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Financial reform and transition in China: a study of the evolution of banks in rural China

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Abstract

Purpose – This paper seeks to understand the evolution of financial intermediation in the course of China's economic transition.
Design/methodology/approach – The research is based on a unique data set collected by the authors and other collaborators from a 1998 survey of financial institutions, enterprises, and government officials in southern China.
Findings – Based on an empirical investigation of rural financial reforms, it is argued that China's two-decade long financial reform was a gradual process that accommodates reforms in other sectors and responds to changing policy goals and the economic and institutional environment in which financial institutions operate. Although using standard measures of financial system performance may cast doubt on the effectiveness of China's rural banking system, when one understands the different roles that it has been asked to play, it can be argued that it has not operated so poorly.
Research limitations/implications – In conclusion, it is found that China's rural economic environment is still changing. If the system continues to change in the future, responding to pressures in the economy, further financial reforms will almost certainly emerge in the coming years.
Practical implications – These findings, although primarily from the 1980s and 1990s, are still helpful in understanding the reform process that is currently ongoing.
Social implications – This paper will help readers make sense of agricultural financial reforms and will allow for more discourse over what has been accomplished and what still is needed.
Originality/value – This is the first manuscript to comprehensively put China's rural financial reforms into the context of modern economic analysis, explaining why China's government proceeded as they did and why the reforms have unfolded in such a stop and start manner.
Keywords Banking, Transition management, China
Paper type Research paper

1. Introduction

Economists have long noted the importance of reforms in the financial sector as a tool of creating changes in the rest of the economy that is needed to generate successful development (McKinnon, 1993; Haggard and Chung, 1995). One of the main criticisms of China's economic reform has been that the financial reforms have not succeeded in creating a modern, efficient financial sector. For example, some claim that the financial reforms in China lag far behind the market-based liberalization programs in other sectors (Tam, 1995). Others argue that inefficient and unreformed banks have slowed down the critical changes needed in the nation's anachronistic state-owned enterprise sector (Lardy, 1998)[1]. While much of the literature on the financial reforms is analytically sound and uses both bona fide field observations and the expert opinion of long-term observers of China's economy, one of the implicit assumptions on which much of the previous work is based is that the major goal of reformers has been to create a modern

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financial system. Given the record of banks over the past 20 years and the evolution of its organizational structure during this time, if leaders had been striving first and foremost for the creation of a modern financial system, there is much prima facie evidence that the execution of China's financial sector reform has indeed failed.

It is our argument in this paper, however, that if the criteria against which financial policy for the past several decades are measured are more in line with the actual objectives of policy makers, then one may have to reassess the performance of the financial sector. In fact, we believe that the financial sector has largely succeeded in meeting the demands that leaders have made on it since the late 1970s. During different periods in recent history, e.g. the late Socialist period or the early reform period, the state never intended its policy to ultimately end up building a modern financial sector. Instead, reformers during different time periods have demanded that banks perform other duties (Lardy, 1998). Most of the reforms have actually been more spontaneous in the spirit of the reforms in the rest of the economy as described by McMillan and Naughton (1992). Reacting to demands by managers, bureaucrats, officials, and industrialists (while at the same time being pushed forward or held back by other economic and institutional constraints, e.g. the lack of collateral or poor information), financial policy since the 1970s has in a large part been created in response to the demand for financial and fiscal services that up to that point had been absent or incomplete. After examining the policy goals during the reform period, it is actually possible to argue that it is not until recently that there has been a systematic, long-term strategy for reaching the goal of setting up a modern financial system.

Thought about in this way, the record of the rural financial reforms would have to be reinterpreted. Instead of measuring success against some standard developed for assessing financial health in a fully developed, market economy (e.g. the balance of a portfolio or the number of times a loan has been refinanced), a different metric would need to be developed for each stage of reform. The assessment would have to vary according to the task that the financial system was being asked to perform. It should be noted, also, that in such a model of reform, the constant state of flux of the economic environment would make it hard to expect that the financial system would be entirely efficient.

The main goal of this paper is to understand and assess the effectiveness of one of the most important sets of reforms that have contributed importantly to the development of China's rural economy during the reform era, namely, the rural financial reforms. To meet this goal, we have four specific objectives. First, we provide a review of the evolution of China's rural financial sector in the past two decades. Second, we seek to demonstrate the role that the financial reforms have played in creating or contributing to the development of the rural economy during the same time. Third, we want to identify the economic forces – both those arising from explicit policy decisions and those arising from unanticipated sources – that have shaped the nature of the financial system during different reform stages. Finally, we want to make an assessment of how well the system has performed, using a wide number of measures. In short, we want to document the steps that define the rural financial reforms, understand how they affected economic transition, explain how changes in the economy and the rest of China's society led to the financial reforms themselves, and assess how effective the financial transition has been in creating a modern financial system.

The key to understanding our results and the relative optimism that we show in analyzing the rural financial system is to have a clear understanding of the criteria against which we should evaluate performance. Moreover, because of structural changes (politically and economically), these criteria change over time. For example,

leaders during the Socialist period used banks for providing liquidity for all economic activities. During the early reform period, we argue that the main task of the banking system is to fund township and village enterprises (TVEs) (which are collateral scarce). Finally, during the late reform period, we believe that officials finally committed themselves to creating a commercially viable financial sector. Hence, if we use measure of performance that show banks are performing well in a commercial financial system, and we find that performance is poor, such measures will be useful for assessing the performance of the banking sector in the late reform era, but not so for assessing performance during the Socialist period or the early reform period.

Beyond our assessment of China's rural financial reforms, this paper also can be thought of as a case study of induced policy and institutional innovation. During the two decades of reform in China, we will show how policy shifts in the rural financial system have induced changes in the rest of economy. However, in at least two different cycles, the very economic changes that were triggered by the institutional reforms in the financial sector created a set of pressures that led to a decline in the effectiveness of the system itself, and a search for a new set of institutions to fill its place. Once in place, however, the new system caused a new round of subsequent changes, and started another cycle of change. This paper may also help researchers and other observers anticipate future changes in other sectors of China's rural economy, since our analysis will show that it is likely that a third round of changes in China's financial system is beginning to unfold.

In trying to sketch out these more general evolutionary forces, we also will contribute to the understanding of a number of other phenomena in the rural economy. For example, we will add to the debate on the factors that have caused the rise and fall of China's TVEs. We also illustrate some of the reasons for the recent wave of privatization that has occurred in the rural industrial sector. Finally, we show why it might not be a contradiction to find individual banks to be trying to reassert central control over branch banks at the very time the national leaders are pushing an agenda of liberalization.

While much of the paper is focused on the time period between the early 1980s and the late 1990s, we believe the paper is still relevant for readers interested in understanding more recent financial reform policies. For example the Agricultural Bank of China (ABC) has been continuing its commercialization reform initiated in early 1990s. In recent years, while officials have been asked to support the policy efforts of the government in developing poor, agriculturally dependent areas, the bank is now in the middle of its first serious effort to reform itself so it can become a stock-listed commercial bank. In other words, this is the first time that officials are really trying to forge a modern financial institution out of the rural financial system. On the other hand, the rural credit cooperative (RCC) reforms are continuing to reform, although not necessarily with the primary goal of becoming a modern financial institution. In fact, since the mid-1990s, the reforms have gone through several stages. First (between 1996 and 2002), financial sector leaders tried to recast RCCs as true financial cooperatives finance nature in 1996-2002. Most observers, however, counted this effort as a failure. Since the early 2000s, other institutional forms have been tried – often different forms in different parts of the country. As before, however, one of the main roles of RCCs is to support local development and not necessarily become a bank in terms of the way one would look in the modern financial institutions. From this, then, it can be seen that the start and stop reform process that will be discussed in this paper is relevant to understanding the forces that are operating today (Zhang and Zhao, 2009; Turvey and Kong, 2008).

To meet our objectives, the plan of the rest of the paper is as follows. Section 2 discusses the data. Section 3 briefly documents China's pre-reform financial system.

Sections 4 explain how joint liability lending has been a substitute of effective collateral in the first stage of financial reform and investigate the reasons for its collapse. The next two substantative sections follow the course of financial transition during the 1990s and briefly explore the factors that have led to the tendency of banks in recent years to move towards financial centralization and will continue to push reforms in the future. Section 7 concludes.

2. Data

The data used in this paper were collected during a series of field surveys conducted by authors and our collaborators in the summer of 1998. Most of the information was gathered based on face-to-face interviews with bank managers, firm managers, and government leaders at the county and township level. The questionnaires seek to characterize and understand the roles of the key players, and their relationships with each other. Historical data were obtained from the accounting records of banks, firms, and township accountants. Most of the questions were asked for two years, 1994 and 1997. We decided to focus on 1994 as the initial year of the recall part of our survey since we believe that the fundamental changes in the financial sector started from that year, the year when officials acknowledged their new efforts to reform the financial sector. Our survey also centers on the township level, the lowest government administrative hierarchy and home to one of the most dynamic sectors of the economy since China's economic reform were launched in 1978 (Nyberg and Rozelle, 1999).

Our survey effort included a number of different survey instruments. The bank questionnaire, the key instrument for this study, was administered to local branch managers and was aimed at understanding two of the main financial institutions in rural China –ABCs and RCCs. ABCs and RCCs accounted for 78 percent of bank loans within townships in 1997. The survey covers a broad array of aspects of bank decision-making and the environment of its county offices and local branches. There are blocks of questions related to governance structures, incentive schemes, loan management activities, and loan performance. Information about factors that may influence the behavior of financial institutions (e.g. the ownership structure of borrowing firms and banking competition), the relationship between banks and borrowers, and the relationship between banks and local government leaders were also gathered. Separate questionnaires were designed to survey county branch managers as well as selected firm managers that were among main borrowers of the rural financial institutions. Since township governments have been actively involved in lending during the reform period, a third part of the questionnaire was focused on local leaders[2].

The survey covers 15 randomly selected counties in Jiangsu and Zhejiang provinces[3]. Within each of the sample counties, we randomly chose four townships and within each township, we interviewed the local leader, three firm managers, and the bank managers of both the ABC and the RCC branch. In total, our fieldwork team visited 59 townships, 57 ABC local branches, and 58 RCCs. At the county level, we surveyed 15 officials from the country office of the ABC and 15 leaders of the county RCC association.

3. The pre-reform period: China's monobank system

The formal rural financial system can trace its origins back to the 1950s when leaders created it to meet the credit needs of the rural sector. In Mao's China that came to fruition in the 1950s and lasted until his death in 1976, the state took charge of the allocation of all goods and services, including the allocation of credit. Although it was called the

People's Bank of China (PBC), the role of a bank in the nation's centrally planned economy primarily was to act as a cashier and accounting agency. The PBC during many of the years of the 1950s, 1960s, and 1970s also assumed day-to-day managerial control over the specialized divisions of the PBC, for example, the agricultural division.

The PBC had developed a nationwide credit allocation and deposit-taking network in rural areas, which, in fact, consisted of two separate sets of interlocked institutions. The agricultural division of the PBC controlled the most complete network. In the 1950s leaders also set up an independent (at least initially) organization to serve the credit needs of farm producers in rural areas, the RCCs. But similar to the experience of the ABC branches, the move to central planning undermined the formation of true producer cooperatives. In the late 1950s, PBC officials took charge of the RCCs and they became the local outlet of the national credit and deposit-taking plan. Although China still had two lending agencies in rural areas, there was no competition, and like their counterparts in the rest of the economy, rural banks mainly functioned as cashiers and accountants. Under planning, China's industrial system did not require the services of a commercially oriented lending and deposit taking financial institution (Lin *et al.*, 1995).

Although not resembling a modern commercial banking system, there is little evidence that the economy stalled because it did not have an efficient set of financial institutions. In most accounts of the performance of the economy during the 1960s and 1970s, there are few complaints of financial bottlenecks (Prybyla, 1981). Many officials during the late 1970s believed that the financial system, in general, and the rural financial system, in particular, did its job well in supporting China's central plan. Liquidity was rarely a problem for activities endorsed by the plan and deposits were safe. Although we know of no systematic study of bank performance, it is almost certain that if one were to use a standard measure of a modern financial system's performance – e.g. the degree of financial intermediation or the portfolio's rate of return – the financial sector would almost certainly receive a failing grade. But, using conventional measures is not fair. Most simply, China did not require the service of commercially oriented lending and deposit-taking financial institutions. If the financial system is assessed on the basis of whether it performed as central planners desired, the system would have received higher marks[4].

4. Rural financial reform in phase I: joint liability lending and TVE financing

In this section, our objective is to examine the original plan for reforming China's financial system at the outset of China's overall economic liberalization. We also identify the factors that helped formulate the rise of the system and evaluate the success of the system. The ultimate goal of this section is to demonstrate that although the banking sector did not become commercially viable in the conventional sense, a financial system emerged that helped the rural economy succeed beyond anyone's expectations and was appropriate for the economic and political environment that characterized the early transition period. This is not to say there were no weaknesses in the way banks conducted business. In fact, the fragile nature of the system becomes apparent as soon as several of the factors that were instrumental in its initial emergence change.

4.1 The emerging rural sector

In the late 1970s, China's government launched its economic reforms in an effort to increase the efficiency of its economy and speed up economic growth (Perkins, 1988). Starting in the agricultural sector, decollectivization and higher prices gave farmers

better incentives and marketing reforms allowed commodity traders to move their goods to ever distant markets. Shortly thereafter reformers implemented a parallel set of reforms in the rural industrial sector, allowing economic agents to produce an entire line of products that were formerly tightly controlled. Since consumers in China's growing economy demanded many of the goods and services, the new firms that filled the niches of supply that were previously ignored by state-owned enterprises immediately began to earn high profits. The response of both the agricultural and rural industrial sectors far surpassed the expectation of leaders and outside observers. The rise of agricultural output and wages increased rural income per capita by 73.2 percent in the early period of reform (between 1978 and 1984)[5]. The growth in the output of the rural industrial sector accounted for most of the nation's miracle growth in the 1980s. During this period, the output value of rural industrial sector shot up by 1,188.1 percent, while the gross industrial output value of China grew by 227.8 percent. The share of output value of the rural industrial sector over the whole industrial sector in China jumped up from 13 percent in 1980 to 40 percent in 1990[6].

One of the main features that characterized China's growth during the early reforms was that the primary source of the economic growth was not from the output of private enterprises, but rather from firms that were begun by local leaders and organized under the rubric of collectively run TVEs[7]. In the late 1980s, TVEs produced over two-thirds of rural industrial output. Run by the leaders themselves or by managers that were hired and supervised by the leaders, collective enterprises became a regular feature of many townships, getting most of their initial investment from local governments and returning much of their profits to local coffers.

Although the performance of TVEs initially perplexed economists (Weitzman and Xu, 1994), an internally consistent explanation emerges when it is recognized that the leadership of local communities had both the incentive and means to run highly profitable manufacturing operations in the economic and political environment that characterized rural China during the 1980s (Walder, 1995; Jin and Qian, 1998). If community property rights were secure (as they were shown to be for leaders – Che and Qian, 1998), township leaders had an incentive to produce revenues by expanding output and striving for higher profits so they could increase fiscal expenditures, provide jobs for local residents, and make investments in the local infrastructure that could become the basis of further local economic growth (Murakami *et al.*, 1994; Oi, 1999; Whiting, 1996). They also used their political, social, and personal connections to provide inputs, such as labor, land, and credit, for the firms that otherwise were not available (Che and Qian, 1998; Meng, 1990; Naughton, 1995). Success in promoting growth led to higher status, promotion, and increased personal wealth for leaders (Rozelle and Boisvert, 1994).

In many cases, however, leaders sought help in running their businesses, especially as the size and number of enterprises grew rapidly in the 1980s, and by the late 1980s, had already ceded many important income and control rights to professional enterprise managers. Leaders had the alternative of being able to hire professional managers to supervise and run the day-to-day operations of the factories. In fact, managers in TVEs filled a number of different roles, and had varying degrees of responsibilities that changed from place to place and from time to time. Recent work actually discovered that most managers (up to 75 percent by the late 1980s) had become much quite autonomous from the day-to-day interventions of township leaders (though, of course, not completely independent – Chen and Rozelle, 1999; Hsiao *et al.*, 1998; Kung and Liu, 1997).

As they grew, TVEs began to apply for bank loans (Zhou *et al.*, 1987; Findlay *et al.*, 2004)[8]. If the local or county branches of ABCs or RCCs had excess funds after its

policy duties were accomplished, the reforms urged banks to extend loans for commercial purposes. Loan sizes and terms were often centrally controlled, but interviews clearly show that the nature of lending varied greatly across regions. The volume of loans to TVEs rose by 12 times between 1980 and 1994, a rise that exceeded that of the rest of the economy. During this time, the share of the total outstanding loans provided by the ABCs and RCCs to TVEs increased from 13.8 to 33.2 percent. The shares of rural credit that went to TVEs in rural areas were much higher in our sampling provinces (Table I).

4.2 Rural financial reform in the early period of reform

As China's rural economy was undergoing the first of its wrenching economic reforms, leaders knew that the rural financial system was in need of restructuring. As in the rest of the economy, these changes were thought to be done in a gradual way (Lau *et al.*, 2000). One of the main financial issues that faced reformers in the newly reformed economic climate was how to provide liquidity and investment capital to the rural industrial sector that was producing primarily out of the plan. Moreover, the weakening fiscal system meant that officials would have to rely on financial institutions to fund a number of policy tasks (McKinnon, 1993). In fact, as we argue in this section, under these circumstances, China did not really need a market-based

	Total rural deposits (billion 1997 yuan)	Total rural lending (billion 1997 yuan)	TVE outstanding loans (billion 1997 yuan)	TVE outstanding loans/total rural lending[a] (%)		
				China	Jiangsu	Zhejiang
1980	167.8	234.8	32.5	13.8	20.8	31.0
1981	192.2	257.3	38.4	14.9	24.8	30.9
1982	227.5	283.1	44.6	15.8	27.6	30.1
1983	267.5	326.9	53.0	16.2	29.0	31.3
1984	375.8	657.0	107.9	16.4	27.6	32.8
1985	415.6	692.8	118.8	17.2	15.6	34.2
1986	531.7	798.7	169.7	21.3	36.6	42.5
1987	638.1	901.2	202.7	22.5	37.9	42.6
1988	633.0	871.1	204.0	23.4	39.8	43.3
1989	654.1	866.2	196.5	22.7	38.1	42.6
1990	830.1	1,051.4	231.6	22.0	n.a.	n.a.
1991	1,019.3	1,252.9	278.2	22.2	n.a.	n.a.
1992	1,227.7	1,464.5	348.3	23.8	n.a.	n.a.
1993	1,422.4	1,331.2	424.3	31.9	n.a.	n.a.
1994	1,415.2	1,262.5	419.2	33.2	n.a.	n.a.
1995	1,571.2	1,306.6	n.a.	n.a.	n.a.	n.a.
1996	n.a.	893.7	444.8	49.8	n.a.	n.a.
1997	n.a.	995.3	409.0	41.1	n.a.	n.a.

Notes: [a]Loans only include those from two traditional rural financial institutions – the ABCs and RCCs. According to our survey, the market share in lending of these two financial institutions were 77 percent in 1997
Sources: *China Statistical Yearbook* (1981-1999), *Statistical Yearbook of Rural Finance and Banking of China* (1981-1999), *Jiangsu Statistical Year Book* (1981-1999), *Zhejiang Statistical Yearbook* (1981-1999), *China Yearbook of Township and Village Enterprises* (1990-1998)

Table I.
TVE financing from the ABCs and RCCs

financial system. The financial reforms that were implemented, in fact, provided a number of important services in this period.

Organizational reforms: the establishment of the specialized bank system. The first task of financial reformers was to dismantle the PBC, a huge, unwieldy institution that had played a key role in managing funds during the planning era. Its services were not needed in the rural economy's reform environment that was increasingly being dominated by non-state firms.

One of the first steps of financial reforms in the early 1980s was to give the core of the PBC's decision-making bureaucracy duties as the central bank (Shang, 1995). At the same time, four specialized banks, based on the scope of economic activity, were created, the Bank of China, the China Construction Bank, the Industrial and Commercial Bank of China, and the ABC[9]. For the first time in decades, financial institutions were at least institutionally independent from government.

The organizational reforms stipulated that the ABCs would provide all of the main financial services to the rural economy from its headquarters in Beijing through offices in each province, county, and township[10]. The major duty of the ABCs was to satisfy the credit needs of farm producers and rural firms and finance the state's supply of farm inputs and procurement of agricultural products. The vast network of the ABC's banking institutions was envisioned to be the only financial network that would manage loans in the rural sector. As in 1950s, other specialized banks would not be allowed to compete with the ABCs in rural areas.

Each ABC county office also assumed the responsibility of supervising the RCCs rural network of outlets, although the relationship between ABCs and RCCs varied over time and among provinces. For example, in 1979, RCCs branches were moved from the PBC to the ABC. In some areas, RCCs merged with ABC local branches. In other areas, RCC outlets in townships remained independent of the ABC local branches but were run by the same county branch leaders. In 1983, a new initiative attempted to formalize the relationship between the RCCs and the ABC local branches, giving RCCs relatively more independence by establishing an RCC association at the county level. However, the independence of RCCs has always been limited since RCC county associations turned out to be *de facto* divisions of the ABC county office. In many places, ABC local branches and RCCs shared the same office with the same branch manager. This murky and sometimes uneasy relationship between ABCs and RCCs almost certainly dampened competition in rural areas.

Managerial reforms: profit incentives and control rights liberalization. Financial reform also created a set of measures to provide greater incentives for and to shift more control over financial activities to bankers (Shang, 1995). Each bank was made an independent accounting unit, separating its income statements and other accounts from the government budget. Profit maximization was institutionalized as one of the goals of the rural banks. Reformers also took the first, albeit limited, step to linking bank performance to the salaries of bank managers and other employees. As early as 1983, some banks would reward their managers monetarily for meeting certain performance targets. Through the 1980s and early 1990s, the increasing importance of profit-related targets (such as repayment rates and net revenues) became clear.

Accompanying the increased incentives, the desire to allow ABCs to allocate credit efficiently induced PBC officials to grant more control rights to ABC managers. The greatest debates (because arguably they are about the most important control rights) were over the amount of loanable funds and destination of loans beyond the credit plan. In the pre-reform era, the rural financial plan, set by the banking division of the

Ministry of Finance, and approved by the central government, determined both the amount of loanable funds and the projects to finance. In the early 1980s, however, the newly independent PBC assumed control over the amount of funds that the ABC banking system could borrow from the government financial system. Bank managers were not supposed to have any discretion over these funds, which were basically earmarked loans to support specific policies. Officials in the specialized banking system also had deposit target that they were suppose to meet, and control over the planned deposits was heavily influenced by the PBC. Beyond that, however, the ABCs – as all of the specialized banks – were allowed to lend out as much as it wanted as long as the loans were supported by the extra-plan deposits it was generating.

Hence, as the financial system was emerging, it faced a unique and complicated set of institutions that undoubtedly would affect the nature of the way it operated and its success. Its clientele, rural enterprises, on average were quite profitable. The local leadership was actively involved in promoting rural industrialization. The collective ownership of many of the firms and the tight knit nature of local economies made it so leaders knew a lot about the activities of collectively firms, and though in some areas they did not run businesses on a day to day basis, still exercised significant indirect control and coordination. Within such an environment, demand for loans was high. The absence of collateral and legal framework made conventional means of securing loans to firms difficult. Banks themselves also faced a set of contradictory pressures. There was scope and encouragement to earn profits and foster an efficient set of borrowing firms. But, banks were burdened with many policy duties that certainly must have distracted their attention. In addition, the lack of competition – since each of the specialized banks were given their own sectors to operate in – gave banks considerable monopoly power in their regional economies. In such an environment, if China's banking sector wanted to effectively finance rural development, it would have to find an innovative way to do so.

4.3 Joint liability lending

Despite the rapid growth during the 1980s, reformed bankers faced three challenges in trying to profitably make loans in the rural economy. First, the firms that wanted loans in rural China were highly risky. Although earnings of firms in most developing countries are subject to fluctuation (Fafchamps, 2000), the risks faced by China's rural collective enterprises arguably were even higher. Thin, spatially fragmented markets contributed to great price volatility (Rozelle *et al.*, 2000). TVE input markets, including those for labor, capital, energy, land, and management, often were unable to reliably delivery low-cost supplies. Finally, there was still an ideological stigma that still existed in some areas that made firms, in some cases even the more successful ones, susceptible to unpredictable government predation. After almost three decades of Socialism, few rules or regulation governed economic activity and trade.

Second, most firms in rural China were relatively small and undiversified. In the mid-1980s (1985), there were already 1.8 million TVEs in China. The average firm hired only 23.4 employees (MOA, 2000). By 1990, the average size of employment and assets holdings of rural firms had changed little. On average, each TVE controlled assets of less than 0.1 million yuan. Moreover, most firms were operating in only one market. Consequently, the firm's low level of assets and its undiversified portfolio even further increased the risk that lenders would have to bear. It also made it difficult for banks to gather information for designing loan package and monitoring ongoing lending activities. Because of the high cost of lending (on a per yuan loan basis), banks either had to rely on the word of the borrower about the quality of a new or existing project

(which in some cases was not reliable because even China's firms had an incentive to manipulate information to its own advantage – that is, there was a moral hazard problem), or not loan at all.

Finally, and most poignantly, rural China offered few ways for banks to secure their loans to rural firms. In developed economies, banks can bear the risk associated with lending primarily by the use of collateral. A banking survey in the USA illustrates that 92 percent of small business debt to financial institutions is secured with collateral (Berger and Udell, 1998). In China, collateral was not even explicitly required in the 1980s or early 1990s. Although ABC regulations begin to push collateral as the preferred way to secure loans in 1985, according to our survey, 85 percent of financial managers reported that collateral was not required before 1993.

Faced with this rather bleak environment, we suggest that the bank loans to TVEs in the 1980s and early 1990s exhibited the key feature of joint liability lending. Under joint liability, members of a group are held mutually responsible for repaying individual loans made to group members. In the same way as microfinance institutions worldwide have been able to extend loan to poor, assetless farmers, bank lending in China during the late 1980s and early 1990s can be thought of as joint liability lending where instead of an NGO, the lender is the state bank, and where instead of poor farmers, loans are made to and jointly secured by the TVEs in a locality.

Although there is no one model for how a township financed its TVEs, in a stylized manner we believe that the process can be succinctly described. Working with a pool of firm managers that belong to the local state, a firm manager, which would have been denied access to a loan on his own on the basis of having too high of risk, not a big enough demand, or having no collateral, could get a loan jointly based on the following mechanism:

- A firm manager (either an individual or a cadre) with a project decides whether or not to join a group of others to share the liability of repaying loans.
- A firm manager becomes a group member if he applies and the leadership approves the entrance.
- A firm manager applies for a loan from a bank.
- The bank grants a loan if the firm manager is backed with joint liability and all other group members have repaid loans on time, and rejects the application otherwise.
- The firm manager receiving a loan decides whether or not to repay the loan when it is due.
- Other firm managers in the group decide whether or not to repay the loan for a firm manager who defaults.
- The lending game continues as long as the group as a whole does not default and ends otherwise.

While such an institution may seem unwieldy and is not found in the industrial sectors other developing countries, it actually overcomes a number of the problems that China's rural banks were facing in the 1980s. First, joint liability lending diversifies firm-specific risks for firms operating in a single product line. Second, it allows banks to loan out more money, reducing average transaction costs, and also helps overcome the information problems that banks face when trying to loan to small firms. Finally, such an institution allows lending even when collateral or the ability to seize collateral

is absent. In short, it solves some of the main problems that banks faced when trying to loan to rural firms in the economic environment that prevailed in the 1980s.

However, for joint liability lending to exist, Park and Shen (2008) show that it can only exist when certain conditions prevail. First, there need to be a critical mass of profitable firms. For a firm to benefit from joining with others to form a joint liability consortium, each firm should have an expectation that, on average, the benefits of gaining access to loans will exceed the potential loss that it would have to cover if the group was forced to assume the liability from the defaulting firm. Therefore, the more profitable firms that there are, the more likely it will be that joint liability lending would be successful. As seen above, most firms in rural China in the 1980s, were profitable; in the 1980s, most firms in our sample were too (Table II).

Second, local government leaders need to be involved since there must be a party that can both collect information at a relatively low cost and is in a position to punish those who do not live up to their promised obligations. In other words, although it is possible that firms themselves could form a joint liability lending cooperative without local government participation, the government's role as a firm owner and as an entity that was in a position to hand out perks and punishments to deter defaults, makes it even more likely that joint liability lending could work.

Third, for such a system to function effectively, banks need to have monopoly power or at least operate in an economy with little competition. This is needed so that there is no or only a limited scope to strategic action by firms of the joint liability coalition.

	Total profits/total revenue (%)			Total profits/fixed capital (%)		
	China	Jiangsu	Zhejiang	China	Jiangsu	Zhejiang
1980	19.9	n.a.	n.a.	36.3	n.a.	n.a.
1981	16.8	n.a.	n.a.	30.0	n.a.	n.a.
1982	15.0	n.a.	n.a.	26.9	45.0	n.a.
1983	12.7	n.a.	n.a.	24.8	47.8	n.a.
1984	10.1	n.a.	n.a.	22.4	n.a.	n.a.
1985	9.4	n.a.	9.6	22.8	47.7	33.5
1986	7.2	n.a.	5.7	17.0	30.3	17.0
1987	6.4	n.a.	3.8	15.3	27.3	11.5
1988	6.1	n.a.	3.4	16.4	29.3	11.6
1989	5.0	n.a.	1.9	12.5	20.8	5.9
1990	4.5	n.a.	1.6	10.6	n.a.	4.7
1991	4.3	n.a.	1.9	10.8	n.a.	5.8
1992	4.8	n.a.	n.a.	13.8	n.a.	n.a.
1993	6.3	3.4	4.4	21.2	13.4	15.7
1994	5.4	2.9	3.6	20.5	11.7	12.8
1995	5.5	3.2	3.0	19.5	11.9	10.7
1996	5.6	3.0	3.6	31.2	23.1	23.3
1997	6.5	3.7	5.2	19.6	11.5	13.7

Notes: [a]Bank loans only include those from two traditional rural financial institutions – the ABCs and RCCs. According to our survey, the market share in lending of these two financial institutions were 77 percent in 1997

Sources: *China Statistical Yearbook* (1981-1999), *Statistical Yearbook of Rural Financial and Banking of China* (1981-1999), *Jiangsu Statistical Year Book* (1981-1999), *Zhejiang Statistical Yearbook* (1981-1999), *China Yearbook of Township and Village Enterprises* (1990-1998)

Table II.
TVE profitability

Since leaders value the growth that is financed by banks, there must be some way that banks can punish leaders should they decide to allow firms in their joint liability coalition to default in part or in full. When there is monopoly banking, of course, such a threat is credible, because should a firm decide not to repay the loans, there would not be a source of financing. This situation puts pressure on both leaders and firm managers to choose good projects (or only allow good firms to borrow) and pay back loans once they do. And, of course, since the market share for lending by the two traditional rural financial institutions in 1994 was more than 80 percent (and these two institutions frequently made decision together), this condition is present also. In short, when there are profitable firms, and when local governments participate heavily in industrial production, and when there is monopoly banking, it is possible to successfully forming a joint liability lending arrangement.

Our data and a close reading of the literature clearly demonstrates that the conditions not only existed for joint lending liability consortia, but that in practice they accounted for much of the lending in rural China in the late 1980s and early 1990s. For example, Oi (1999) writes that "Township and village officials redistributed income and debt among sectors and enterprises within their corporate community" and "the collective – that is, the township or village as a collective entity – bore the risks" (p. 70). She adds, "Interviewees from a number of localities stated that when a collective enterprise failed and defaulted on its loans, the debt was paid off by the remaining solvent collective enterprises. These firms paid, however, grudgingly, because their own future depended on the goodwill of the local authorities who controlled credit and investment opportunities." (p. 71). Byrd and Lin (1990) also describe the community government's ability to "spread risk across its enterprises to increase the flexibility and ability to absorb losses of any one firm." Similar accounts are offered by Wu (1993), Whiting (2000), and interviewed bank managers in our study areas in Jiangsu and Zhejiang.

In many cases local government agencies such as township economic commissions or public finance bureaus acted as official loan guarantors (Zhou *et al.*, 1987; Oi, 1999; Whiting, 2000). Our survey finds that in 1994 two-thirds of local governments acted as guarantors for at least some TVE loans, and 42 percent of loans on average. For new loans granted in 1997 and secured by guarantors, 41.7 percent of ABC loans and 53.1 percent of RCC loans were secured by local governments, the rest by other township-owned enterprises. Our firm survey reveals that for nearly 100 percent of borrowing firms whose loans are secured by guarantors in 1994 and 1997, the guarantor was either the township government or a township-run enterprise. Private firms generally were not qualified guarantors.

The survey also finds that township leaders played an active role in loan applications and in ensuring repayment of loans. Even as late as 1994, about 70 percent of township leaders organized loan application meetings to bring lenders and borrowers together. On average, each township government organized 2.6 such meetings during the year. Leaders also regularly met with firm managers regarding repayment (on average, more than once a year). Finally, more than half of bank managers reported that in 1990 government assistance in repaying loans after a collective firm shut down was likely or possible; the percentage was still above 40 percent in 1994.

4.4 Evidence of the success of joint liability lending

In many dimensions, for the rural economy, in general, and for the rural financial sector, in particular, joint liability initially was successful. Following Deng's southern tour in 1992, southern China witnessed an explosion of economic growth. GDP rose in

real terms by more than 10 percent per year. Much of this growth was driven by the TVE sector. Among rural gross output value, the share of TVE gross output value increased from 57 percent in 1990 to 75 percent in 1994. At the same time, TVE industrial output as a share of total industrial output rose from 25.3 percent to 46.1 percent (SSB, 2000; MOA, 2000). Since such growth could not have occurred without sufficient financing, the rural financial sector can be given at least part of the credit for China's economic performance in the early 1990s. Moreover, joint liability lending also might be an additional explanation of why rural industries in China were able to succeed when they had never done so in other developing countries.

Throughout the late 1980s and early 1990s, bank performance measures showed that the rural financial reforms and the rise of joint liability lending benefited the banking sector also. For example, deposits in ABCs and RCCs rose from 168 billion yuan to 1415 billion yuan in real terms, a rise of more than seven times between 1980 and 1994 (Table II). At the same time, loans provided by ABCs and RCCs to commercial agricultural, industrial, and commercial enterprises rose from 235 billion yuan to 1263 billion yuan, a rise of more than 400 percent.

The record of lending to TVEs by rural financial institutions was even more impressive. From 1980 to 1994, bank lending to TVEs grew more than 39 times in nominal terms and over 12 times in real terms (ABC, 1981-1999). Over this period, the share of TVE lending in total rural lending (lending by ABC branches and RCCs) grew from 13.8 percent in 1980 to 33.2 percent in 1994.

The performance of the portfolio of loans of rural financial institutions during the early 1990s also was not bad. During a survey carried out by the authors in 2005 (in 73 counties in six provinces) it was found that there were few non-performing loans in the sample banks.

But despite the great increase in the activities of banks, we do not want to imply that banks had already been transformed into commercial entities that acted and performed like those found in a modern banking system. In fact, it is our argument that a close examination of the record shows that the success of banks was more because they evolved into an institutional form that overcame some of the structural weaknesses of China's transitional rural economy (e.g. an economy with few collateralizable assets) and focused their activities in a clever way on the dominant type of enterprise of the era, collectives firms.

In fact, despite the best intentions of bank reformers, managers of rural banks did not run their financial institutions completely on the basis of commercial principles and were still spending a lot of their time and resources on policy activities. Although banks were supposed to be pursuing profits (and, in fact, were), incentives for local bankers were still not complete in the early 1990s. For example, our data show that in the early 1990s, 41.4 percent of the managers admitted that local government policy was more important than their own profitability and 51.7 percent of them said that lending was somewhat influenced by non-commercial factors. Most managers said profits were important, but a lot of their time was spent on running their banks according to the demands and rules promulgated by officials[11].

On the other hand, our data show that once policies were performed, bankers were still concerned with making profits. Unlike what might be expected from a commercial bank, however, most of the loans during the period were extended to collective firms, those enterprises owned and operated by local governments. Unlike many developing countries where small- and medium-scale firms have difficulty obtaining formal bank loans, in China state banks have played a major role in financing collective enterprise

development. Periods of rapid growth in lending corresponded with rapid growth in output and employment in TVEs.

Such a view of banking performance might call into question some of the criticisms that have been levied against the financial sector reforms. Based on provincial level data, Park and Sehrt (2001) found that rural financial intermediation during the early reforms was not responding to fundamental economic signals. While probably true, such an observation might be thought of as a failure of China's rural reformers to establish an effective financial sector. However, if the rural financial system was being asked to fund the development of local enterprises, and loaned to them on the basis of a unique arrangement of joint liability lending, then examining how much funds moved around the regional economy may be unfair. Likewise, financial institutions are sometimes blamed for failing allocate credit efficiently to all sectors of the economy, including the private sector (Lardy, 1998; Liu, 1992). While failing to support a potentially profitable sector may be thought of as inefficient, if the legal and other regulatory institutions did not allow banks to profitably lend to a specific category of firms without an inordinate amount of risk, then perhaps it is understandable why private firms were rationed out of the market in the early period of China's decades-long reform.

5. Financial reform in phase II: the fall of joint liability lending and bank commercialization

If the combination of profitable rural industry, leader involvement in local firms, the ability to sanction individual managers that default purposely, and the absence of banking competition accounted for the rise of joint liability lending, the disappearance of these factors in the mid-1990s contributed to its demise. In this section, we first look at the evolution of the factors that originally had been instrumental in facilitating joint liability lending. We show not only that the changing environment in the mid-1990s led to the fall of joint liability lending, but that it also negatively affected banking system performance and ultimately triggered a new effort to re-reform rural finance.

5.1 The fall of joint liability lending

The fall in the profitability of the TVE sector perhaps more than anything else forced changes upon the banking system. Although TVEs earned high levels of profits in the mid-1980s, the sector's profitability fell gradually thereafter (Naughton, 1995; our data). The ratio of total TVE profits to total revenue declined steadily from 9.4 percent in 1985 to 1.9 percent in 1997[12].

As profits were falling, markets in China were beginning to emerge and with them the ability of leaders to impose sanctions on defaulting firms declined[13]. Whereas in earlier times stagnant labor markets made managers excessively reliant on local leaders for employment, the rise of managerial labor markets meant that managers had more options (Groves *et al.*, 1995). If they found it worthwhile to engage in more strategic behavior (e.g. shirk on their managerial duties or strip a firm of its assets), such actions might lower profits and increase the probability of loan default. In the 1980s, if the manager was relieved of his duty for poor performance, he most likely would have had to accept a reassignment within the township (presumably in a poorer job), a threat that may have reduced strategic behavior. By the mid- to late-1990s, however, a good manager would have had a much higher likelihood of finding a good job outside of the township and thus may have been more tempted to consider acting in his own interest against those of the local firm.

Changes in the way township leaders were assigned to their jobs may also have had an effect by reducing the amount of information that local leaders had about their firms. While originally in the late 1970s and early 1980s most commune/township leaders were from the same locality, our survey found that only 17 percent of government officials were born in the same township in which they were acting as a leader in 1997. Moreover, during the mid-1990s, there was substantial turnover in the leadership of local governments, reflecting the implementation of a system of regular cadre rotation. On average from 1992 to 1998, townships had 2.6 party secretaries and 2.7 mayors. Thus, it appears that township officials exhibited greater mobility than firm managers. This practice may have led to a falling in the quantity and quality of information that township leaders had about firms, a shift that would have served to undermine joint liability lending.

Although the formal shifts in policy to encourage more competition among the specialized banks did not occur until the mid-1990s, banks already had acted on their own to expand operations across sectoral boundaries somewhat earlier. By the early 1990s, other specialized banks had moved into rural county seats and larger townships. Initially, they may have come under the guise of lending to their own sector (e.g. to lend for construction). The newly established banks, however, soon began to accept deposits from and extend loans to rural firms. According to our interviews, although their loan volume was relatively small in the early 1990s, their very presence created a threat of competition. Firm managers and the leaders of their joint liability lending groups began to have an option if they decided they did not want to stay a part of the finance group.

Finally, and perhaps most importantly, although the inability of banks to secure loans with collateral and use the threat of liquidation as an incentive for firms to repay their loans remained pervasive in the mid-1990s, the situation was gradually changing during the 1990s. Our firm survey shows that TVE loans secured by collateral increased from 30.1 percent in 1994 to 45.8 percent in 1997. From 1994 to 1997, the frequency of lawsuits against collective firms tripled as legal remedies gradually began to be institutionalized. Our survey also finds that in 1997, it took about five months to conclude a foreclosure case with costs equal to 4.3 percent of the loan amount. The likelihood of winning lawsuits was 94 percent, and winning lawsuits returned 45 percent of the disputed loan amount on average. Clearly, it was becoming more possible to require firms to secure loans with collateral.

Empirical evidence shows that as the factors that had led to joint liability lending began to disappear, the banking sector's performance deteriorated. Above all, overdue loans began to accumulate in the portfolio of banks. Throughout the 1990s, our respondents told us that repayment rates steadily fell (Table III). For example, only seven percent of county managers perceived a low willingness to repay in 1990 but over one-third did so in 1997. In fact, throughout China in the same way that overdue loans began to accumulate in the portfolio of banks in our sample areas, non-performing loans began to accumulate in banks across the country (Lardy, 1998).

The fall of joint liability system also ended the decades long cooperation between rural financial institutions and local governments. When leaders began to believe that the system of joint liability lending was nearing the end of its usefulness, local governments quickly began to shirk from their obligations. Our data clearly indicate the decline of the government's involvement in lending between 1994 and 1997. For example, the number of meetings hosted by local government leaders to assist TVEs to apply for bank loans on average fell from 2.6 per year in 1994 to 1.6 in 1997. Meetings to coordinate loan repayment dropped from 1.3 per year to 0.6. The managers of ABC county branches

	1990	Percentage 1994	1997
Actual repayment rate (Obs.: 25)[a]			
High	55.1	48.3	48.3
Medium	34.5	31.0	31.1
Low	10.4	20.7	20.6
Rank by year of actual repayment rate (Obs.: 25)[b]			
Highest	60.0	16.0	32.0
Medium	20.0	68.0	20.0
Lowest	20.0	16.0	48.0
Willingness to repay if able to repay (Obs.: 29)[c]			
High	57.2	37.9	41.4
Medium	35.7	41.4	24.2
Low	7.1	20.7	34.4
Rank by year of willing to repay (Obs.: 25)[b]			
Highest	60.0	20.0	36.0
Medium	16.0	60.0	12.0
Lowest	24.0	20.0	52.0

Notes: This table is estimated by managers from ABC county branches and RCC county associations. Local government leaders were asked the same questions and similar results were obtained; [a]"actual repayment rate" is defined as the ratio of loans repaid over total loans due in the year, excluding those bad loans accumulated before the year of question; [b]for comparison, the interviewees were asked to rank both willingness of repaying loans and the actual repayment rate among the years of 1990, 1994 and 1997; [c]"willingness to repay if able to repay" is defined by whether the borrowing firms are willing to repay loans when they are financially capable of doing so. We try to eliminate the effect of declining profitability of borrowing firms on their repayment decisions

Table III.
Loan repayment

and RCC county associations (as well as local government officials) knew that there had been a dramatic change of attitude of the local government leaders towards loan repayment. Once a collective firm was shutdown, in 1990, only about 30 percent of bank managers thought that it was unlikely or very unlikely for local government leaders to coordinate the repayment of the remaining loans. This percentage increased to 72.1 percent by 1994 and to 86.3 percent by 1997. In short, soon after the conditions that had supported joint liability lending began to disappear, joint liability lending, as practiced for more than 10 years, itself ceased to exist in most places. Moreover, since China's gradually modernizing economy began to demand a new set of financial services, it could be that a demand also rose for a new set of reforms.

5.2 A new move towards bank commercialization

After the fall of joint liability lending, China's leadership realized that many of its markets were improving and recognized the importance of improving financial intermediation. Consequently, financial reforms became a top policy priority. The most sweeping changes sought to increase banking competition and provide bank managers with more autonomy and better incentives.

Although China initially reformed its banking system in 1984, there was no plan to make banks and their branches to compete with each other. Policywise, this approach remained unchanged throughout the 1980s and the early 1990s. In the mid-1990s, however, financial reformers made several important changes designed to bolster competition. First, starting in 1994, RCCs became administratively independent from

ABC local branches. RCC officials have now begun to report directly to the PBC in administrative matters. Second, in a move that in fact merely ratified the reality that was occurring in many localities already, officials began to encourage commercial banks to lend across sectors. Watson (2004) and Oi (1999) both document the fundamental shift in the leadership's preference for a competitive banking system[14].

To motivate local bank managers to exercise their role as financial intermediaries, managerial incentives were strengthened starting from the mid-1990s in both the ABC local branches and RCCs. For the first time, profit maximization was stated to be a primary objective of the bank. Higher bank officials used profits and profit-related indicators in their annual evaluations of banking staff and management.

Financial reform also strengthened the incentives of bank employees by raising the share of bonus in total annual income of bank employees, an action that also increased the differences in compensations among bank employees. Our survey reports that the average share of bonus in total income in 1994 was 26.8 percent and increased to 41.9 percent in 1997. The rise in the importance of performance-based bonuses has also led to a rise in the variations of the income of managers across branches. The average income gap of bank employees between the best and worst branches in 1994 was 2393.8 yuan, about 20 percent of the targeted income in the beginning of 1994. By 1997, the gap increased to 7384.6 yuan (in real terms), about 40 percent of the targeted income.

A number of reform measures also attempted to provide bank managers and employees with more operational autonomy. Although production and distribution plans gradually have lost their importance since the mid-1980s, annual national credit plans have continued to be a key determinant of inter-regional fund allocation. When strictly enforced as a "binding" plan, they left little room for bank managers to adjust total lending amounts, either through within-bank transfers or inter-bank lending. After the mid-1990s, however, upper bank officials reduced the status of plans to be that of "guidance" (*zhidaoxing*). Reforms in 1994 also changed the method for determining approved credit volumes of the specialized banks, giving local branch managers more authority over the volume and composition of loans.

In order to allow making the incentives more effective and give bankers more discretion over lending, a bold new initiative in 1994 established a set of policy banks. Removing policy duties allowed officials to better assess banker performance since it was a common practice to blame all bad performing loans on their policy obligations. Officials created the Agricultural Development Bank of China (ADBC), the largest policy bank, by establishing branches in all provinces and giving them primary responsibility over financing grain procurement. Over 90 percent of ADBC loans were for procurement of agricultural commodities. It was hoped that such a separation would prevent diversion of policy loans in the ABCs to more profitable lending activity, on the one hand, and free specialized banks to focus on commercial lending without being burdened by policy responsibilities (diversion in the opposite direction), on the other.

5.3 Changing banking behavior

The fall of joint liability lending ended the decades long cooperation between rural financial institutions and local government leaders. Without government participation, banks have to depend on themselves to carefully screen new projects, closely monitor firm managers, use other methods to secure loans, and liquidate unprofitable projects. The new financial reforms aimed at creating a more commercial banking sector. In this subsection, we discuss how the second phase of the financial reforms changed the incentives faced by bankers and influenced other aspects of their behavior. In

particular, we examine their changing the orientation toward earning profits, the use of collateral, how their preferences towards loans changed, and the shift banks made in their lending portfolios.

The shift in profit orientation clearly changed the attitude that bank managers had towards the importance of cooperating with local leaders. In our survey of the managers in ABC county branches and RCC county associations, we asked the managers to weigh the importance of the factors that might influence their lending decisions: to coordinate with policies enacted by local governments (Table IV) or the bank's own profitability (or repayment rate – Table III). In 1990, 41.4 percent of the managers admitted that cooperating with local governments was more important than their own profitability (the sum of rows 3, 4, and 5 of column 1 in Table IV). During this time, more than 90 percent of bank managers believed it was somewhat important to adopt local government policies in lending decisions. By 1997, however, the situation changed dramatically. Almost none of managers believed cooperating with local governments was important and only 35.5 percent believed local policy played any role in the creation of their portfolios. Accordingly, both bank managers and local government officials felt that government officials were no longer obligated to guarantee for loans even implicitly (Table V).

Table IV.
Government involvement in lending (percentage of sample financial institutions)

	1990	1997
1. Bank profitability was solely important	3.5	55.2
2. Both were important, but bank profitability was more important	51.7	35.5
3. Both were equally important	13.8	3.4
4. Both were important, but government policy was more important	20.7	0
5. Government policy was solely important	6.9	0
6. Others	3.4	6.9

Notes: This table is estimated by managers from ABC county branches and RCC county associations. Local government leaders were asked the same questions and similar results were obtained

Table V.
Likelihood of repaying loans assisting by local government leaders once a TVE shuts down

	Percentage		
	1990	1994	1997
Estimated by county branch managers			
Obs.	29	29	29
Very likely	0	0	0
Likely	6.9	3.4	10.3
Medium	62.1	34.5	3.4
Unlikely	10.3	34.5	17.3
Very unlikely	20.7	27.6	69.0
Estimated by township leaders			
Obs.	44	44	44
Very likely	27.3	9.1	6.7
Likely	15.9	15.9	4.4
Medium	13.6	15.9	13.3
Unlikely	9.1	13.6	6.7
Very unlikely	34.1	45.5	68.9

Note: The question is about the probability for local government leaders to use their fiscal revenue or ask other TVEs to help repay the loans if a TVE bankrupts or shuts down

With improving legal systems and better property rights, banks began to depend more on collateral to secure loans. As seen above, nearly 50 percent of loans used collateral by 1997. When we returned to our field sites in 2000, we found during interviews that collateral had continued to play an increasingly important role in the lending process. In some areas, no new loans are given unless they are fully collaterized.

Together, the fall of joint liability lending and other corresponding changes brought on by the second round of financial reforms led to a sharp shift in the lending preferences of banks in favor of private firms. Whereas in 1994, nearly all bank managers favored lending to collective firms, by 1997 only 14 percent favored collective firms while 58 percent favored private firms.

The fall of joint liability lending also was accompanied by a sharp move to privatization of TVEs. Except for one township, which stated that it had started privatizing TVEs in 1988, all other townships surveyed reported that the privatization of TVEs started some time between late 1993 and 1998. Our data show the rapid shifts toward privatization. Of the 323 township-owned enterprises that were included in our survey townships in 1994, by the end of 1997, 149 of them were privatized[15]. By 2000, one-third of the townships claimed that they privatized all township-owned enterprises. These figures are consistent with the empirical work of Brandt *et al.* (2001) that found that banking reforms played an important role in accelerating China's move to privatize its rural industries.

6. Financial reform in phase III: where does China go from here?

But just when it appeared as if China's rural financial sector was going to successfully become liberalized, policy makers shifted their ground a third time. When the second round of reforms had been completed, in theory, bank branch managers in ABCs and RCCs had better incentives and more authority. Their policy duties were lightened. They had a portfolio that increasingly emphasized private firms and many of the loans were secured with collateralized assets that could be liquidated in the event of default. Unfortunately, banking performance continued to deteriorate after the second round of the rural financial reforms[16]. The decline of bank performance is likely the result of the transition from joint liability lending to collateral-based lending, during which the lack of meaningful guarantees triggered strategic defaults. There are two possible reasons why collateral-based lending could not secure loans previously granted under the arrangement of joint liability lending: First, the market and supporting institutions needed for collateral-based lending were just emerging. High liquidation cost undermined the effectiveness of collateral. Second, those enterprises located in remote rural areas originally financed based on joint liability lending would have never been financed otherwise because of they were undercollateralized. Respondents in our survey identified 1997 as the year in which borrowers were least likely to repay their debt among the years of 1990, 1994 and 1997 (Table III). Actual repayments were also thought to be relatively low that year. Besides the observations we made in the previous section regarding the changing banking behavior, perhaps the most influential change is the financial centralization that began to occur in response to problems that emerged during the second round of financial reforms. This section presents evidence and explanation of recent financial centralization and discusses its impacts and discusses additional changes that may be needed for China to begin to develop a truly competitive financial system.

6.1 Recent trend of financial centralization

Modern theory of financial intermediation suggests that financial intermediaries, such as banks, play an important role in allowing investments to occur when there are

serious information asymmetries that exist between investors and firms. Banks that employ careful screening processes and use new information technologies frequently are better able than individual investors to gather information about the quality of borrowers (Diamond, 1984; James, 1987). Holmstrom and Tirole (1997) further show that the ability of banks to monitor can substitute for collateral in securing loans in an environment where collateral is ineffective and insufficient. As we argued above, the lack of effective collateral is one of the largest obstacles keeping banks from being able to maintain their lending volume. According the theory, then, the absence of sufficient collateral during financial transition should mean that commercialized banks play a larger role since they have an advantage in accessing information about firms.

Although having access to the information that can be provided by local branch manager is advantageous, it frequently can only come at a cost of creating a banking environment in which it is too easy for firms to gain refinancing (which is a form of soft-budget constraint). The problem is twofold. First, if banks can commit to not refinancing a loan *ex ante*, firm with projects that require longer terms of financing (and have more risk attached to them) will not apply. Second, when refinancing is not an option, managers are forced to work hard to avoid liquidation. In other words, banking system that does not refinance will attract a smaller, but higher quality, pool of prospective borrowers. It is shown in Cremer (1995) that banks with less information are more able to commit to credibly implementing a no-refinance policy. In this sense, then, when authority is devolved to the local branch manager and they have access to better information, it serves to undermine their ability to not allow refinancing. With the additional information at the end of the first financing period, banks may be able to convince themselves that another round of financing will likely be profitable (while a centralized bank would not have such information and liquidate the firm). Of course, prospective borrowers and firms that have received loans in the initial period know this and when local banks have more authority, those with lower quality projects would seek loans in the first place (reducing the quality of the bank's pool of lenders) and those that received loans would have less of an incentive to make their project more successful in first loan period since refinancing was always an option. The solution to this problem is, as shown by Dewatripont and Maskin (1995), to take the lending authority out of the hands of bank managers that have better information.

Hence, the decision to provide autonomy to local branch managers is a tradeoff between using the superior information of the local branch manager to find and track better loans, but being subjected to the danger of over-refinancing. In trying to find the balance between these two elements, bank officials need to determine how much autonomy branch managers should have. At one extreme branch managers work with a client, draw up a prospective loan, and then must submit a loan plan to his/her boss at the level above before any further action can be taken, no matter what the loan size. In other words, loan approval is completely centralized. At the other extreme, local bank managers have complete authority to make loans and only submit information about the loan to upper level officials after the fact as part of the bank's periodic accounting and monitoring process. This is, according to our definition, complete financial decentralization (Park and Shen, 2008). In many cases, there is a third option in between the two extremes. In this case, local loan officers can approve loans of a certain size, but must get approval for larger loans. They are said to have limited loan approval authority.

Despite better incentives and the information that comes from providing bank managers with greater levels of autonomy, our data show that lending authorities in China's financial sector have clearly opted for centralization within their own hierarchy. Between 1994 and 1997, among the 29 county branch managers we interviewed, about

50 percent of them stated that the lending authority of local bank manager had declined (Table VI). In contrast, only four of them (or 13.8 percent) believed local branch managers had more loan approval authority in 1997 than in 1994.

Although there clearly was a move towards centralization, our data show that different localities and different banking systems apparently still had a choice in how much autonomy could be granted to local branch managers, and understanding the motives for recentralization in instructive in understanding the evolution of China's banking system and its impacts. In their multi-variant analysis of the determinants of recentralization, Park and Shen (2008) show that, in fact, the inability of a decentralized system to commit to not refinancing is the main reason that China's banking officials have moved to recentralize banking authority in recent years. Their work also demonstrates that the recent centralization of lending authority directly affects credit allocation. Although centralization may solve certain problems, it does so only at the cost of better information. Not surprisingly, with less information, more centralized banks have begun to ration small borrowers out of the market.

6.2 Where does China go from here?

This paper has shown that financial reform and transition in China is a spontaneous process responding towards the demand of financial reform. If our approach is correct, we should expect that further financial reform may have to match the current demands of the economy on the financial system. In this subsection, we predict the direction of future financial reform.

Several changes in the environment in which financial institutions operate in rural China have been observed since the financial system started to commercialize in the

	Percentage	
	Fresh loans	Restructuring/relending existing loans
Changing authority between 1994 and 1997[a]		
Expanded	13.8	13.8
No change	34.5	37.9
Shrunk	51.7	48.3
Total	100.0	100.0
Authority of lending in 1997[b]		
Completely controlled by county branches	68.7	13.0
Mainly controlled by county branches	4.4	7.0
Share the control between county and local branches	24.4	42.6
Mainly controlled by local branch managers	0	3.5
Completely controlled by local branch managers	2.6	33.9
Total	100.0	100.0
Lending limit for single loans in 1997[b]		
0	66.1	19.5
With a limit	29.6	51.3
No limit	4.3	29.2
Total	100.0	100.0

Notes: [a]Data collected from interviews with managers from ABC county branches and RCC county associations from 15 counties. Total observations: 29; [b]data collected from interviews with managers from ABC local branches and RCCs; total observations: 115

Table VI. Delegation to local branch managers

mid-1990s. First, almost all TVEs and many of small and median state-owned enterprises have been privatized (Park and Shen, 2008). In 2000 the share of output produced by state-owned enterprises dropped to less than 30 percent (SSB, 2004). Second, labor markets and almost all factor markets in the rural economy have been fully liberalized (Rozelle *et al.*, 2000). The only factor markets that have yet to be liberalized are credit and land markets (Nyberg and Rozelle, 1999)[17]. Third, better communication and information technologies now allow better supervision of local banks by the central bank and better monitoring of clients by commercial banks. Fourth, China's improved legal environment is making contract enforcement more viable which could substantially increase the supply of effective collateral. Finally, with the rise of informal credit sources and the possibility of the entry of foreign banks, competition is already rising and may rise more in the future.

In such an environment, there will be pressure on the financial system to continue to evolve toward a well-functioning modern financial system. There is going to be a need to create financial institutions that can serve the rising number of smaller firms. This need, however, is not being met by the current system that is based on large banks with centralized contrast. Certainly, there seems to be room in the future for the emergence of a set of smaller banks and non-bank financial intermediaries (e.g. information collecting agencies and credit guarantors). The rise of new technologies and reduction in the cost of information may provide an opportunity for finding a better balance between providing local branches with authority, but maintaining some control over them. If so, the downside of centralization could be offset by getting local managers more involved in the loan process again. If competition is indeed rising, banking authorities should respond positively in order to allow this pressure to induce more effort from bankers. If they are too passive, increased competition may result in further dragging down the performance of state-owned banks.

China's commitments to the WTO also will almost certainly have large effects. Among other things, China has promised that it will allow the participation of foreign banks – first in a limited way and then in a gradually increasing manner. In fact, by 2006, foreign banks will almost be on a level playing field with domestic banks. Such entry by foreign banks will only serve to intensify competition. For China's banking sector to survive and flourish, the institutional structure will have to allow itself to evolve in a way that domestic banks can begin to compete. One likely way that such evolution may take place is that national leaders may allow or even encourage mergers between foreign and domestic state banks which will almost certainly facilitate the adoption of a number of new banking managements approach and other innovations. China's commitments to the WTO also will almost certainly have large effects. Among other things, China has promised that it will allow the participation of foreign banks – first in a limited way and then in a gradually increasing manner. In fact, by 2006, foreign banks will almost be on a level playing field with domestic banks. Such entry by foreign banks will only serve to intensify competition. For China's banking sector to survive and flourish, the institutional structure will have to allow itself to evolve in a way that domestic banks can begin to compete. One likely way that such evolution may take place is that national leaders may allow or even encourage mergers between foreign and domestic state banks which will almost certainly facilitate the adoption of a number of new banking managements approach and other innovations.

7. Concluding remarks

In this paper, we have sought to achieve four objectives: First, we describe and document the reforms in China's rural financial sector. Using a number of sources of

data, including our own primary data and the findings of numerous interviews in rural China and with upper level officials in Beijing, we have shown that both reforms in the financial system in general and rural financial sector in particular reflect the changing needs of the economic system. In other words, China's financial reform is a spontaneous process that accommodates reforms in other sectors and responds to the economic and institutional environment in which financial institutions operate. In doing so, we have tried to demonstrate the role of financial reforms in the development of China's rural economy with the rise and fall of joint liability lending. In the past two decades, joint liability lending helped fuel the rise of TVEs, played role in its downfall, and was instrumental in encouraging the rush to privatization that is ongoing today. We also have presented evidence about the factors that have influenced changes in the financial sector during the reforms. For example, firm profitability, local government involvement, and bank competition had played critical roles in shaping the process of rural financial reform in China. Based on the evidence from our survey, we show that as these factors have changed, the financial sector has evolved with them.

Finally, there is evidence that the rural financial sector has not functioned too badly during the reform period. Although many standard measures may suggest that the system has not performed well, this conclusion is modified if one keeps in mind what the leaders have been demanding of the system at different points of time. From this other point of view, the record is better. When central planners wanted the bank to be a cashier, there were few complaints about this aspect of the work. In the early reform era when economic growth depended on funding the emerging collective sector, the financial system evolved into a joint liability lending system and provided collective firms massive amounts of credit. It is only in the most recent era that the system is trying to transform itself into a truly modern commercial banking sector.

While it is too early to tell whether the new effort in financial reform will succeed in the near future, it is clear that the evolution of the lending relationships among bankers, firm managers, and local government leaders will continue. Along with the fall of joint liability lending, the influence of local government leaders in lending has been declining. A commercial relationship between bankers and firm managers rather than government policy will dominate in the lending games. However, as we have argued, this process may not be planned. Given the commitment problems in a transitional environment, a commercial bank may choose to centralize lending authority and shrink its lending volumes rather than the opposite. For example, a commercial bank may stop lending to state-owned enterprises but it does not mean that it will rush its funds to the private sector.

One dimension that the financial reform has yet explored is to privatize the financial sector or, equivalently, allow free entry of private banks. As banks bear less policy obligations and most of their clients become private enterprises, the benefits of having state-owned banks will disappear. Also, like the unit banks in rural Indonesia, small, private, and regional banks may have comparative advantages in gathering information and, more importantly, are well motivated in seeking for better allocation of credit even in an unfavorable environment. Lastly, the entry of private banks can provide an alternative source of financing for those who are rationed out by large and state-owned banks and thus better meet different financial needs from various clients. Should China finally enter into this stage, we will surely expect another round of financial reform aiming at a more matured regulatory framework and a more capable central bank that provide disciplines needed in emerging credit markets. Most of the policies and rules that are employed to regulate state-owned banks would be revisited.

The results of our study and our final conclusions, of course, are not meant to be construed to be nationally representative. As we suggested in an earlier footnote our selection of Jiangsu and Zhejiang, two rapidly growing coastal provinces, will affect that nature of our conclusions. Had we done the study in a less developed, inland is likely that a number of findings would have changed (though on this we can only speculate). For example, because the collective sector was much weaker in poorer areas (and faltered earlier), the breakdown in the joint liability system would have occurred earlier. The nature of competition that led to the falling of profits in poorer areas is also different. In richer areas, it in part came from the emergence of private sector. In poorer areas, the competition came from firms in the richer areas. Because the economic conditions in these areas were much less favorable to the emergence of the private sector, when the collective firms failed they simply would have disappeared and there likely would have been little privatization. Hence, banks in these areas would have only accumulated bad loans and really would not have been able evolve. In fact, this is probably one reason why the banking sector today in China is often characterized by a dual nature: a relatively vibrant sector in the coastal region and less vibrant in the inland areas (as pointed out in a recent study).

Notes

1. In fact, Lardy (1998) at one point suggests that the China's future development success is at stake because of the poor way officials have managed the financial reforms.
2. For more information about the survey, see Shen (2001).
3. The reason for selecting these two coastal provinces is that they have experienced rapid economic growth in the last two decades, although there is still great heterogeneity in terms of the level of wealth and enterprise development. The reader should be cautioned that our results and findings might be different had we chosen to work in poor parts of China.
4. As Lin *et al.* (1995) have argued, the financial system successfully channeled low-cost funds to support China's heavy industry purposely.
5. The income per capita is deflated using purchasing price index of agricultural products from the same source. See SSB (2000) for details and source of data.
6. All data are deflated according to SSB (2000) and MOA (2000).
7. The primary role of local, state-owned enterprises (or TVEs) is unique because the experience of almost all countries in the world that had grown rapidly and developed during the twentieth century was that a large part of the growth had come from the private sector. In fact, China's rural, local state-owned enterprise-led growth (that is the growth during the 1980s that was spearheaded by the emergence of TVEs) stands unique in history. Many writers outside of China (e.g. Weitzman and Xu, 1994) make this observation. The dominance of the private sector can be seen from data from the China Industrial Economy Statistical Yearbook. In the 1980s, the output of the collective sector was between five and 20 times higher than private output. Some observers (e.g. Whiting, 2000) have noted some firms that were in fact private were registered as collective (wearing "red hats"). Therefore, the gap according to published figures between collective and private firms may be overstated. However, the phenomenon of wearing red hats appears to be not very widespread across China. According to most observers of China they were concentrated mainly in Wenzhou, a prefecture in the south part of Zhejiang Province.
8. Although rural credit foundations (RCFs) are technically non-banking rural financial institutions, since they operated much as banks did, we do not differentiate RCFs and formal state banks in the rest of the paper. See footnote 27 for a more complete description of RCFs.

9. Among those specialized banks, the Bank of China, China Construction Bank, and the ABC was officially separated from PBC in 1979. The Industrial and Commercial Bank of China was established to take the banking duties from the PBC in 1984 after the latter was restructured as the Central Bank of China.
10. There also was a parallel informal financial sector that was just emerging at this time. Tsai (2002) has a rich description of the informal financial sector. It likely is the case, however, the informal sector during the 1980s was quite small and regionally isolated. Likewise, Findlay *et al.* (2004) discuss the emergence and demise of RCF. RCFs were essentially government-initiated and government-controlled financial institutions that were registered under the Ministry of Agriculture. They were banned in the late 1990s. Unfortunately, it is hard to analyze them because there is no available data.
11. In fact, there were many policy controls limiting the actions of rural banks. For example, Lardy (1998) estimates that as late as 1991, 42 percent of loans of specialized banks were being done at the direction of policy. With the burden of grain procurement and the financing of fertilizer and other inputs and investments for agriculture, claims by the ABC that their policy burden far exceeded those of the other specialized banks during some years during the 1980s and early 1990s are believable. Hence, a lot of efforts with little commercial return were spent by rural bankers in executing policy, rather than on profit-making activities.
12. A number of factors may explain the declining profitability of firms. First, increased competition may have eroded profitability. Alternatively, retrenchment policies may have adversely affected business performance. Interest rate rises also eroded firm profitability. Finally, it may simply have been that China had entered a recession.
13. Because of space limitations we are unable to completely formulate the analysis that would be required to show the causality between falling firm profitability, increased mobility, and the fall of joint lending liability. We do so here primarily with descriptive statistics and argumentation. For those interested in the full analysis, see Park and Shen (2008).
14. The survey finds that one-quarter of townships have at least one state bank branch in addition to the ABC. Most of these banks are located in developed areas where more business opportunities exist. Even when no other state bank branches are found, competition can come from branches located in nearby townships. The survey finds that in 1997, the lending market share of RCCs was 45.9 percent, followed by 32.4 percent for ABC local branches, and 21.7 percent for other financial institutions. RCCs held 42.5 percent of deposits in 1997 and ABC local branches 34.7 percent. The percentage of firms banking exclusively with one rural financial institution was 41 percent for collective firms and 62.3 percent for private firms.
15. We say a TVE is privatized if the government-owned share dropped below 50 percent.
16. Our data are not current enough to analyze the reasons for the sector's poor performance. It is plausible that the reforms did fail from the reasons that the authors cite. It is just as likely, however, that the reforms succeeded, and that the poor performance of the banking sector could have been merely a function of the downturn in the economy after the Asian financial crisis and China's own downturn of business cycle.
17. Even for land, land rental markets are now almost universally allowed and have become more active recently.

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