short-term loans, the credit plan institutes an overall lending limit. This comprises some formal as well as most informal policy loans, but otherwise banks are supposed to make independent lending decisions on short-term loans. For long-term loans, the credit plan institutes an overall lending limit as well as quotas on the amount of funds to be lent to individual projects or enterprises; these loans are extended for two purposes, capital construction and technological updating and transformation. The banks have no lending discretion in the case of capital construction loans and very limited authority to swap funds between technological updating and transformation projects. Capital construction loans are approved (if not determined) by the Development and Planning Commission, technological updating and transformation loans by the State Economic and Trade Commission. (For more details, see Holz 1992.)

other departments of the state bureaucracy to help identify the borrowing needs of the major borrowers and to secure repayment of loans.

This lack of autonomy, inherent in the operations of the state bureaucracy of which the state banks are a part, implies that banks cannot be held accountable for bad debts. Consequently, they have few incentives to monitor loan quality or take proper measures to prevent loans from turning bad, despite current attempts to hold bank managers responsible for the accumulation of bad debts.¹⁰

SOE Losses: Causes and Linkage with Bank Loans

The losses of SOEs in the PRC have often been attributed to their shedding of labor and excessive welfare burdens (Hu 1995, Lardy 1998, Lin et al. 1998, Zheng et al. 1998). SOEs are required to create employment for urban residents even if many of the workers they hire are not needed. SOEs also have a much higher percentage of retired workers on their payrolls than other types of enterprise, which typically have a shorter history and thus younger workers (Hu 1995). SOEs have until recently provided most of their employees with various fringe benefits and service facilities such as free or virtually free housing. SOEs, finally, have shouldered more than their fair share (given their value added) of the tax burden. 12

It would thus appear that SOEs are strongly disadvantaged in comparison with other enterprises, such as township-owned enterprises (TOEs). This could explain why in the 1995 Industrial Census the average ratio of net profits to equity was only 0.02 for industrial SOEs as compared with 0.11 for industrial TOEs (see Table 3). However, the ratio of industrial SOEs' pretax profits to equity was 0.18 as compared to 0.33 for industrial TOEs. The heavier tax burden thus cannot fully account for SOEs' lower profitability.

All too often, pressure to recover loans only leads to counterproductive policies at the lower tiers of the banking hierarchy, such as rolling over bad loans rather than acknowledging their nonperforming status.

The PRC's SOEs have traditionally been organized as public sole proprietorships. Since 1993, the government has embarked on a major effort to transform traditional SOEs into shareholding companies, many of which are either wholly or majority owned by the state. These state-controlled shareholding companies enjoy, at least in principle, more managerial autonomy and have more ways of financing. Detailed statistics on these new types of SOEs are not available. It is likely that these companies, particularly the public listed ones, have on average lower leverage than traditional SOEs given the fact that new equity investments are normally required for establishing a shareholding company. The shareholding reform is discussed in more detail below.

¹²According to the 1995 Industrial Census, the average ratio of total taxes to pretax profits was 0.77 for stateowned industrial enterprises, while the figures for township-owned enterprises and wholly foreign-owned enterprises were 0.54 and 0.35, respectively (OTNIC 1997).

¹³TOEs are enterprises owned and controlled by township-level governments, whereas the often-studied township-village enterprises (TVEs) also include enterprises that are collectively owned by villages.

2.33

State-owned Township-owned **Enterprises** Enterprises Ratio of taxes to pretax profits 0.77 0.54 Ratio of net profits to equity 0.02 0.11 Ratio of pretax profits to equity 0.18 0.33 Ratio of the sum of wages, pension and pretax profits to equity 0.37 0.61

1.92

Table 3: Performance and Leverage of State-owned versus Township-owned Industrial Enterprises

Debt-equity ratio
Source: OTNIC (1997).

In order to further consider the state sector's labor redundancy and pension burden, we calculate for each type of enterprise the sum of total wages, pensions, and pretax profits, which roughly measures a firm's value added, minus interest and miscellaneous fee payments, and divide it by the amount of equity. The difference in performance still remains—the ratio is 0.37 for SOEs, and 0.61 for TOEs.

Some authors have also attributed the SOE losses to their heavy debt burden (Chi et al. 1996, Lin et al. 1998). It is true that the banking system remains the single most important external financing source for almost all SOEs. ¹⁴ This reliance on bank funds makes PRC firms highly leveraged. But the data show that TOEs are even more highly leveraged. In 1995, industrial SOEs had a debt-equity ratio of 1.92 while the figure for industrial TOEs was 2.33 (see Table 3). In 1998, the debt-equity ratios for SOEs and TOEs were 1.78 and 2.13, respectively (see *China Statistical Yearbook* 1999, 433-5). TOEs thus should face a higher interest bill relative to equity and therefore have lower profit rates; in addition, the average interest rate on loans to TOEs is higher than on loans to SOEs.

Nevertheless, a high rate of leverage that, as in the case of the SOEs, is not a market outcome, has peculiar implications. First, poor SOE performance and high leverage imply that state ownership of enterprises is actually the result of the leverage effect rather than of the government's equity ownership. When a firm's asset value is well below its debt level, and its equity thus negative, it is still regarded as state-owned. Such firms should already be in the hands of the creditors; but the creditors (in this case banks depositors) are represented by the state. It does not matter whether the state provides capital to SOEs directly in the form of a "free" equity contribution or indirectly—as the "owner" of state banks—in the form of debt. Debt thus does not come with truly external control and monitoring. The final

¹⁴ Enterprises in the PRC have few legal sources of financing. While the largest enterprises may receive administrative approval to list on the Shanghai or Shenzhen stock markets and a few enterprises may issue bonds, most enterprises can access no formal sector funding other than bank loans.

investors, i.e., the depositors, would have incentives to care about the use of their money if it were invested at their own risk. But because the state has insisted on maintaining its ultimate right to control enterprises and has therefore limited the development of alternative investment channels, the final investors are left with few choices other than bank deposits.

A second problem associated with the high rate of leverage is that when banks have incentives to limit the amount of bad debts, it may be difficult for highly leveraged firms to borrow money even if they have projects with strong investment potential (the debt-overhang problem). Since 1998 banks have come under increasing pressure not to accumulate more bad debts, and thus have become reluctant to lend to debt-ridden firms. But sometimes, more investment may be the only way for these firms to turn themselves around. 15 In response to the debt-overhang problem, the central bank and the State Economic and Trade Commission are cooperating with banks to have banks extend "closed-circuit" loans (fengbi daikuan) to potentially profitable individual projects of heavily indebted SOEs. But in practice, this is little different from policy loans or implicit government guarantees for individual loans (formally prohibited). Not only have the results of these loans been far from convincing, but the closed-circuit loans are again perpetuating the participation of nonbank government departments in lending decisions.

Finally, when bank loans are virtually the only source of external financing, firms become extremely vulnerable to fluctuations in the economic environment. Changes in regulations or monetary policy can quickly change the profitability of an enterprise and thereby the likelihood of loan repayment. Furthermore, enterprise liquidation in an economy with a highly incomplete market for bankrupt enterprises and their assets is likely to lead to additional losses through bankruptcy procedures. In such an environment, bankruptcy, even if enforced, may not be very efficient. At the same time, banks may well prefer to keep nonperforming loans on their books rather than enforce bankruptcy, hoping for a turnaround in the firms' performance. A high rate of leverage is therefore another cause of bank passivity in enforcing payment. This, in turn, weakens enterprises' incentives to perform well ex ante and to repay loans on time ex post.

Overall therefore, SOEs are inefficient not just because they have too many redundant workers, too high a welfare burden, or too much debt. More fundamentally, SOE loss making can be attributed to the existence of soft budget constraints and the "agency problem." This has become increasingly serious after the central planning and control system was gradually disbanded in the course of reform (Qian 1996, Zhu 1999). It has two levels: one, government bureaucrats, as agents, act on

¹⁵On the other hand, if debt-ridden SOEs are able to borrow, their managers may not have an incentive to use the money wisely. As they have little to lose, they are prone to make risky investments, particularly in speculative markets (the "asset substitution problem" à la Jensen and Meckling 1976). Too much debt can also weaken managerial incentives if all or most of the profits are used to pay back the debt.

behalf of the government (or the people); and two, enterprise managers, as agents, act on behalf of government bureaucrats. Although bureaucrats are supposed to act as owners, they are not legally entitled to the residual income rights that owners of private enterprises normally enjoy. Their exercise of control all too often exhibits private or departmental rent seeking. Furthermore, SOE managers often take advantage of their powers to pursue reckless operations or engage in activities for their own account. More generally, if control is so poorly exercised, it is unclear who is to bear responsibility for the SOEs' financial deficit.

State Sector as a Whole

The extent of bad debts—and of SOE losses—reflects little more than a political decision on where within the state sector to place the financial deficit attributable only to the state sector as a whole. Policy loans to SOEs could equally well enter the accounting system as bank loans to the government or as a budget deficit. Bad debts could be written off against the banking system's equity held by the government. Enterprises could be forced to repay overdue loans and, if need be, go bankrupt, or they could be sustained through budget appropriations. The government, through tax policies, its choice of social welfare system, and many other measures, determines the profit and loss of state-owned banks and SOEs, which in turn affect the amount of bad debts that banks can write off every year (up to a maximum equivalent to 1 percent of total loans) as well as the extent to which the government budget is in surplus or deficit.

The three pillars of the state, government, and SOEs and state banks together, cannot be viewed independently. A consolidated balance sheet of the state sector shows that it is a very large net debtor to domestic households. ¹⁶ This debt is backed by state assets such as SOE fixed assets or land. As state assets currently still exceed state debt, in principle, bad debts could be written off against this net worth of the state.

As long as the central bank is able to prevent a liquidity crisis in the state banks and thus a run on the banks, the government's bad debts will not cause an immediate crisis in the banking system.¹⁷ They simply reflect the destruction of state net worth and thus the degree of inefficiency with which financial resources have been invested. The extent of bad debts by itself then matters little. What appears more

 $^{^{16}}_{-}$ For the consolidated balance sheet and its implications see Holz (2001).

Only in rare instances has the ability of the state banking system to meet depositors' claims been significantly impaired. For example, in 1998 five mainland companies listed in Hong Kong, China were unable to withdraw their time deposits with the CBC and other financial institutions at the due date (*Xinbao* 28 August 1998).

pressing is to resolve the governance problem throughout the state sector in order to end the destruction (or inordinately low increases) in state net worth.¹⁸

Pitfalls of the PRC's Recent Reform Measures

In the aftermath of the Asian financial crisis, the PRC has implemented a range of measures to stabilize the domestic financial system, and a three-year program of SOE reform was initiated in early 1998. Yet most of these measures do not address the fundamental issues of decision-making autonomy, incentives, and control mechanisms. Transferring budgetary funds to the banking system and largely cosmetic SOE reform measures dominate the agenda.

Recent Efforts to Solve the Bad Debt Problem

Since 1997, the government has repeatedly injected funds into the state banking system. In 1997, more than 30 billion yuan of budgetary funds were set aside to write off SOE bad debts, presumably old capital construction (fixed-asset) loans. But these funds were equivalent to only 1.9 percent of total investment in fixed-asset loans outstanding at end-1997, while the total of fixed-asset loans accounted for only 20.6 percent of all loans extended by state banks (see China News Digest 17 October 1997 and China Statistical Yearbook 1998, 668). In 1998, the government financed another 40 billion yuan bad debt write-off as well as a conversion of 57.7 billion yuan of outstanding loans into state equity, without specifying the types of loans covered (see China Finance Association 7 December 1998).

Also in 1998, the National People's Congress Standing Committee recapitalized the four state commercial banks to enable them to meet the 8 percent riskweighted equity-asset ratio specified in the Commercial Bank Law of 1995 (and recommended by the Bank for International Settlements). After the minimum reserve requirement was lowered, on 18 August 1998 the four state commercial banks used their now excess reserves at the People's Bank of China to purchase 270 billion yuan of special 30-year interest-bearing bonds. The Finance Ministry then recapitalized the banks by returning the 270 billion yuan. Although the recapitalization was undertaken to meet international capital requirement standards, it also increased the banks' net worth and thus provided a cushion for writing off bad debts.

¹⁸Even if bad loans were to exceed state net worth, the PRC banking system could continue to operate as before, as long as the public believes that the state will honor the public's deposits with the state banks. Yet the lower (or more negative) state net worth, the higher the likelihood that the public will begin to distrust the state and start a run on the state banking system. The proposal to adopt an insurance deposit scheme has surfaced repeatedly, but not yet come to fruition. With the government implicitly guaranteeing deposits at its state banks, there appears to be no need for a deposit insurance scheme.

In 1999, the four state commercial banks set up their own asset management companies (AMCs) to take over their bad debts and to carry out a debt-equity swap plan for selected SOEs. Government funds provided the initial capitalization for the four AMCs, which then issued government-guaranteed bonds to secure further funds. The AMCs proceeded to buy the bad debts of their corresponding banks at face value. With approval of the State Economic and Trade Commission, the AMCs turned the loans of selected, central government-owned SOEs into equity. In 1999, a total of 601 SOEs (mostly large enterprises) were authorized to participate in the debt-equity swap scheme; the total amount of debt involved was 460 billion yuan (Wang 2000). By mid-2000, AMCs had taken over more than 1.3 trillion yuan of bad debts, equivalent to approximately 20 percent of all state bank loans (see *Xinbao* 28 July 2000, and *People's Bank of China Quarterly Statistical Bulletin* 2000-2, 24). Their task now is to dispose of their acquired assets.

Turning some of the bad debts into equity allows the AMCs to postpone resolving some of the bad debt problems—except that the return on the equity is likely to be lower than the interest rate that the AMCs pay on the bonds they issued. With the equity holdings accounting for approximately one third of all AMC assets, this leaves close to 1 trillion yuan of assets in the form of bad debts in the AMCs to be dealt with. This figure is almost equivalent to total annual government budget revenues. The recoverable share of these bad debts is unknown, but it is likely to be very small.

These recent measures do not represent fundamental changes in how the banks operate, but simply shift the bad debt burden from the banks to the government budget. The measures appear to be primarily a domestic and international public relations step. The opportunity to improve incentive structures and to pressure local bank branches and governments to resolve local bad debt problems has been largely missed.

However, even these apparently benign measures have the strongly negative side effect of increasing moral hazard. This is because the government has in effect been implicitly inviting SOEs not to repay their loans, and encouraging banks to label as bad as much of their portfolio as possible, and to write off assets as fast as they can. Dai Xianglong, head of the central bank, has tried to limit the damage by repeatedly talking about this very last "free meal." Yet given the potential implications of widespread bank runs on the state-owned banking system, it is very unlikely that this will be so.

²⁰On the equity holdings see *Xinbao* (29 August 2000). Total budgetary revenues in 1999 were 1.1 trillion yuan (*China Statistical Abstract* 2000, 58).

¹⁹The equity holdings of the AMCs are equivalent to approximately one fifth of total capitalization of the Shanghai and Shenzhen stock markets at the end of 1999 (*China Statistical Abstract* 2000, 77). The gradual sale of these equity holdings is therefore unlikely to cause major disturbances on the stock market.

Recent Efforts at SOE Reform

The three-year SOE reform program announced by Premier Zhu Rongji to the National People's Congress in spring 1998 aimed to relieve SOEs of their welfare and debt burdens by encouraging them to lay off workers and cut welfare expenses in housing and medical care, thereby reducing the degree of leverage (and interest payments).

The key measure is cutting excess labor.²¹ By mid-2000, more than 10 million SOE workers (or approximately 10 percent of the total state work force) had lost their jobs, a figure expected to double by the end of 2000. Yet in mid-2000, some officials felt that SOEs were still overstaffed by as much as one third of their work force.²² An accompanying reform measure is the creation of a provincial-level rather than enterprise-level urban social security system. In addition, since 1999, SOEs have stopped giving their employees quasi-free housing, while existing SOE housing is to be gradually privatized. An SOE bankruptcy would therefore no longer deprive workers of social security and housing, which allows the government to force the pace of SOE bankruptcies and shut down loss-making SOEs.

Laying off workers and creating a social security system external to enterprises clearly reduce SOE losses (or increase their profits). Some of the laid-off workers may find productive new jobs, thus increasing national value added. Yet all these are one-off financial effects. They do not change the systemic features of the economy; in particular, they do not significantly change the governance structure of SOEs. At the worst, all they achieve is an increase in unemployment and social security payments out of the government budget, corresponding to the decrease in such payments by SOEs, and deep dissatisfaction of the laid-off workers, with implications for the much treasured social (and political) stability of the country.

A second major SOE reform measure is the privatization of some of the small SOEs and the establishment of a "modern enterprise system" for large and mediumsized SOEs. Specifically, small SOEs can be sold either to private investors or, in the case of conversion into employee-shareholding cooperatives, to employees. Large and medium-sized SOEs are to be transformed into shareholding companies, which may take either the form of a limited liability stock company or a limited liability company.23

²¹Premier Zhu Rongji emphasized, at a meeting with members of the Ninth People's Congress, that the key to pulling loss-making enterprises out of difficulty lies in reducing the number of surplus workers (Xue 1998). See Xinbao (30 August 2000), citing a deputy head of the State Economic and Trade Commission.

²³ According to the PRC's Company Law, the main differences between limited liability companies and limited liability stock companies lie in the following: (i) the threshold of equity capital (0.5 million vs. 10 million yuan), (ii) the level of approving authority (subprovincial vs. provincial government or an authority designated by the State Council), (iii) the number of shareholders (2-49 vs. 5 or more), and (iv) the liquidity of shares—only the shares of the latter can be traded on stock markets, where only those with equity capital of over 50 million yuan are eligible for listing.

According to a national survey conducted by the State Statistical Bureau in 1998, the results of the ownership reform are not particularly encouraging.²⁴ As Table 4, which draws on the findings of Lin and Zhu (2000) shows, state ownership remained dominant in restructured industrial enterprises, particularly in limited liability stock companies, limited liability companies, and enterprises in the "other" category. Overall, more than half of the firms surveyed are still majority owned by the state. The identities of those labeled as "institutional owners" are not clear, though the overwhelming majority of them are reported to be state-owned entities (Dong 1999). Also, the state maintained sizable shares in quite a number of those companies registered as "employee-shareholding cooperatives." Even some of those labeled as "private enterprises" had the majority of their shares held by the state. 25

Table 4: Majority Ownership in Restructured SOEs, 1998 (percent)

Type of Company	Share in Total Number of Restructured Enterprises	Firms with Majority Control by State	Firms with Majority Ownership by Institutions	Firms with Majority Ownership by Private Owners
Limited liability stock				
company	11.5	57.6	12.4	1.8
Limited liability company	43.7	53.2	12.6	2.6
Employee cooperative	16.2	23.9	3.7	7.5
Private enterprise	7.1	7.4	3.8	83.9
Other	21.5	85.0	7.1	4.5
Total	100.0	53.5	9.7	27.6

Source: Lin and Zhu (2000).

Moreover, for many restructured SOEs, little has changed except labels; in particular, management and supervision have not changed significantly (Lin and Zhu 2000). The slightly more than 1,000 SOEs listed on the Shanghai and Shenzhen stock markets have perhaps the most trustworthy published accounts and the most rigorous management structures, but even here, most are majority owned by the state. Chairpersons and supervisory board members are often Party and government officials.26

 See Lin and Zhu (2000) for a detailed study of the ownership reform of SOEs in the PRC.
 It is possible that a significant part of the assets (especially land-use rights and factory buildings) leased or contracted to new private enterprises during restructuring was still counted as owned by the state.

26 Plans are afoot to establish a second-tier stock market for technology or even smaller firms in general that do

not meet the stringent capital and profitability requirements of the Shanghai and Shenzhen stock markets. Technically then, at some point in the future, almost all large and medium-sized SOEs could be listed, as well as a fair share of the small SOEs. (The size classification follows sector-specific real measures, rather than the size of total assets or capital.)

Overall, the SOE reform measures are predominantly redistributive and cosmetic, rather than efficiency-enhancing. The financial burden of SOEs is shifted to the government budget, and Western management and supervisory structures are established largely in form but not in content. These measures fall far short of establishing an efficient corporate system, and do not address the fundamental problems.

Policy Options

Any serious attempt to resolve the twin problems of bad debts and enterprise losses in the state sector requires substantial restructuring of real as well as financial commitments of the state. Successful reform requires changes in ownership and governance structures across the state sector as a whole. Well-implemented reform of the banking sector is particularly important, because rigorous banking practices will automatically exert pressure on SOEs and their government owners to reform.

At the present stage of economic reform, improvements in bank management, such as the gradual granting of lending autonomy, may no longer be enough to yield continuous improvements in systemwide efficiency. Within five years of the PRC's membership in the World Trade Organization (WTO), foreign banks will be allowed full access to the domestic banking sector.²⁷ The domestic securities industry will be liberalized, with foreigners allowed to own 33 percent of PRC securities brokerages and fund management companies, rising to 49 percent three years after WTO accession. But can the country's banks reform rapidly enough to be ready for the potential onslaught from foreign banks in five years? Current reform measures as well as the changes achieved since the passing of the Commercial Bank Law in 1995 raise severe doubts about this. Time is running out. A wholehearted banking reform that creates a competitive financial sector with free entry and exit may be unavoidable.

Introducing more competition into the banking sector will help improve efficiency in the allocation of financial resources and lead to a downsizing of state bank operations. New and existing nonstate banks should be encouraged to compete with bigger state banks and thus to increase pressure on the latter to improve performance. Moreover, given the huge size of the state commercial banks, with their 50,000 branches nationwide, they can be broken up into smaller independent banks. In the case of the almost fully centralized banking sector, local governments and other domestic entities might wish to pick up institutions deemed crucial for local economic development, such as a local bank branch, and turn it into a separate local bank. Competition in the banking sector would allow outside banks to move into a

²⁷Only two dozen foreign banks are currently allowed to conduct lending business in the domestic currency.

locality and force any local bank run in the old-fashioned manner to change its ways. Local governments with tight budgets and unable to borrow could not maintain soft budget constraints and mismanagement indefinitely, but would be forced to give their economic entities sufficient autonomy and proper incentives—or let them exit.

Moreover, a significant change in state ownership and corporate governance is crucial for improving incentives. The failure of recent SOE restructuring to make significant real improvements suggests that simply incorporating and then listing SOEs (along with banks) on domestic stock markets is not enough. Significant shareholdings by nonstate owners may well be needed to achieve a clear end to government interference and bureaucratic rent seeking. The experience of other countries suggests the need for a drastic break. In particular, the underlying causes need to be identified and fully addressed in a comprehensive rather than piecemeal fashion, remedies should be implemented quickly, and firm exit policies should be drawn up (see, for example, Dziobek and Pazarbasioglu 1997).

However, relying on domestic nonstate firms to acquire significant stakes in large state banks and enterprises may take too much time. A better strategy may well be to sell off significant, possibly majority, stakes in the state commercial banks and large SOEs to international investors or multinational companies. Not only will foreign ownership bring in much-needed technology and management expertise, and time-proven incentive structures that are crucial for efficiency, but also, supported by WTO accession and the introduction of international law, the clout to prevent continued meddling by government and Party cadres. International companies could have more leverage than domestic banks and firms to push for institutional change, thanks to their higher degree of political independence from the government, and thanks to the lobbying power they may enjoy through international organizations and their own governments. Thus, for example, pressure to create a regulatory and legal environment that is more conducive to business autonomy and sound corporate governance would very likely increase. Government agencies would be forced to create a level playing field and treat all firms equally, improving operating conditions even for wholly domestic entities.

A takeover by foreign banks is likely to quickly bring about changes in lending practices, thus not only helping resolve the accumulated problems of the past but also preventing the continuing emergence of new bad debts. Once lending practices make economic sense, the bank-induced soft budget constraint of SOEs turns into a hard constraint. A hard budget constraint reveals the true economic viability of SOEs, thus identifying those SOEs most urgently in need of drastic measures (including closure), and specifying the price of keeping those SOEs alive. The strategy of selling off majority stakes in state-owned banks and SOEs not only solves the problem of lack of autonomy and poor incentive structures, but may also provide badly needed revenues for the government. For example, the state commercial banks' branch network and physical assets may still be attractive to foreign investors now, but may

not be once the PRC's domestic financial market has been opened and foreign banks have begun to establish their own branch network. If state-owned assets are sold in a fair and open-bid fashion, foreign competition for these assets can only increase the price they will fetch. The proceeds from the sales could help pay for SOE reform, including the establishment of a viable government social security system.

Many measures, however, need to be implemented first to pave the way for liberalizing the financial sector. These include writing off bad debts, reducing the work force, introducing a modern governance structure, removing policy restrictions on interest rates and local currency business, and, perhaps, allowing some degree of capital account convertibility. In the meantime, regulatory capacity needs to be improved. A more rigorous risk management system should be established in state banks. Finally, a more accurate assessment of the extent of bad debts is also needed to establish a benchmark against which future performance can be measured.

Conclusions

The government's recent efforts to deal with the problem of bad debts and mounting SOE losses have had largely redistributive effects, with state bank and SOE financial deficits being shifted to the government budget. This has had little effect on efficiency. Instead of the continuation of such measures, this paper has proposed a substantial reform of ownership in both the financial and real sectors, which will address the fundamental problems in state banks and SOEs. Despite the radical appearance of our proposals, opening the financial sector—and consequently SOEs—to international ownership is perfectly in line with Deng Xiaoping's open door policy initiated more than two decades ago. Where domestic innovation stagnates, multinationals can bring in new impetus. WTO membership should provide the leaders of the PRC with a powerful instrument to overcome formidable social and political obstacles on their way to achieving the final success in reforming the country's inefficient banking and enterprise systems.

References

- Almanac of China's Finance and Banking (Zhongguo Jinrong Nianjian), various years. Beijing: China Statistical Press.
- Chen, Y.M., et al., 1997. "Pochan Zhidu de bu Wanshan Yingxiang Gaige de Jincheng" (The Imperfections of the Bankruptcy System Hinders the Progress of Reform). *Jinrong Yanjiu Baogao* (Financial Research Report) 17 June. Pages 1-2.
- Chen, Y.S., and M. Cong, 1997. "Guanyu Fangfan He Huajie Jingrong Fengxian de Fenxi" (An Analysis on Preventing and Resolving Financial Risk). *Jingji Yanjiu Cankao* (Economic Research References) 101:2-6.
- Chi, F.L., et al., 1996. Zhaiwu Yu Guoyou Qiye Gaige (Debt and the SOE Reform). Beijing: Democracy and Construction Press.
- China News Digest, 1997. "Government Said to Write Off Bad Debts for State-Owned Firms." 17 October. Global News, No. GL97-142. Available: http://www.cnd.org/CND-Global/.
- China Finance Association, various years. TCFA Update. Available: http://www.china-finance.org.
- China Financial Statistics 1952-1996 (Zhongguo Jinrong Tongji 1952-1996), 1997. Beijing: China Fiscal Economy Press.
- China Statistical Abstract (Zhongguo Tongji Zhaiyao), various years. Beijing: China Statistical Press.
- China Statistical Yearbook (Zhongguo Tongji Nianjian), various years. Beijing: China Statistical Press.
- Dong, F.R., 1999. "Securities Market Has Achieved Rapid Development in Recent Years, But..." Renmin Ribao (People's Daily), 21 June 1999. Page 10.
- Dziobek, C., and C. Pazarbasioglu, 1997. Lessons from Systemic Bank Restructuring: A Survey of 24 Countries. IMF Monetary Exchange Affairs Department Working Paper No. 161, International Monetary Fund, Washington, D.C.
- The Economist, 1998. "The Darkest Hour Comes Just Before Dawn." 17 October.
- _____, 2000. "Broken Thais." 18 March.
- Holz, C., 1992. The Role of Central Banking in China's Economic Reforms. Ithaca, N.Y.: Cornell East Asia Program.
- -----, 2001. "Economic Reforms and State Sector Bankruptcy in China." *China Quarterly*. Forthcoming.
- Hu, S.T., and H.L. Wang, 1998. "Lishui Diqu Yinhang Buliang Zichan Chuzhi Yu Zhuanhua Wenti Tansuo" (An Exploration of How to Handle and Transform the Problem of Unhealthy Bank Assets in Lishui Municipality). *Jinrong Cankao* (Financial References) 3(March):28-31.
- Hu, X.Y., 1995. "Reducing SOEs' Social Burdens and Establishing a Social Insurance System." In H. Broadman, ed., Policy Options for Reform of Chinese SOEs. World Bank Discussion Paper No. 335, World Bank, Washington, D.C.
- ICBC (Industrial and Commercial Bank of China), 1994. Zhongguo Gongshang Yinhang Yinfa «Guanyu Dangqian de Guoyou Gongye Kuisun Qiye Fafang Jiben Zhuanxiang Daikuan de Guanli Banfa» de Tongzhi (Administrative Measures for Special Loans to Presently Lossmaking Industrial SOEs). Gongyinfa #81/1994. In Selected Financial Rules and Regulations, Vol. 1 (Jinrong Guizhang Zhidu Xuanbian [shang]). Beijing: China Financial Press.
- Jensen, M., and W. Meckling, 1976. "Theory of the Firm: Managerial Behavior, Agent Costs, and Capital Structure." *Journal of Financial Economics* 3:305-60.
- Kornai, J., 1980. Economics of Shortage. Amsterdam: North-Holland.

- Lardy, N. R., 1998. China's Unfinished Economic Revolution. Washington, D.C.: Brookings Institution.
- Lin, J. Y., et al., 1998. "Competition, Policy Burdens, and State-Owned Enterprise Reform." American Economic Review Papers and Proceedings 88:422-7.
- Lin, Y., and T. Zhu, 2000. "Ownership Restructuring in Chinese State Industry: An Analysis of Evidence on Initial Organizational Changes." China Quarterly. Forthcoming.
- Maskin, E., 1999. "Recent Theoretical Work on the Soft Budget Constraint." American Economic Review Papers and Proceedings 89:421-5.
- Ming Pao, 1998. "Dai Xianglong: Reports on Bad Bank Assets Incorrect: Overdue Loans, Nonperforming Loans and Loan Losses Add Up to 25%" (Dai Xianglong: Yinhang Huaizhang Baodao Bushi: Yuqi Daizhi Daizhang Daikuan Xiangjia 25%). 17 January. Page 7.
- -, 1998. "Dai Xianglong Emphasizes the Establishment of a Deposit Insurance Institution" (Dai Xianglong Qiangdiao She Cunkuan Baoxian Jigou). 22 April. Page 4.
- OTNIC (Office for the Third National Industrial Census), 1997. The Data of the Third National Industrial Census of the People's Republic of China of 1995. Beijing: China Statistical Press.
- PBC (People's Bank of China), 1996. Daikuan Tongze (General Credit Rules) Decree No. 2. In Selected Financial Rules and Regulations, Vol. 1 (Jinrong Guizhang Zhidu Xuanbian [shang]). Beijing: China Financial Press: 20-33.
- -, various years. People's Bank of China Quarterly Statistical Bulletin. People's Bank of China, Beijing.
- Qian, Y.Y., 1996. "Enterprise Reform in China: Agency Problems and Political Control." Economics of Transition 4:422-47.
- Wang, H.Q., 1998. "Lessons from the Southeast Asian Financial Crisis." Jinrong Shibao (Financial Times), 16 January, Page 3.
- Wang, Y.T., 2000. "SOEs' Profits Increased by 70% Last Year and the Amount of Debt-for-Equity Swaps Have Reached 459.6 Billion Yuan." Remin Ribao (People's Daily), 26 January 2000.
- Xia, D., 1996. "Guanyu Zhongguo Jingji Zhuangui Shiqi Guoyou Yinhang Buliang Zhaiquan Wenti de Yanjiu" (A Study of the Unhealthy Loan Problem of State Banks during China's Economic Transition). Guanli Shijie (The World of Management) 6(November):40-7.
- Xiao, G., 1997. Chanquan Yu Zhongguo de Jingji Gaige (Property Rights and China's Economic Reforms). Beijing: China Social Science Press.
- Xinbao (Hong Kong Economic Journal), 1998. "Moody Puts China's Nine Banks Under Observation" (Mudi Jiang Zhongguo Jiu Yinhang Lieru Guancha Mingdan). 30 July. Page 2.
- -, 1998. "Hidden Dangers in China's Financial Crisis Are Severe: Rectification and Consolidating Exceedingly Difficult" (Zhongguo Jinrong Weiji Yinhuan Yanzhong: Qingli Zhengdun Kunnan Zhongzhong). 5 August. Page 9.
- -, 1998. "State-owned Enterprise Problem Deposits Ever Worse: Luobo Cannot Withdraw Forty-One Million" (Guoqi Wenti Cunkuan Yu Jian Yanzhong: Luobo Si Qian Yi Wan Wei Neng Shouhui). 28 August. Page 4.
- -, 2000. "Four Companies Acquire 1.3 Trillion Unhealthy Bank Assets" (Si Gongsi Jieshou Wan San Yi Yinhang Buliang Zichan). 28 July. Page 13.
- -, 2000. "569 State-owned Enterprises Enter Debt-Equity Swap" (569 Hu Guoqi Dacheng Zhaizhuangu). 29 August. Page 12.
- -, 2000. "Overstaffing in State-owned Enterprises Still One Third" (Guoqi Chenyuan Reng Zhan San Fenzhi Yi). 30 August. Page 9.

- Xue, Z.J., "Several Suggestions for Carrying Out the Work on Laying off and Reemploying Redundant Workers." *Remin Ribao* (People's Daily), 4 May 1998. Page 1.
- Zheng, H., et al., 1998. Guoyou Qiye Kuisun Yanjiu (A Study of Loss-Making by SOEs). Beijing: Economic Management Press.
- Zhou, T.Y., 1995. "Yinhang Daizhang He Huaizhang Shi Daozhi Shehui Dongdang de Yinhuan." (Loan Losses and Bad Accounts: Hidden Dangers to Social Stability). *Jinrong Cankao* (Financial References) 1(January):1-3.
- Zhu, T., 1999. "China's Corporatization Drive: An Evaluation and Policy Implications." Contemporary Economic Policy 17:530-9.