Finance and Economic Development: Financing Township and Village Enterprises in the People’s Republic of China

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Introduction

Since 1978, People's Republic of China (PRC) has experienced rapid economic growth and rapid institutional change at the same time. The market-oriented reform and transition ongoing in PRC’s financial sector is the crucial and core content of the institutional change that will decide whether PRC can keep rapid economic growth over the long term. In PRC’s case, not only has the financial sector expanded rapidly, its institutional structure has changed very fast (through deregulation and liberalization).

The development of Township and Village Enterprises¹ (henceforth TVEs) is one of the most important parts of PRC’s economic miracle. Before the mid-1990s, the TVE sector played the role of growth “engine” for national economic development. At their peak they contributed about one third of GDP and more than 50% of industrial value added. In recent years, the academic literature has mainly focused on why the TVE sector could sustain rapid growth under collective ownership in a central planning economic system.² There is little literature on in the relationship between TVE growth and the accessibility of financial resources during their rapid development and transition of the financial sector.

Paradoxically for a non-state sector, TVEs achieved very high growth between the mid-1980s and mid-1990s under a lower level of development level of the financial sector and a poorly functioning legal system. During this period there was serious financial repression and strict planning regulations were in force. Since 1994, PRC started the market-oriented reform of the bank sector with a great increase in deposits and loans. Nevertheless, since the mid 1990’s, the TVE’s growth rate has slowed due to the constraint of external financing. The key questions raised here include: First, why could TVEs obtain rapid growth in a repressed and undeveloped financial system? Second,

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¹ In Chinese statistics, TVEs include all the enterprises at or below township level, regardless of their ownership types. These enterprises include not only those operating in industrial sectors, but also those in construction, transportation, commerce, and food services. We adopt this definition in this paper.

after 1994, especially since 1997, why did the growth of the TVE sector slow due to the constraint of access to finance when financial development entered a new stage and was far higher than in the 1980s?

Joseph Schumpeter (1911) argued that banks play a pivotal role in economic development because they choose which firms get to use society’s savings. Based on this view, the banking sector alters the path of economic progress by affecting the allocation of savings and not necessarily by altering the saving rate. Following Schumpeter, King and Levine (1993a,b) assessed empirically the connection between financial sector development and the sources of economic growth and raised the proposition that financial development is closely correlated with growth. More recently a growing body of studies at the firm-level, industry-level and country-level, as well as cross-country comparisons, have demonstrated the strong link between the financial sector and economic growth.3

Some scholars have considered PRC’s specific case. For example, Park and Sehrt (2001) used provincial data 1991-1997 to test whether financial reforms increased efficient intermediation. They found however that up to the end of their period policy lending by state banks continued to be important and that lending still did not respond to economic fundamentals. Cull and and Xu (2003) investigated the factors that determine the sources of finance for firm-level fixed investment. They suggest direct government transfers were not significantly associated with profitability throughout the period they examined. In contrast, bank finance was positively linked to both profitability and some types of reform. Boyreau-Debray (2003) analyzed the relationship between growth and financial intermediation at the sub-national level. Using a dataset of 26 provinces between 1990 and 1999, she suggests that credit extended by the banking sector at the state level had a negative impact on provincial economic growth. Allen, Qian and Qian (2005) argue that PRC is an important counterexample to the findings in the law.

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finance, and growth literature: neither its legal nor financial system is well developed by existing standards, yet it has one of the fastest growing economies in the world. They compared growth in the formal sector (state-owned and publicly traded firms) and the informal sector (all other firms). With a much poorer applicable legal and financial mechanisms, the informal sector has grown much faster than the formal sector, and has provided most of the economy’s growth. They conclude that it is effective informal financing channels and governance mechanisms, such as those based on reputation and relationship, that support this growth.

Accompanying PRC’s dramatic economic growth the financial sector has also developed, so superficially it is easy to conclude that the Chinese case supports the view in the mainstream literature that “financial development will promote growth”. However, if we examine carefully the evolution of finance and growth in PRC, we find it is not so simple.

TVEs and financial reform

One of the most important features of PRC’s economic development is its rapid rural industrialization centered on the development of numerous small TVEs established by township governments, village collectives and rural individuals. In 1978, only 10% of the rural labor force was engaged in industrial activities, and only 8% of rural income was contributed by the non-farm sector; by 2003, 28% of the rural labor force were working in the TVE sector, and non-farm income accounted for 35% of rural per capita net income. In 2003, the 50% of the incremental part of rural per capita income is from TVE sector. TVEs are providing jobs to around 135 million people. The total assets of TVEs have increased about twenty times since 1978 and their average annual growth rate of value-added over 1978-2003 is around 20%.

Table 1. Growth Value Added and Ownership Structure of TVEs (%)

<table>
<thead>
<tr>
<th>Proportion of Total Value Added in TVEs</th>
<th>Average Annual Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>80-85</td>
</tr>
<tr>
<td>2002</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
<tr>
<td>Town</td>
<td>37.69</td>
</tr>
<tr>
<td>Village</td>
<td>36.66</td>
</tr>
<tr>
<td>Private</td>
<td>25.65</td>
</tr>
</tbody>
</table>
Note: Due to the change of statistics indicator, the data in bracket is including enterprises of all collective ownership and there is no difference between village collective and township collective.

Collective firms at the township and village level accounted for the majority of TVEs in number in the initial years of their development, although their share both in numbers and in value added has fallen sharply in recent years with the spread of 'private’ TVEs (see tables 1 and 2). Overall the growth of TVEs has decelerated since the mid-1990’s.

Table 2. TVEs Structure of Value Added by the Type of Registration in 2003

<table>
<thead>
<tr>
<th>Company Type By Registration</th>
<th>Share of Total Additional Value (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collective Ownership</td>
<td>10.33</td>
</tr>
<tr>
<td>Stock and Cooperative</td>
<td>3.70</td>
</tr>
<tr>
<td>Joint Enterprise</td>
<td>0.55</td>
</tr>
<tr>
<td>Ltd Company</td>
<td>10.01</td>
</tr>
<tr>
<td>Shareholding Company</td>
<td>2.30</td>
</tr>
<tr>
<td>Private Company</td>
<td>30.39</td>
</tr>
<tr>
<td>Individual Firm</td>
<td>18.48</td>
</tr>
<tr>
<td>Others</td>
<td>16.58</td>
</tr>
<tr>
<td>Hong Kong, PRC and Taipei, China Investment Firms</td>
<td>4.37</td>
</tr>
<tr>
<td>Joint Venture</td>
<td>3.28</td>
</tr>
</tbody>
</table>

Source: China Agriculture Year Book, 2004

Since 1985, PRC’s financial development is very fast either by indicators of banking or capital market development. Liquid liabilities to GDP were 62% in 1987 and rose to 176% in 2003. Bank deposits to GDP were 46% in 1987 and increased to 160% in 2003. Stock market capitalization to GDP rose from 2% in 1992 to 41% in 2003.

In 1994, PRC started the new market-oriented transformation of the banking sector from a specialized and controlled bank system to a commercial banking system. The primary target is to make financial institutions take risks by themselves running on market principles. In order to increase competition in the bank market, the government abolished the restriction on business scope and state-owned commercial banks and other deposit money institutions were encouraged to expand their business to other locations and sectors (for example, there is now no restriction between rural and urban finance). At the same time, the management of loans has changed from quota controls to a proportionate ratio to deposits. Generally banks face a loan ceiling up to 75% of deposits after satisfying the requirement reserve requirements of the Peoples’ Bank of
China (PBC). In 2003, the function of supervision of the banking sector was separated from the central bank and the China Bank Regulation Committee was established to play this supervisory role, leaving the PBC only to take responsibility for the conduct of monetary policy. Following the transition of the banking sector from specialized bank system to a commercial bank system, the bank-related legal system has also improved greatly.

The mainstream financial literature argues that a well functioning financial system will promote higher economic growth. Allen, Qian and Qian in various papers (for example, Allen, Qian and Qian 2005) survey the Chinese situation and suggest that Chinese experience is inconsistent with this literature. They argue that there were effective, informal financing channels and governance mechanisms, based on reputation and relationships, to support the growth of firms without recourse to formal financial institutions. Although Allen et al make a very important point about the deviation of financial development and growth for the non-state sector, there is still some misunderstanding and their conclusion does not completely match the real situation. In fact, the banking sector was very important for the development of the non-state sector, specifically for TVEs, at the early stages under the specialized bank system. Allen et al have focused on the situation in the late 1990s and they ignore the historical development of the non-state sector before 1994. Therefore, they do not notice the important financial assistance from state-owned banks to TVEs before 1994.

Figures 1 and 2 illustrate the relations between financial development and the growth of TVEs since 1978.

At the early stage of development of TVEs, with a lower level of financial development and a poor legal system nationally, they nonetheless obtained financing from formal financial institutions to sustain their rapid growth. However with the bank sector development and the improvement of the legal system after 1994 they have had difficulty in accessing financing, so that the ratios of TVE loans to their value added and TVE loans to total loans show a clear decline in recent years.
Figure 1. Deviation of Financial Development and TVE Growth

Note: AV=Value Added
Figure 2. Importance of TVEs in GDP and Bank Loans

Note: AV=Value Added of TVEs

Table 3 TVE Loans and Value Added

<table>
<thead>
<tr>
<th>Year</th>
<th>Ratio of TVEs value added to GDP (%)</th>
<th>Ratio of TVEs Loan to Total Loan (%)</th>
<th>Ratio of TVEs Loan to TVEs value-added (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>5.77</td>
<td>1.19</td>
<td>10.53</td>
</tr>
<tr>
<td>1985</td>
<td>8.61</td>
<td>4.88</td>
<td>37.31</td>
</tr>
<tr>
<td>1990</td>
<td>13.5</td>
<td>6.38</td>
<td>45.06</td>
</tr>
<tr>
<td>1995</td>
<td>24.96</td>
<td>8.79</td>
<td>30.43</td>
</tr>
<tr>
<td>2000</td>
<td>30.35</td>
<td>6.32</td>
<td>25.27</td>
</tr>
<tr>
<td>2003</td>
<td>31.29</td>
<td>4.82</td>
<td>20.88</td>
</tr>
</tbody>
</table>

Note: Loans are from State Owned bank and Rural Credit Co-operatives.

In 1978 TVEs' value added was 6% of GDP, although they only obtained 1.2% of total loans, whilst loans were about 11% of their value added (see table 3). During the period of specialized banking and state control, TVE financing from banking institutions grew very fast. By 1990, the ratio of loans to TVE value added reached 45%. In 1995 the
sector obtained 9% of total loans from state banks and Rural Credit Co-operatives. Despite the continued importance of TVEs in the economy (at around 30% of GDP) their share of total lending has continued to fall from the mid 1990’s. Why did TVEs access financing from formal bank institutions more easily in a specialized banking system when financial development was lower and the legal system was poor and why should TVEs have difficulty in accessing formal bank financing when financial development is higher and the legal system has improved so much?

One possibility is that TVE productivity and profitability may have declined after their rapid growth over more than 20 years. However, there is little evidence to support this. In fact a number of studies show the contrary. As Figure 3 illustrates, the marginal return on capital in the TVE sector (defined as rural non-farming industry) rose very fast and in 2001 this indicator was 5 times higher for TVEs than for urban industry (World Bank, 2005). Up to 2003, PRC’s non-state sector firms (not all of which will be TVEs) obtained a return on assets of 15%, well above that of SOEs (OECD, 2005). Based on the estimation of Jefferson and Rawski (1994), during 1988-1992, TFP annual growth of the state sector was 2.5% compared with 6.9% for TVEs. A comparative study on ownership reform of firms by Dong, Putterman and Unel (2004) found that during 1994-2001, TFP growth rate averaged 8.2 % for TVEs and only 1.5% for the state sector. For profits per Yuan of assets invested, the state sector average over this period was –0.011, whilst for the TVE sector it was 0.058. Such evidence suggests that the difficulty faced by TVEs in accessing banking finance after 1994 is unlikely to originate primarily from poor productivity or profitability.
Figure 3. Marginal Return to Capital between Urban Industry and Rural Non-farming Industry

Comparision of Maginal Return to Capital During 1978-2001


Relationship-based lending to TVEs

PRC TVEs initially relied heavily on external debt financing, especially on bank loans, due to the general poverty of rural areas in which they were located. Today they continue to have high liability-assets ratios (typically over 50%). The founders of TVEs had no valuable assets of their own as collateral for obtaining loans and could only obtain funds through the operation of a relationship-based financial system.

Relationship lending means that banks and their customers build up long-term agreements on terms of credit during the procedure of repeat transactions. Berger and Udell (2002) identify two different type credit technology -transactions lending⁴ and

⁴ According to the definition of Berger and Udell (2002), transaction technology is primarily to base on “hard” quantitative data that may be observed and verified at the time of the credit origination. It include five types, financial statement lending, small business credit scoring, asset-based lending, factoring, and trade credit.
relationship lending. They suggest that the two kinds of technology are correlated with lending infrastructure, like accounting standards, commercial laws, judicial system, bankruptcy system, the tax and regulatory environment, and the structure of the financial market. Under a poor environment of lending infrastructure, relationship lending will have a comparative advantage. Rajan and Zingales (1998) also suggest that relationship-based systems work well when contracts are poorly enforced and capital scarce.

The relationship-based credit contract depends mainly on the personal relationship, the so-called implicit contract or informal contract due to imperfect legal institutions. Implementing relationship-lending for TVEs was complicated by a number of factors. First, due to the nature of collective ownership of TVEs and the poor legal system, financial institutions faced a difficulty in identifying who the borrower was and where their creditworthiness came from. The founders of TVEs did not have enough private assets as guarantee or collateral and the assets of firm did not belong to them personally. Second, even if the firm’s assets could be used as collateral, there was the problem of how the financial intermediary could implement a contract when legal system was not well developed or the enforcement cost was high?5

Before 1994, collective ownership accounted for about 70% of total output in the TVE sector. Actually, from the viewpoint of TVE finance, collective ownership became the important insurance for access to the formal financial institutions. There were two main sources of TVE founders or entrepreneurs; one was former government officials, mainly leaders of township enterprises, and the other was elite members of the local community. Given their own lack of income the founders of TVEs had to mobilize local resources——official and non-official 6. In the early phase of TVE development there were three main sources of capital: (1) collective accumulation of agricultural surplus at the township

5 Even if there is an almost perfect legal system, contract enforcement is often difficult and high cost and still has to rely on informal institutional arrangement. Alford (2000) has pointed out the insufficiency to just look at China’s formal laws when one evaluates the Chinese legal system; instead, he suggests researchers focus on the interplay of the formal law and the informal enforcement mechanisms.

6 In the 1980s, the establishment of any enterprise must get the permission of government. It was generally a very complicated procedure and often needed several months (Chen Jianbo, 2004)
and village level - this accounted for about 1/3rd of capital initially (2) loans from Rural Credit Co-operatives and State Owned banks - this accounted for about half of the original capital and (3) trade credits and investment or loans from individual members of the community.

To use all kinds of custom, convention, location and kin relationships, the founder could form different types of informal contract with local people in order to mobilize more extensive local resources and guxi resources (a personal relationship) and establish the authority to make a new property arrangement in the form of TVEs. For example, the founder could ask villagers to give an input of their labor without payment for the new firm. This type of contract is not negotiated one by one but is based on a behavioral relationship contract between the founder and local members of the community. In this type of contract, the input from the founder may include mainly invisible assets, that is their personal credit or reputation, and some individual labor services. The formation of an informal contract between a founder and members of the community means a principal-agent relationship has come into existence.

Relationship-based contracts were important for access to bank finance. At first, the founder got recognition from community members. Then local government gave the permission and created the legitimacy to establish the firm. Often the local government would become the guarantor of the loan contract, either through the reputation of local officials or through the fiscal income of the local government. Here the relationship-based contract with a senior community member replaces the functioning of the market as a means of identifying entrepreneurial talent. Participation of local government provided one sort of guarantee mechanism for the enforcement of a loan contract in the absence of legal protection to the creditor. Local government used its administrative authority as a measure of guarantee. It was very clear to the entrepreneur of the TVE that the cost of breach of contract was very high. The punishment was not only money, but also the loss of face in the community.

**Experience under a commercial bank system**

During 1985-1990, bank loans obtained by TVEs grew at an average annual rate of 31%. Over 1990-1995 the rate was similar at 32%, but during the period 1996-2003, the
annual growth rate of bank loans to TVEs decreased to around 7%. As we have mentioned above, after 1994, the banking sector shifted into a commercial bank system. In the shift, profit maximization and risk prevention became the important objectives of bank operations. At the same time, the institutional foundation of loans changed from a relationship-based to legal-based contract. To reduce risk, loans must be made against collateral, banks must assess borrower creditworthiness, and loans to a single borrower must not exceed 10% of bank capital. The most important change is by law all loans need enough collateral.7 Due to the establishment of a legal system, banks have to issue loan contracts based on the rule of law. Furthermore, Chinese commercial banks are adopting balance sheet criteria that reflect international practices; for example, as recommended under the Basle Accord, risk-based capital ratios of 8% are maintained and financial statements are gradually being brought in line with international standards.

TVEs face a difficulty in adapting to a legal-based contract system. The transformation of company institutions is much slower than for the banking system. Firstly, undefined property rights are an obstacle to enter into a legal-based contract. At the same time, services for the valuation of property, and accounting and auditing standards are of poor quality and expensive. Secondly, in 1995 the Law of Guarantee was issued and has become important for business and financial activity. This law prohibits the use of fiscal income of local government for a loan guarantee. Thirdly, TVEs, as small and medium enterprises, face the restriction of a big bank versus a small client. Because of TVEs’ non-standard accounting practices and the banks’ lack of information on TVEs the potential risk from information asymmetry is significant.

The different speed of transition between the banking and the enterprise sector leads to the result that state-owned bank have largely abandoned rural areas and have thus have greatly decreased the divisions and branches that serve TVEs. Table 4 shows that the four state-owned banks have closed 66,718 division and branch institutions from 1995 to 2003. 90% of these closures are at the county and below-county level.

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7 If the staff of a bank or financial institution act against the law, by extending a loan to person of close relationship without guarantee or collateral, or on preferential terms, such acts can be punished by imprisonment and a heavy fine.
**Table 4 National Bank Branch Closures**

<table>
<thead>
<tr>
<th></th>
<th>1995 Numbers</th>
<th>2003 Numbers</th>
<th>Decreased Number</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial and Commercial Bank</td>
<td>38583</td>
<td>24129</td>
<td>14454</td>
<td>37.5</td>
</tr>
<tr>
<td>Agricultural Bank of China</td>
<td>67092</td>
<td>36138</td>
<td>30954</td>
<td>46.1</td>
</tr>
<tr>
<td>Bank of China</td>
<td>13637</td>
<td>11609</td>
<td>2028</td>
<td>14.9</td>
</tr>
<tr>
<td>People’s Construction Bank of China</td>
<td>35895</td>
<td>16613</td>
<td>19282</td>
<td>53.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>155207</strong></td>
<td><strong>88489</strong></td>
<td><strong>66718</strong></td>
<td><strong>42.99</strong></td>
</tr>
</tbody>
</table>

Source: China Statistical Yearbook, 1996 and 2004

TVEs have faced heightened market competition in recent years. Before the 1990s, PRC was a shortage economy and there was a huge potential demand for most products, especially for the products of light industry. However, since the 1990s, the economy’s structure has changed and surplus production has begun to emerge in manufacturing. TVEs now have to face competition from private firms, joint ventures and others. In this situation, banks are very cautious about financing small firms, such as TVEs. In addition, what directed credit remains in the banking system has gone to large loss-making state enterprises rather than to TVEs and other small firms.

**Conclusions**

It is obvious that the finance and growth nexus discussed in the literature is complicated and it is not simply that a “well-functioning financial system can promote growth”. First, there is some substitution mechanism when the financial sector is not well functioning and legal system is not well developed. A relationship-based contracting system can assist the formation and enforcement of formal contracts and the combination of formal and informal contracting can promote growth when other institutional arrangements do not match. Second, a relationship-based contract can take part of the functions of formal market transactions. Third, it is clear we cannot ignore the importance of formal institutions. Nevertheless, financial development and legal institutions need a long-term process of evolution accompanying economic growth. It is worth stressing that for transition economy, the definition of property rights clearly takes time and will require improvement of a set of economic, political and legal aspects. If the financial sector has a faster transition and the enterprise sector lags comparatively, this will lead to the
deviation of financial development and from economic growth. The Chinese case and the specific experience of TVEs illustrate this deviation.
References:


