

## **Analysis on Financing Difficulties of Small and Medium-sized Enterprises in China and Corresponding Countermeasures**

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### **Abstract**

*This paper aims to explore the causes of financing difficulties of Chinese small and medium-sized enterprises and give out corresponding solutions for handling the problem. Through building up the theoretical analytical framework of SMEs' financing difficulties, and discussing the development of Chinese real economy in recent years and the characteristics of SMEs in China, this paper will analyze the causes of SMEs' financing difficulties, and put forward some possible solutions to mitigate the current problem.*

**Key Words:** SME lending, financial development, financing

### **1. Introduction**

In recent years, along with the development of small and medium-sized enterprises, SMEs are playing an important role in the development of China, and become a significant part of propelling economic and social development. At present, there are over 10 million small and medium-sized enterprises in China, and 99% of enterprises in China are SMEs, which have created 60% of China's total economic output and 50% of tax revenue, and offered more than 80% jobs. Moreover, SMEs represent an indispensable force for achieving the technological innovation and adjusting industrial structure in China.

Accelerating the development of SMEs has been widely recognized by Chinese society. Consequentially, people begin to pay more attention to financing difficulties, which restrict the development of SMEs. In order to resolve the problem, the Chinese government and some financial institutions have made great efforts in reducing the pressure faced by SMEs. However, the problem and hurdles still exist. Getting funds from banks is the first choice for many SMEs. By the survey conducted by Shusong Ba (2013), 66.7% SMEs have chosen to rely on loans borrowed from banks. Very few SMEs chose other financing channels, including borrowing from their friends and usurious loans. Lacking of appropriate financing channels is one of the hurdles. In addition, Chinese banks are short of incentives to help SMEs, because the SMEs' financing scales are not large enough.

The financing difficulty of SMEs is a worldwide issue. The adverse selection problem and moral hazard caused by asymmetric information usually happen to formal financial institutions, because SMEs cannot provide complete financial information and effective mortgages. And by the survey conducted by Shusong Ba (2013), there are about 41.4% SMEs had problems in getting loans from banks due to the absence of effective mortgages. Moreover, during the process of economic and political reform, Chinese SMEs are restricted by several factors, including the government intervention, weak legal system, and the incompleteness of financial system. Facing the difficulty of receiving formal financing, SMEs have to pay attention to the informal financial market. However, it not only has increased SMEs' financial cost, which will have a negative effect on the development of SMEs, but also will raise the potential risk of the whole financial system. Therefore, this paper has a significant meaning in exploring the causes of financing difficulties of Chinese SMEs.

### **2. Literature review and theoretical analytical framework**

The major obstacle to the effective operation of credit market is that there exists asymmetric information between lenders and borrowers. Asymmetric information will lead to adverse selection and moral hazard problems. Thus, with the increase of credit risk and the failure of interest rate tools, credit rationing phenomenon takes place because financial institutions aim to increase profitability and reduce risk (Stiglitz and Weiss, 1981). Compared with large firms, SMEs lack of valuable mortgages, and have asymmetric information problems. Therefore, SMEs are relatively easily controlled by banks and their credit rationing policy.

The development of financial sectors could help improve financial system’s allocation efficiency, decrease the level of information asymmetry between lenders and borrowers, help investors evaluate projects, and finally facilitate SMEs’ financing. Cetorelli and Strahan (2006) analyzed the effect brought by the local banking market structure on the development of real economy. They found that a high-level competition market structure will lead to rapid growth of SMEs. Beck et al. (2005, 2008a, 2008b) proved that the development of financial sectors plays a significant role in promoting the development of SMEs. The research shows that though SMEs utilize less external financing, the development of financial and political systems would alleviate the influence on the development of SMEs and help SMEs get external financing much easier. In the countries with high-level financial development, SMEs have relatively more accesses to credit funds, and thereby enhancing its proportion of the total economy. The effect is still significant even if asymmetric information, industrial concentration and development opportunities are controlled. Based on the analysis above, it is clear that the scale of enterprise and financial development are two main factors about financing difficulties of SMEs. By establishing a model, it will be helpful to reveal the inherent logic of financing difficulties for the Chinese SMEs in the credit market.

Suppose that there are several capital suppliers and capital demanders in the credit market. In order to do a project with R expected profits, fund-demanders would need to receive K dollars from fund-suppliers to start operating the project, and the interest rate of the loan is r, which is smaller than R (  $R > r$  ). When the bank refuses to provide demanders with funds, the expected profits of both sides are zero. When banks choose to offer funds to enterprises, banks and enterprises will form a principal-agent relationship. However, since there are asymmetric information problems in the principal-agent relationship, the moral hazard issues will be more likely to happen to enterprises. In other words, the owners will deliberately evade returning their debt. When enterprises return money to banks, enterprises will have  $(R-r)*K$  expected profits, while the expected profits of banks are  $r*K$ . However, when enterprises are unable to return the loans on time, enterprises will have  $(I+R)*K$  expected profits, while the expected profits of banks are  $(-K)$ . Hence, we have the payoff matrix below.

**Table 1 The payoff matrix for banks’ choices and enterprises’ choices**

		Banks	
		Offer loans	Refuse
Enterprises	Return	$(R-r)*K, r*K$	0, 0
	Default	$(I+R)*K, -K$	0, 0

Based on the analysis above, banks should pay special attention to the credit factors of enterprises before offering loans. Suppose that the probability of returning loans is described as the function  $P(C, F)$ <sup>1</sup>, and then the probability of dodging is  $1 - P(C, F)$ . Banks will only choose to offer loans if their expected profits are greater than or equal to zero, that is  $r*K*P(C, F) - K[1 - P(C, F)] \geq 0$ , which can also be seen as  $P(C, F) \geq \frac{1}{1+r}$ . Otherwise, banks will not provide enterprises with funds.

From the definition and property of the function  $P(C, F)$ , we know that compared with SMEs, large firms are able to get enough funds from financial institutions, because they have larger probability of returning loans. Along with the development of financial system, the level of asymmetric information between SMEs and financial institutions will be lowered, and the probability of returning loans will increase a lot. Hence, the financing difficulty will be relieved.

<sup>1</sup>The independent variable C represents the type of enterprise. C will equal to 1 if the enterprise is large and equal to 0 if it is SME. Compared with the large enterprises, SMEs are harder to offer valid mortgages or complete information. Hence, the probability for large enterprises to return loans on time is higher, that is  $P(1, F) > P(0, F)$ ; the independent variable F represents the level of financial development. Since the financial system has the ability of sharing risk and the function of information searching, then it could solve asymmetric information problem for debtor and lender. Along with the development of financial system, the probability for returning loans will be higher and higher and tend to approach 1, that is  $\frac{\partial P}{\partial F} > 0$ , and  $\lim P = 1$  as  $F \rightarrow +\infty$ .

### 3. Analysis of the causes of current SMEs' financing difficulties in China

#### 3.1 SMEs' own problems

Firstly, the scale of SMEs limits their borrowing capacity in the financial market. Generally, the production scale and owning capital of SMEs are relatively small. Thus, SMEs cannot get enough funds due to lacking of effective mortgages. In addition, most of SMEs are still influenced by the traditional family-own management mode. Some SMEs are short of necessary financial management, information openness and high-level credit, which cause banks to have a huge cost of supervising SMEs. Besides, during the process of expanding, SMEs often face problems such as lacking of management experience, and uncertainty of technology and market. Therefore, SMEs usually have characteristics of high birth rates and high mortality, and the loans offered by banks will face high risk.

Comparatively, large enterprises have obvious advantages in several aspects, including financial information, credit rating, and accessible mortgages. Hence, banks will have a relatively low cost for searching the fund-receivers' information and supervising large enterprises. Based on the theoretical analysis above,  $P(1, F) > P(0, F)$ , large firms' probability of returning loans is obviously greater than the probability of SMEs. In other words, banks will face a relatively low risk if they choose to provide large firms with funds. In order to lower the risk of offering funds, banks will choose to reduce the amount of funds SMEs request. The risk is raised from asymmetric information. Due to the existence of asymmetric information, adverse selection will appear in the financial market. Once the adverse selection appears, in order to eliminate negative effect, banks will refuse to determine interest rates according to the level of risk. Rather, banks will establish lending conditions according to the information they have for enterprises. It is clear that under the formal financial system arrangement, the relationship between banks and enterprises changes into the situation that banks will prefer to provide large firms with funds and refuse to offer loans to SMEs. Quitting from the SMEs credit market becomes a rational choice for banks, because in this way banks are able to avoid risk and achieve profit maximization.

#### 3.2 The situation of China's financial development

Moral hazard and adverse selection, caused by asymmetric information, are considered as the primary causes of Chinese SMEs' financing difficulties (Lin and Li, 2001). And financial development could improve the efficiency of financial system, reduce significantly the level of asymmetric information that exists between banks and SMEs, help financial institutions process credit evaluation, and identify potential investment opportunities. From the definition of function above, it is clear that  $\frac{\partial P}{\partial F} > 0$ , and  $\lim P = 1$  as  $F \rightarrow +\infty$ . However, the lagged financial development causes the probability of returning loans to become lower and lower, while the risk of providing enterprises with capital becomes larger and larger. Hence, the credit constraints phenomenon is obvious in the SMEs credit market.

**3.2.1** The reform of Chinese financial institutions still has the characteristics of financial restraint. It is confined to strengthen internal management and pays less attention to the institutional transformation. Nowadays, Chinese financial reform mainly focuses on the extension, such as establishing new branches, introducing new financial instruments and opening up new markets. However, facing with more serious problems that may impact the existing institutional framework and financial order, such as the admittance and development of small and medium-sized private financial institutions, the government is unhelpful, and avoids giving out specific plan on this area. Although there are some new financial arrangements already released, there are no meaningful and substantial changes happened in the content of these arrangement. At present, the monopoly situation among state-owned banks still exists. The control of interest rate and the business pattern of financial institutions have not changed radically.

First of all, the four major state-owned banks have comparative advantages on the share percentage of deposit and lending market. Small and medium-sized commercial banks, which can provide SMEs with financial service, only make up a small portion. And it is still difficult for these banks to make a difference in the deposit and lending market (see table 2). The financial system, which is dominated by major state-owned banks, has the responsibility of managing the national macro-economy. The ownership discrimination and credit preference problem still exist, and banks have preference of providing large enterprises and projects with financial aids. Meanwhile, due to the inherent shortages, SMEs lack of viable financial channels even though they have plenty of investment opportunities.

According to statistics, the loans borrowed by Chinese SMEs only account for 16% of financial institutions loan scale at present. And the financing difficulty of SMEs has not yet been alleviated.

**Table 2 The financial condition of State-owned Banks (unit: 10 Billion RMB)**

Year	Total capital	Proportion	Year	Total capital	Proportion
2004	17.98	56.91	2009	40.09	50.89
2005	21.01	56.06	2010	45.88	48.70
2006	24.24	55.15	2011	53.63	47.30
2007	28.01	53.25	2012	60.04	44.93
2008	31.84	51.03			

Source: Original data from 《ALMANAC OF CHINA'S FINANCE AND BANKING 2007-2012》 and China Banking Regulatory Commission

Secondly, Chinese government has controlled the setting of loan interest rates bottom limit and deposit interest rate cap limit for a long time, which can maintain necessary loan-to-deposit spreads, help limit price malignant competition among banks, give reasonable protection to banks' profits, and leave more time to improve financial industry competitiveness and the efficiency of overall economy and finance. However, due to the control of interest rates, banks make considerable profits because of the large interest rate spreads between loan interest rate and deposit interest rate. Hence, banks will be satisfied with their situation and pay less attention to improve their own competitiveness. Due to the existence of large interest rate spreads, although China's economic growth was slow in 2011 and SMEs faced credit squeeze, the net profits of Chinese banking industry were 1.0412 trillion RMB, which increased 277.5 billion than last year. The growth rate reaches 36.3%. The average profits per day were 2.85 billion RMB. Furthermore, statistics shows that the interest rate spreads is the most important source of profits for the banking industry. In 2011, 80% profits of commercial banks came from interest revenue, and net interest rate spread was 2.7%, which increased by 0.2%. Banks are more willing to support large firms and construction projects that make significant contribution to the economic growth of China in the last period.

However, banks are hesitant to help SMEs, which will become a large part of force that makes contribution to the Chinese economic growth in the next period. In addition, regional small and medium-sized financial institutions, which should devote to the development of SMEs, also begin to have preference to serve large firms rather than SMEs, because with the attraction of large interest rate spreads between loan interest rate and deposit interest rate, these small and medium-sized financial institutions do not want to spend time and money on searching the internal information of SMEs. And SMEs have to turn to informal financing, because they cannot get enough funds from formal financial institutions. However, the lending rate of informal financing is over 20%, and some private financing is even as high as 140%. Usurious loans suddenly become popular in certain areas, SMEs face with a more serious situation in financing. Many SMEs' owners cannot afford such expensive operating cost, and they run away with borrowed funds.

Although the Chinese government already canceled the loan interest rates bottom limit in July 2013, it is only helpful for large state-owned enterprises to bargain with commercial banks, there will not be any substantial positive influence on SMEs' financing in short run. Overall, the competition among banks is not enough, and credit market is dominated by banks. If the relationship among financial institutions is perfect competition, then enterprises will have more choices of choosing financial institutions to get capital. For the current financial institutions in China, the competition among financial institutions is imperfect. Under the absence of effective competition, banks can ignore the needs of SMEs and maintain the monopoly situation, and financing difficulties of SMEs still exist. Meanwhile, credit rationing leads a difficult situation for SMEs in financing. Facing with the financial requirement from SMEs, banks are reluctant to raise interest rates. They would rather to reduce the amount of offered loans, and in this way a part of financing demanders quit from the lending market.

**3.2.2** The government attaches great importance to improve financial intermediaries and pays less attention to financial market. And the government is prudent to develop capital market. Hence, the multi-level capital market cannot be established. The direct consequence of this type of industrial structure is that Chinese financial service functions and risk management function are both weak. Meanwhile, social financing structure becomes single and relies more on bank loans. Consequently, enterprises have to raise funds mainly by indirect financing channels.

In the development of capital market, a series of arguments, which are related to the topic “Give service to state-owned enterprises or all kinds of enterprises”, have profound impact on the direction of relevant policies and the formation of relevant laws and regulations. At present, Chinese capital market is still unenlightened, financial transaction is simple and hard to satisfy needs of different scale enterprises. Additionally, it is pretty hard for SMEs to get the right of issuing public stocks and enterprise bonds. Though China has experience of western developed countries for reference and established SMEs’ board market that provide SMEs with financial service, especially for SMEs’ financing, the market’s listing requirements are too rigorous for SMEs to enter the market. Hence, for most SMEs, they are unable to enter the market, because they cannot meet the requirements for operation scale, information transparency and operating capability. From the enterprise bond market, we can see that SMEs are hard to get opportunities to issue enterprise bonds, because issuing enterprise bonds is strictly controlled by the government. Lacking of multi-level capital market causes SMEs to rely on indirect financing channels such as bank loans.

### **3.3 The problems of the financial system’s external environment**

For a long time, China's economic marketization reform is mainly controlled by the Chinese government. After implementing the tax reform, the local government’s ability of controlling resources shows an increasing trend. Local government officials not only pay attention to the increase of fiscal revenue, but also focus on the GDP growth to get promotion (Zhou, 2004, 2007). In order to get enough fiscal revenue and get advantages in political promotion, government officials only care about the short-term economic growth during their tenure. Hence, large enterprises and projects become preferences of the local government. The local government often chooses to offer land as mortgages, and provide enterprises with implicit guarantees to control the allocation of financial resources and support their preferences, which makes SMEs face a more difficult financing situation. Besides, the local government will put a large number of resources in economic construction fields under the drive of fiscal revenue and performance examination, but put fewer resources in credit construction and legal environment, which help maintain a healthy environment for economic development. Therefore, it is no doubt that SMEs face a difficult situation in financing.

## **4. Countermeasures and Suggestions**

**4.1**The government should regard helping SMEs and employment as the main objective instead of caring about the GDP growth only. Moreover, the government ought to establish a better financial environment for SMEs’ financing, SMEs’ credit guaranty system and policy-based financial institutions to support SMEs’ development. Many developed countries have successful experience in solving SMEs’ financing difficulty, which is worth for our reference. For example, there is Small Business Administration (called SBA) in the United States. SBA provides SMEs with financial support through various methods, such as direct loans, coordinate loans and loan guarantees. In Germany, there is KfW Bankengruppe, which is the biggest government financial institution that provides SMEs with loans in Germany. In Britain, the government has “Small Businesses Security Plan” to help those SMEs that have potential ability but cannot get enough loans. France has established a credit guarantee group which is similar with mutual funds. Chinese government should promote the development of guarantee industry. According to Shusong Ba (2013), due to the absence of efficient precautionary measures to credit risk and anti-risk system to immoral behaviors, many credit guarantee corporations face unstable environment, and thus have restrictions on the development. It is clear that the market failure could be remedied if the government establishes guarantee institutions.

**4.2**China should continue deepening marketization reform of commercial Banks, and establish various financial institutions co-existing commercial banking system to promote competition and improve operation efficiency of financial institutions.

First of all, the government should formulate relevant policies to encourage commercial banks to help SMEs, and set up new financial institutions that aim to help SMEs’ financing only. For example, according to the law of the United States, the local commercial banks must put at least 25% of the total financing amount to help SMEs. Meanwhile, there are many small and medium-sized financial institutions that are controlled by the government to serve SMEs’ financing, such as DZ Bank and National-Bank AG in Germany and BDPME of France.

Secondly, the government should set standards for informal financing as soon as possible, remove obstacles that prevent private capital from involving in setting up financial institutions.

In addition, the government should develop private commercial banks, which have flexible operation, strong adaptability, low transaction cost and informational advantages. In this way, China can realize the diversification of China's commercial banks and institutions.

Thirdly, the government should gradually improve interest rate formation mechanism, which is determined by supply-demand relation. The operation of interest rate marketization will help correct and eliminate distortion of credit funds price, optimize financial resource allocation efficiency, and force state-owned banks to enhance competitiveness.

**4.3**The government should set standards and develop the multi-level financial market. In the current Chinese Security Markets, the government needs to transform the financing function into capital allocation function as soon as possible, and regards capital allocation optimization and enterprise institutional innovation as stock market's primary function. Meanwhile, by developing the multi-level financial market and continuing the construction of Growth Enterprise Market, the government is able to provide SMEs which have high growth, small scale, and weak ability for resisting risk, with more financing opportunities. The government should prepare and improve positively regional and local securities trading center, allowing some normative private companies with good profits to trade at the counter and establishing over-the-counter market. To provide SMEs with plenty of financing opportunities, the government should strive to develop corporate bond market, and allow some SMEs, which have good operating conditions, to enter the bond market for financing.

Venture investment is also a choice for SMEs' financing. The United States has the most developed venture investment company, which aims to help those SMEs with innovation abilities to get rid of financing difficulty.

**4.4**SMEs should strength themselves and improve their overall quality. At present, it is common that Chinese SMEs have several universal problems, such as having unsound corporate financial system and inaccuracy financial reports. SMEs should build modern enterprise institutions, and improve the standardization of the enterprise's financial system and enterprise information transparency. Moreover, SMEs should offer effective financial reports with high authenticity to help commercial banks make judgments. Besides, SMEs should pay more attention to the credit consciousness and set up a good credit image to financial institutions. When the credit level of enterprise has risen, financial institutions will change their impression toward SMEs, and banks will change their credit orientation. Hence, the financing difficulty issue will be handled completely.

**4.5**There are some other issues that Chinese government should consider. Chinese government should consider reducing the tax imposed on SMEs. According to another survey conducted by Shusong Ba (2013), there are more than 60% SMEs owners regard the tax reduction as the most helpful policy that the government should employ. With tax reduction, owners believe that the development of their enterprises will be promoted.

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