Market Microstructure Analyses of Small Business Acquiring Microcredit

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Abstract

The supply of credit to small businesses has always received considerable attention in political and academic spheres in China. As an important part of Inclusive Finance, the emergence of microcredit companies has provided a new channel for small business financing. But at present, China's microcredit companies are facing a dilemma of sustainable development and ineffectively provide credit services for small businesses. This paper first analyzes the difficult situation of small business financing and development of microcredit in China, and then based on the market microstructure theory, put forward a new business model of the small business acquiring microcredit.

Keywords

Small business, Microcredit, Market microstructure, Business Model.

1. Introduction

Small businesses account for more than 90% of the total number of enterprises in China. They are the most dynamic and innovative group in economic activities and play a positive role in promoting the real economy. The entrepreneurial spirit of small businesses is the source of the nation's progress and economic growth[1].

However, the financing difficulties of small businesses have been plaguing the government and the real economy. As for the reasons why it is relatively difficult for small businesses to obtain credit from formal financial institutions, relevant theoretical results include credit rationing theory, scale matching theory and financial growth cycle theory. Stiglitz and Weiss[2]believe that under the condition of information asymmetry, there must be adverse selection and moral hazard in the credit market, and the balance of the lender's interest and risk leads to the inevitable credit rationing. The research of Starhan and Weston [3,4] proves that banks have a strong negative correlation between the size of SME loans and the size of banks, that is, large financial institutions are usually more willing to provide financial services for large companies than funds. Small and medium-sized enterprises with small demand provide financial services. Berger and Udell[5]believe that the more SMEs are in the initial stage of growth, the greater the binding of external financing and the narrower the financing channels. The large and medium-sized enterprises in the mature stage have stronger external financing capabilities.

As an important part of China’s inclusive financial and the deepening of financial reform, the microfinance industry in China has developed rapidly. Small businesses have become important service targets for microfinance institutions (MFIs). The achievement and its rapid growth have attracted wide attention from the industry and academia. The emergence of microcredit companies is a beneficial exploration to improve the business environment of small businesses, especially the financing difficulties of small businesses. However, in recent years, the development of microcredit companies has faced many problems, especially the issue of sustainable development.

The second part of this paper is the analysis of the business environment of small businesses, especially the chronic problems of small businesses s in obtaining credit. The third part mainly analyzes the sustainability analysis of microcredit companies, and there are problems such as target deviation and technology backwardness. The fourth part, guided by the market microstructure theory, designs a business model, which tries to find a feasible way for small businesses to obtain microcredit. The last part is the conclusion.

2. Doing Business for Small Businesses

In resent 10 years, the Chinese government has acknowledged that the development of small businesses is the strong foundation and fertile ground for the growing economy and society. The central government has continued to issue a series of related policies to support the development of small businesses. On the one hand, government support is reflected in important meetings of the State Council. In particular, it is necessary to strengthen policy support and financial services for small businesses. The State Council meeting in February 2012 pointed out that small businesses are the main channel for providing new jobs, are the main platform for the growth of entrepreneurial entrepreneurship, and are an important force for technological innovation. ...... At present, small businesses are still faced with significant operational pressures, rising costs, and difficulties in financing. We must further increase support. The meeting in September 2017 pointed out that intensifying the financial and financial support for the development of small businesses, in particular, promoting the easing of financing difficulties and expensive financing issues, will help promote entrepreneurial innovation and new growth in kinetic energy, expand employment, and enhance the vitality and inclusive of economic development. On the other hand, government support is reflected in government documents, focusing on supporting the healthy development of small businesses. Small businesses have become one of the key service providers of inclusive finance in China. See Table 1.

Table 1. Main Policies of the Chinese Government in Supporting the Development of Small Businesses (2012-)

No.	File Name	Publication Organization	Document No.
1	Suggestions on further supporting the healthy development of small businesses	the State Council	2012,No.14
2	Implementation opinions on financial support for the development of small businesses	General Office of the State Council	2013,No.87
3	Guidance on taking various measures to ease the high cost of corporate financing	General Office of the State Council	2014,No.39
4	Suggestions on supporting the healthy development of small businesses	the State Council	2014No.52
5	Announcement on issuing promotion of inclusive financial development plan (2016-2020)	the State Council	2015No. 74
6	Guidance on Financial Services for Small businesses in 2015	China Banking Regulatory Commission	2015No.8

The difficulty and cost of financing for small businesses is a worldwide problem. Small businesses in China receive less support from traditional financial institutions. According to the official data from the China Banking Regulatory Commission, as of the end of December 2017, the balance of loans for small-business enterprises in banking institutions in China was RMB 30.74 trillion, accounting for 24.67% of the total balance of loans [6]. From 2015, the China Banking Regulatory Commission requested banks to achieve three regulatory objectives. That is, the growth rate of small business loans should not be lower than the average growth rate of all loans, and the number of small business loans should be no less than the number of households in the same period of last year, and the loan acquisition rate of small businesses is not lower than the level of the same period of last year. Thus, we know that the above data is only superficial and is the result of banking supervision. It does not truly reflect the willingness of the banking industry to lend. Large banks are well aware that their own risk control systems are not compatible with small business loan management systems. They can only formally deal with microcredits. Moreover, local governments have strong “political performance” impulses, which have substantial influence and intervention on the business and development strategies of city commercial banks, leaving most city commercial banks to lack the awareness of financial services for local small businesses[7].

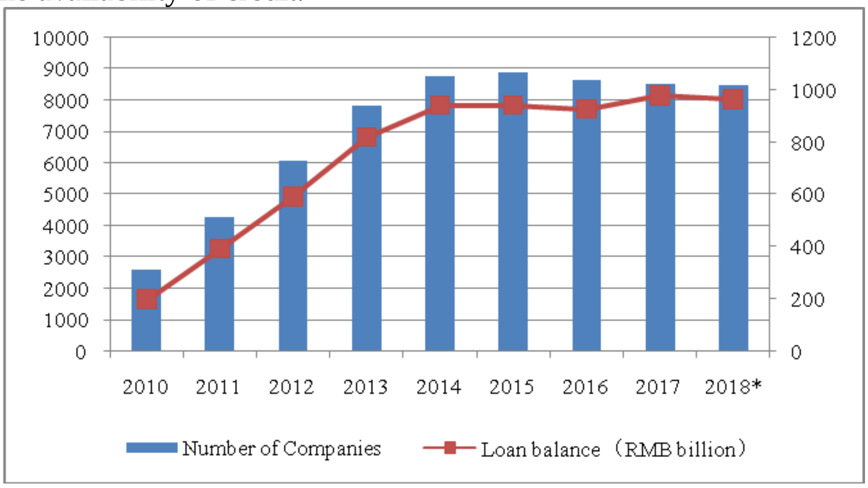
In the “Doing Business 2018” published by the World Bank, China’s global business environment is ranked 78th overall. The single indicator of “acquiring credit”, which measures the convenience of corporate financing, is ranked 68th. It should be noted that the World Bank surveys two central cities in China—Beijing and Shanghai. Obviously, China's business environment needs to be greatly improved, especially financial services.

3. The Predicament of Microcredit Development

3.1 The Criterion of Microcredit

According to the definition of Consultative Group to Assist the Poor, microfinance refers to the small and unsecured credit services provided to low-income groups and micro-enterprises. In order to further broaden the financial service channels, improve rural financial services and curb underground financial and illegal financing activities, in 2008, microcredit companies were formally recognized by the government. According to the “Guiding Opinions on Pilot Projects for Microcredit Companies” (CBRC, 2008, No.23), microcredit companies are established by natural persons, corporate legal persons and other social organizations. They do not absorb public deposits, and only operates microcredit. Unlike general financial institutions such as commercial banks, the loan interest rates of microcredit companies are mainly determined according to market principles. However, the central bank stipulates that the ceiling of their loan interest rate must not exceed 4 times the bank loan interest rate for the same period, and the floor is 0.9 times the benchmark interest rate of the loan.

The establishment and development of microcredit companies is a reform of the financial system of the Chinese government aimed at adapting to changes in the macroeconomic environment and improving the financial system. This measure can reduce the cost of changes in China's financial system. From the perspective of organizational properties, microcredit companies are still financial organizations based on market operations. Profit maximization is the fundamental requirement for them to achieve self-worth and sustainable development. From the perspective of policy requirements, the social goal of microcredit companies is to direct capital flows to farmers and small businesses; and to increase the availability of credit.



Notes: the data are from the People's Bank of China. *2018 is the first quarter data.

Fig. 1 Microcredit company number and loan balance

3.2 The Status of Microcredit

In May 2008, the People's Bank of China promulgated the "Guiding Opinions on Pilot Projects for Microcredit Companies". Since then, microcredit companies have experienced a period of rapid development. At the end of the first quarter of 2018, China had 8,471 microcredit companies. The loan balance was RMB 963 billion. However, judging from the data in recent years, the number of microcredit companies has decreased since 2015, and the loan balance has not been able to break through the mark of trillion. As shown in Figure 2.1.

3.3 The Trouble of Microcredit

In recent years, China's inclusive finance has made some progress in both institutional and practical aspects. As an important financing channel for small businesses, the development of microcredit companies has important implications for the promotion of inclusive finance. The birth of inclusive finance is precisely to solve or alleviate the problems caused by financial exclusion. In other words, it is precisely because of the existence of financial exclusion that promotes the continuous evolution and development of inclusive finance. From a theoretical point of view, due to the information asymmetry and the discontinuity curve of credit supply and demand, combined with the defects of the traditional bank credit approval model and the mortgage guarantee system, there is a deviation between the funding needs of small businesses and credit availability. As a result, the foundation for the survival of microcredit companies has been formed. However, the conflict of inclusive finance is that, in order to achieve equal opportunities under the current financing mechanism and to take care of small businesses, it is necessary to reduce the public’s return on investment; but if we want to increase the benefits of inclusive finance, the funds will be re-assembled into the mainstream of the formal financial system, non-inclusive issues will be more prominent [8].

3.3.1 Mission Drift Issues

The mainstream view of the international microfinance research believes that MFIs have double missions, that is, social goals for poverty alleviation and financial sustainability goals (Zhang & Hu, 20016). There is a certain degree of controversy among academic circles about whether MFI's financial goals and social goals are compatible or balanced.

BA Shusong et al. [9] believe that although the commercial microfinance business aims at profitability, it does provide financing services for a large number of low- and middle-income groups and microenterprises. More scholars believe that excessive pursuit of profitability will lead to the deviation of social performance goals and distort the original intention of microfinance. For example, Cull & Morduch[10]found that in order to maximize profits, the proportion of rich clients in MFIs will be higher; due to the natural profitability of commercial capital, the enthusiasm for loans to small businesses is not high[11].

SUN & ZHOU[12]statistically analyzed the data of microcredit companies in Jiangsu and Zhejiang provinces, and concluded that the average loan size of microcredit companies is large, the proportion of credit loans is low, and the loan interest rate exceeds the bearing capacity of target customers. In general, the financial services provided by microcredit companies in the two provinces have deviated from the original intention, and there has been a shift in mission. In fact, many microcredit companies now tend to behave as large, centralized and secured quasi-corporations.

As part of inclusive finance, microfinance should have the capacity for sustainable development. On the one hand, if inclusive finance is used as a philanthropic approach to poverty alleviation, it will become an unsustainable and unrepeatable financial service model based on its own strength. This is not due to inclusive finance[13]. On the other hand, microcredit should be accurately positioned, abandoning rentier thinking, turning into investor thinking, taking into account the interests of both financial supply and demand. If microcredit companies blindly pursue profit maximization, sooner or later they will still have to take the old path of usury, and fall into the quagmire of unordered private capital.

3.3.2 Credit Technology Issues

The credit characteristics of small businesses are small, high risk, and high cost. The credit constraints faced by small businesses in different life cycles are also different. The more newly established small businesses, the higher the credit risk. We know that there is an alternative relationship between collateral and risk when companies apply for loans. However, most small businesses lack a qualified collateral or guarantor.

The risks faced by microcredit companies in the lending process are mainly credit risk and liquidity risk. Since under the current system, the business of MFIs microcredit companies is limited to loans and cannot absorb deposits, the precondition for effectively providing financial services for small businesses is to control these two risks well. The key to controlling these two risks is to establish good credit repayment mechanism.

Since the 1990s, the credit loan repayment mechanism for microfinance has been continuously researched, setting up horizontal research frameworks, horizontal supervision, and dynamic incentive mechanisms. Microcredit exploits innovative contracts to motivate borrowers to work hard to repay and seek the possibility of resolving information asymmetries

Innovations in microfinance include joint liability, sequential financing, regular scheduled repayments, and group funds. The loan technology and mechanism used by microfinance institutions constitute the core competitiveness of microfinance in the credit repayment mechanism, which mitigates and reduces costs of adverse selection,, audit, and tactics defaults, and ultimately improve the efficiency of the loan.

However, the credit technology of a considerable number of small loan companies in China is still not mature enough, and the management system is relatively backward. Some companies' credit management is based on shareholder resources; most of the loans are one-off repayments, and there are few forms of high-frequency amortization. Even some companies lack the necessary post-lending management, resulting in high risk of credit funds.

4. How Small Businesses can Easier to Obtain Microcredit

4.1 The Enlightenment of Market Microstructure Theory

4.1.1 Brief Description of the Theory

The theory of financial market microstructure is mainly to study the mechanism of price formation in the process of trading of financial assets under certain market trading rules. This particular research object determines that the research methods and paths of financial market microstructure theory are very different from those of traditional economics and finance. This theory is mainly established and developed on the basis of information economics and game theory, and can better reflect the actual situation of market operations.

It is generally believed that the theory of market microstructure originated from the classical paper "The Cost of Transacting" published by Harold Demsetz in 1968. Starting from Demsetz, the investigation of financial asset prices has changed, focusing on the inherent micro-foundation of financial markets and focusing on the spread of financial assets. The important economic meaning of this transformation is that since prices are determined by specific economic entities and trading mechanisms, examining the formation of prices is the act of examining economic agents or trading mechanisms.

The key function of the trading mechanism is to convert the investor's potential supply and demand into realized transactions. In this conversion process, the process of price discovery, that is, the formation of market clearing prices is the key. Different trading mechanisms play different roles in the price discovery process.

4.1.2 The Enlightenment of Theory

Financial product transaction structure refers to the organization mode and a series of contractual arrangements between capital providers and enterprises and related stakeholders. Contracts involve the level and duration of income sharing, risk taking, behavior constraints, risk control and default disposal. To achieve a smooth financing, the financial product trading structure is not only a contract arrangement of the responsibility and risk management between the capital provider and the enterprise, but may also include other stakeholders (such as the government, the guarantee agency, the insurance, the industry association, and so on) and its organizational pattern[14].

Therefore, when designing the structure of microfinance and credit product trading for small businesses, we must consider how to construct the appropriate transaction structure based on the benefits and risks of these two types of companies, including the stakeholders involved, the resource capabilities of the transaction partners, participation, trading methods, role positioning and corresponding benefits and risks. Only when the transaction structure of credit products is complete, can it achieve smooth financing and provide a guarantee mechanism for credit repayment, and reduce the risk of default.

A good credit product transaction structure is a good business model that can enhance the value of transactions between microcredit companies and small businesses. Microcredit companies have clear trading goals, smooth credit mechanisms, and small businesses can increase credit availability and lower financing costs.

4.2 Business Model Innovation

4.2.1 Theoretical Basis

At present, there are many arguments about the innovation of business models in the world, and different disciplines have their own definitions, such as marketing perspectives and corporate strategic perspectives. This paper believes that business model innovation is a process based on value proposition, redesigning the operating model of the organization's resources and processes, and the profit model involving revenue and costs. Therefore, in essence, business model innovation is that companies follow new logic of behavior to create and offer value for stakeholders[15].

A business model describes the rationale of how an organization creates and captures value. It can best be described through nine basic building blocks that show the logic of how a company intends to make money. The nine blocks cover the three main areas of a business: strategy, customers & market, value creation[16]. The business model is like a blueprint for a strategy to be implemented through organizational structures, processes, and systems. As shown in Figure 4.1.

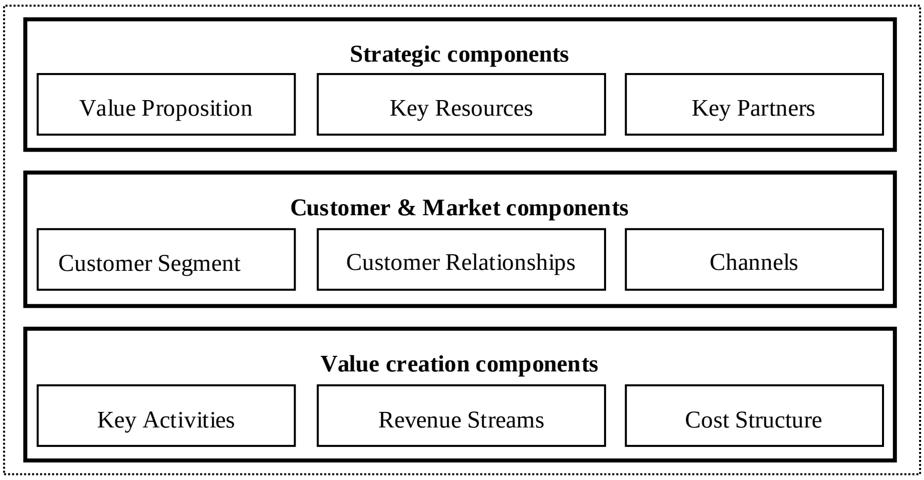


Fig. 2 Components of the Business Model

4.2.2 Business Practice

In the practice of microcredit, some financial institutions in China have designed several good credit product transaction structures for small businesses. The first example is the innovation of China Minsheng Bank. its "Two-circles and Two-chain" financing model for SMEs and private enterprises is characterized by the discovery of stakeholders, the establishment of a unique transaction structure, the design of corresponding contractual arrangements, the convergence of resources, sharing of benefits, thereby effectively preventing, reducing, sharing and compensating risks. "Two-circles" includes tangible business districts and intangible business districts. The former refers to the wholesale and retail markets, and the farmer's trade, while the latter refers to trade associations and regional chambers of commerce. "Two-chain" refers to supply chains and sales chains.

The second example is the innovation of the China Development Bank. The CDB has designed a "Three-platform and One association" model that combines professional guarantee institutions, mutual guarantee funds, and joint insurance technologies, promotes the establishment of a three-tier risk sharing and compensation mechanism, coordinates the participation and interests of relevant stakeholders, and Effectively solve the financing difficulties of many small businesses. Specifically, the "Three-platform and One association" consists of four organizations, namely the government management platform, financing platform, guarantee platform, and credit promotion association, to carry out credit business for the construction of SME projects. After years of operation, this model has achieved good economic and social benefits in many cities in China, such as Tianjin, Chifeng, Jiaozuo, and Liuyang.

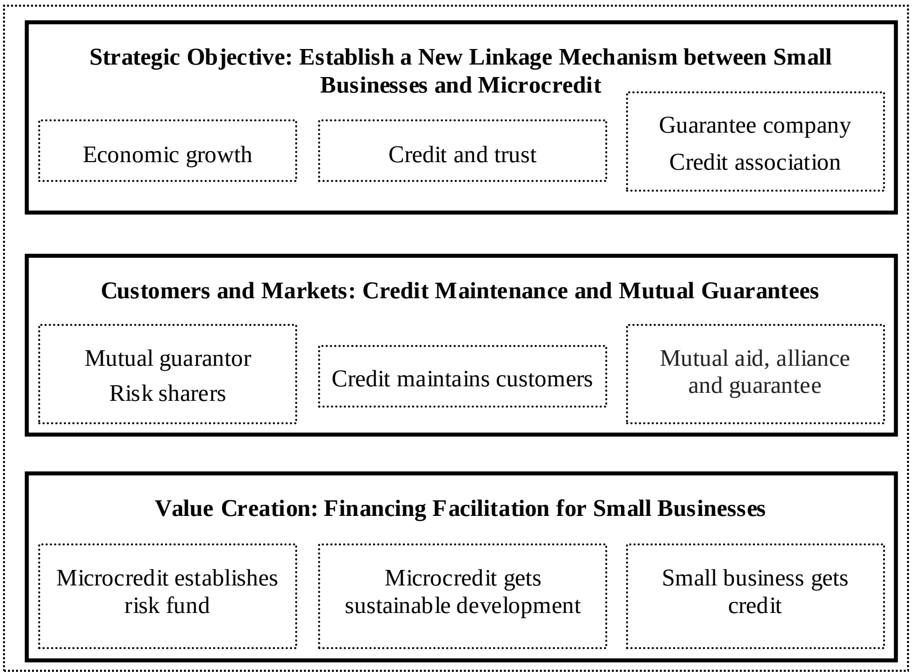


Fig. 3 A New Business Model of "Small Business & Microcredit"

Drawing on these business model innovations, we can design a new business model that promotes microfinance to better serve small and micro enterprises. As shown in Figure 4.2. The new model includes the following main elements:

The strategic goal or value proposition of the model is through the role of the government and credit promotion association to establish a smooth connection mechanism between small businesses and microcredit. Participants in the model include government, credit associations, guarantee companies, small businesses, and microcredit companies.

The model's customer and market maintenance are dependent on three funds, including mutual guarantee funds for small businesses, microcredit risk funds, and government support funds. Microcredit risk funds are jointly established by many microcredit companies to protect against credit risk.

The model creates value through three aspects, namely, improving the business environment of small businesses, increasing their credit availability, thereby promoting local economic growth and increasing employment, and microfinance obtaining the foundation for sustainable development.

The Credit Promotion Association is an important coordinating agency whose main function is credit rating, coordination relations and risk warning.

The core of the model is the establishment of a credit mechanism and a trust relationship between the lender and the borrower, which is more important for the operation of the market economy in China.

5. Conclusion

Credit availability is an important indicator of the doing business. Chinese small businesses have less access to credit and higher costs. This issue has always been highly concerned by the Chinese government and has introduced a large number of simulative policies, but the effect is not obvious. Of course, this is not only a unique phenomenon in China, but also a worldwide problem.

Microcredit (excluding formal financial institutions such as banks) has long been in the informal form of private capital. High interest rates and high risks are the main features of microcredit. Since 2008, the Chinese government has publicized and formalized private microfinance. Initially, microcredit had a period of rapid growth. However, in recent years, there have been many problems, such as a marked increase in industry withdrawals, nearly zero growth in loans, and a decline in profitability. The reason for these problems may be that the mission shift of microcredit companies and the backwardness of its credit technology. However, in essence, what is missing is an effective mechanism for small and micro enterprises to obtain microcredit.

Market microstructure theory is an insightful theory that analyzes asset pricing directly from trading mechanisms and product transaction structures. A good trading structure of financial products is a valuable business model that can effectively clear the market and bring about Pareto improvement. Drawing on the successful business model, this paper establishes a new model that can promote the microcredit for small businesses and microcredit for sustainable development. This business model focuses on the establishment of credit mechanisms, microcredit risk reserve funds, and mutual guarantee funds for small businesses.

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