

Research on Commercial Credit Financing of Rural Small and Medium-sized Enterprise

Questionnaire Analysis Based on Small and Medium-sized Enterprises in Gaochun and Lishui Counties

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Abstract—According to the data of field survey, this article deeply analyzes the commercial credit financing of rural small and medium-sized enterprises from the quantity of commercial credit financing, financing terms and duration, way of financing and the perception of financial credit financing. In the analysis process, it sets forth problems existing in the current commercial credit financing and puts forward corresponding policies and suggestions.

Keywords—rural small and medium-sized enterprises; commercial credit financing

I. INTRODUCTION

Countries in the world pay attention to the important status and role of small and medium-sized enterprises in economic development. [1] In China, rural small and medium-sized enterprises are not only the outcome of the development of market economy but also the basic power to fuel the continuous and stable development of marketization, industrialization and urbanization. It has dual meanings of development and reform in the national economy of China. Although the financial system of our country is not so developed, the economy develops very fast. Except for other factors, the way of financing outside the system is an important reason to support economic growth. Commercial credit refers to the credit provided for downstream firms when upstream firms promote products for downstream firms, they allow downstream firms to delay in payment for goods. For the party who obtains the commercial credit, commercial credit is a very important way of financing outside the system.^① With the development of society and economy, commercial credit widely exists in upstream and downstream firms and plays an important role in the existence and development of enterprises. This article researches on commercial credit financing of rural small and medium-sized enterprises and puts forward corresponding policies and suggestions, looking forward to better serving the rural small and medium-sized enterprises and promoting its development.

II. DATA SOURCES AND SAMPLE DESCRIPTION

The data of this article come from the field survey of more than 200 rural small and medium-sized enterprises in Gaochun and Lishui of Jiangsu by the research group in 2011 through the combination of random sampling and typical sampling. The reason why they choose the two places is that on one hand, the economic level and development situation of the two counties is in the average level of the economy of Jiangsu^②, and can represent the average level of rural small and medium-sized enterprises of Jiangsu province even the mid-eastern China; On the other hand, they consider the convenience and appropriation budget of the questionnaire survey.

The distribution of sample enterprises of the field survey is shown in “Table I”: choose Dongba Town, Gucheng Town and the Development Zone in Gaochun County; choose Yongyang Town, Honglan Town and the Development Zone in Lishui County. From the perspective of sample distribution, the rural small and medium-sized enterprises in the Development Zone occupy 35% of the whole sample. The rest is in towns. The distribution proportion is more close to the overall location distribution of enterprises in the two counties and can reflect the physical truth of the sample area.

^① The commercial credit financing in this article refers to the sum of “accounts payable” and “notes payable” on the financial statement.

^② According to Jiangsu Statistical Yearbook 2010, in the ranking of the added value of the second industry, proportion of the second industry in GDP and total taxes and profits of industrial enterprises above designated size, the total situation of industry in sample areas is in the average level of Jiangsu province and can represent other areas very well.

TABLE I. DISTRIBUTION OF SAMPLE ENTERPRISES

	Gaochun			Lishui		
Total	77			113		
Location	Development Zone	Dongba Town	Gucheng Town	Development Zone	Yongyang Town	Other Towns
Enterprise	40	21	16	28	24	61
Proportion(%)	21.05	11.05	8.42	14.74	12.63	32.11

^a Data source: calculation of the survey data.

The selection of rural small and medium-sized enterprises mainly bases on the “Small and Medium-sized Enterprise Type Dividing Standard Code” revised by the Ministry of Industry and Information, National Bureau of Statistics, Development and Reform Commission and the Ministry of Finance in 2011. The samples selected in the article are enterprises of industrial manufacturing industries, excluding enterprises accepting customers’ materials for processing, enterprises without independent purchasing and marketing and enterprises without complete financial statements of the recent years after the establishment of more than three years. In this survey, they visit 209 rural small and medium-sized enterprises with valid questionnaires of 190. The recovery rate of valid questionnaires is 90%.

III. OVERALL FINANCING SITUATION OF THE CURRENT RURAL SMALL AND MEDIUM-SIZED ENTERPRISES

To better obtain actual financing situation of rural small and medium-sized enterprises, the article researches by using DEM on the basis of induced inquiry information. The research results are shown in detail in “Fig. 1”: In the recent three years, among 190 rural small and medium-sized enterprises, there are 161 enterprises having borrowing demand, but only half of the enterprises can get full amount of the loans they need; about 25% of the enterprises can get part of the loans they need and the average loan amount obtained is 70% of the amount they apply for. This shows that the degree of financing restriction of rural small and medium-sized enterprises is high. The problem of loan-applying tension is still serious.

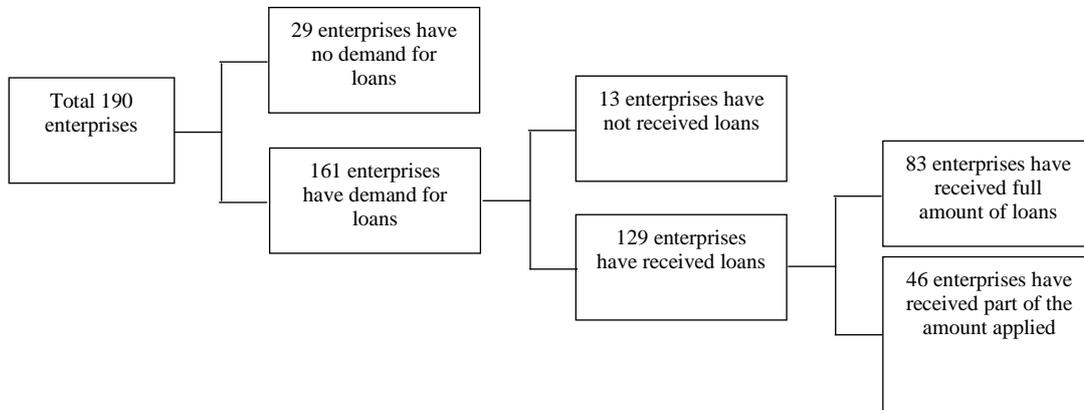


Fig. 1. Overall financing situation of rural small and medium-sized enterprises

For rural small and medium-sized enterprises, the circulating liabilities mainly consist of bank loan, commercial credit and other account payables. See details in “Table II”^①. During 2008 and 2010, the proportion occupied by capitals of the three parts in circulating liabilities slightly floats, maintaining in about 30%. Almost all the bank loans obtained by rural small and medium-sized enterprises are short-term loans. The commercial credits are mainly short-term stable. From the perspective of the quantity and quality of the capital, commercial credit is an important short-term way of financing for rural small and medium-sized enterprises. Especially for rural small and medium-sized enterprises that are difficult to

get bank loan, commercial credit helps to maintain normal and orderly operation of enterprises.

TABLE II. CIRCULATING LIABILITIES OF RURAL SMALL AND MEDIUM-SIZED ENTERPRISES IN RECENT THREE YEARS

Year	2010	2009	2008
Bank loan proportion(%)	37.73	33.32	29.68
Commercial credit proportion(%)	30.56	28.59	31.55
Other payables proportion(%)	29.83	34.48	34.38
Other proportions(%)	1.87	3.60	4.38

^b Data source: calculation of survey data

^① The proportions in Table II refer to the proportions occupied in circulating liabilities of enterprises.

IV. COMMERCIAL CREDIT FINANCING

A. Quantities of Commercial Credit Financing

1) *Commercial credit financing of enterprises with different ages:* This article classifies the sample enterprises according to small and medium-sized enterprise growth cycle theory put forward by Berger and Udell. [2] The average founding time of the sample enterprises is about seven years. They have stepped in “Middle Age”. The commercial credit of enterprises (“Table III”) shows inverted “U” shape. According to the survey data, the business capital in “Infancy Stage”

mainly comes from personal funds of the shareholders, occupying 78% of all the funds. It is difficult for them to get external sources of finance. Bank loan only occupies 3% of all the funds. After the enterprise enters into the “Teenager” stage, the commercial credit obtained reaches the peak. It shows they have gone through the “Infancy Stage”. The suppliers trust them more and are willing to increase the commercial credit for enterprises. After entering into the “Middle-aged and Old Period”, the commercial credit obtained by the enterprise is inclined to reduce. The main reason is that after the enterprises grow, the way to obtain external sources of funds is more diversified.

TABLE III. COMMERCIAL CREDIT FINANCING OF ENTERPRISES AT DIFFERENT AGES

Commercial credit financing of enterprises at Enterprise age	0-2 years (Infancy Stage)	3-4 years (Teenager Stage)	5-24 years (Middle Age)	25 years- (Old Age)	Ensemble average
Commercial credit proportion ^① (%)	18.66	20.99	18.05	16.62	18.68

^{c.} Data source: calculation of survey data

2) *Commercial credit financing of enterprises in different industries:* The commercial credit financing of rural small and medium-sized enterprises in different industries is different. The main reason is the industry characteristics. “Table IV” shows that the textile and garment enterprise gets the least commercial credit. It is because the main raw materials and cloth belong to commodities in short supply. The demand of products exceeds supply. The upstream manufacturers often require enterprises purchasing these raw materials to pay in

cash. Food enterprises get higher commercial credit. It is because the major clients of many food production enterprises are chain hypermarket and shopping malls. They can recoup funds after the sales cycle. It has a great demand for commercial credit. The architectural material industry has the longest term of commercial credit, about two months. It has close relationship with its long production cycle of this industry.

TABLE IV. COMMERCIAL CREDIT FINANCING OF ENTERPRISES IN DIFFERENT INDUSTRIES

Industry	Food	Textile and garment	Pharmaceutical chemicals	Machinery and electronics	Construction materials	Other industries	Ensemble average
Commercial credit proportion(%)	20.08	8.28	16.67	20.31	20.2	21.03	18.68
Commercial credit term(day)	32	42	40	48	61	38	45
Number of enterprise	14	15	39	83	16	23	190

^{a.} Data source: calculation of survey data

3) *Commercial credit financing of different scales of enterprises:* After rural small and medium-sized enterprises are divided according to the Small and Medium-sized Enterprise Type Dividing Standard Code revise in 2011, the quantity of commercial credit obtained by them has not showed obvious rules. The proportions occupied by the commercial credit obtained by rural small and medium-sized enterprises in the total assets are the same, namely 18.17% (“Table V”). This proportion of micro-enterprises is far below that of the small and medium-sized enterprises. It may be because most micro-enterprises are very young. They cannot match with the information of suppliers very well. Suppliers are not willing to provide commercial credit for these enterprises. Another reason is that the division of enterprises in this article according to different scales combines enterprises in different industries. If they are in the same industry, enterprises with different scales have comparability. But if the

enterprises are in different industries, then enterprises with different scales are not comparable.

TABLE V. COMMERCIAL CREDIT FINANCING OF DIFFERENT SCALES OF ENTERPRISES

Enterprise scale	Medium-sized enterprise	Small enterprise	Micro-enterprise
Commercial credit proportion(%)	18.17	18.17	11.87
Number of enterprise	10	128	52

^{a.} Data source: calculation of survey data

^① “Commercial credit proportion” mentioned here and below refers to the proportion occupied by commercial credit financing in the total assets. It will not be explained below.

B. Terms and Duration of Commercial Credit Financing

In foreign countries, commercial credit terms are generally divided into simple terms and two parts terms. The most common simple term is “net 30”^①; the most common two parts term is “2/10 net 30”^②. According to many times of survey, the author finds Chinese rural small and medium-sized enterprises widely use the simple terms instead of two parts terms, which conform to the research conclusions of Du Qingjun^③. [3] Another credit term provided by Chinese rural small and medium-sized enterprises is as follows (hereinafter referred to as “favorable term”: after the goods reach the designated place, if the client pays immediately, the enterprise will give discount of the payment for goods, or the client should pay off the money without any discount. Among 190 enterprises, there are 171 enterprises having commercial credit financing. There are 38 enterprises getting favorable term of commercial credit, with average discount rate of 3.3%.

The payment duration of rural small and medium-sized enterprises is 45 days. According to the “Table VI”, the duration for most enterprises to call in the payment for goods is within 60 days. These enterprises account for 87.1% of the total number of enterprises. The duration of accounts payable of 67.8% of enterprises is within 30 days. The average duration of accounts payable is shorter. It shows the commercial credit operates more smoothly in rural small and medium-sized enterprises.

TABLE VI. RURAL SMALL AND MEDIUM-SIZED ENTERPRISE COMMERCIAL CREDIT FINANCING DURATION

Duration(day)	Number of enterprise	Proportion(%)
<30 days	116	67.8
31-60 days	33	19.3
>60 days	22	12.9

^a. Data source: calculation of survey data

C. Ways of Commercial Credit Financing

1) *Clearing form of commercial credit financing:* There are four common clearing forms of commercial credit financing: regular clearing, clearing after the dealing of each batch of products, clearing based on the amount of funds and clearing after reaching certain amount. There are 46.20% of sample enterprises using regular clearing. The application of this way is the most frequent because it helps buyers and

^① “net 30” means the payment for goods should be paid off within 30 days after the reception of goods. The discount will not be enjoyed if the payment is paid during the 30 days. If the payment is paid after 30 days, it means the purchaser breaks the contract and needs to pay a fine.

^② “2/10 net 30” means if the purchaser with delayed payment pays within 10 days, he can enjoy a discount of 2%. If the purchaser pays within 10 to 30 days, he will not enjoy the discount and shall pay off the money within 30 days. If he pays the money after 30 days, it means he breaks the contract and needs to pay a fine.

^③ According to the survey of Du Qingjun (2004), although non state-owned enterprises in China widely use commercial credit, the commercial credit terms provided by the enterprise are single and few enterprises will provide commercial credit of two parts. The survey result of Yinbin in Sichuan in 2003 shows among 112 enterprises, there are only five enterprises providing two parts commercial credit terms.

sellers to predict the fund flow within a period of time in the future very well, so as to carry out the procurement and sales required by normal operation of enterprises. Besides, clearing after the dealing of each batch of products is also very extensive. There are 29.82% of sample enterprises using this way. It refers to “batches of goods follow each other”. That is to say, the next deal begins after the payment for goods of the last time is paid off. It can reduce the risk that the sellers cannot call in the payment in time. Even though the sellers temporarily or finally cannot call in the payment, they only lose the payment of one batch of goods. Compared with the above two clearing forms, the clearing based on the amount of funds is more random.

2) *Dispose of default behavior in commercial credit financing:* According to the survey, when rural small and medium-sized enterprises purchase raw materials from the upstream suppliers, short period of default is very common. Among sample enterprises with commercial credit financing, there are only 11.11% of enterprises that do not pay to the upstream suppliers in arrears. When it happens, the suppliers often intensify the collection and may stop the supply of the next batch of goods, but they seldom use legal means. There are only 2.34% of enterprises that bring it into court. The main reason is that the articles of law in China regarding to this default behavior is not perfect and the cost to bring it into court is too high. Moreover, through the ages, China is in the society of “human feelings”. If the upstream suppliers have alternative, they will not solve the problems through legal means.

D. Perception of Commercial Credit Financing

Among sample enterprises that use commercial credit financing to purchase raw materials, there are 65% of enterprises that think it is an important way of financing and 34.5% of enterprises that do not think it is an important way of financing. It mainly bases on the educational level and cognitive competence of informants (enterprise senior managers). Generally speaking, except for formal financial institution loan, informal finance is regarded as an important financing channel by enterprise senior managers. However, because the acquisition of commercial credit means enterprises reduce capital expenditure through purchasing raw materials on credit instead of directly getting access to finance, it is difficult for some senior managers to realize it. It shows although commercial credit objectively makes rural small and medium-sized enterprises increase financing channels, its immense effect may be underestimated even neglected. To further exert the immense effect of commercial credit, it needs a progressive process of proper guidance.

Furthermore, this article divides the interpretation of commercial credit financing cost^④ by enterprise senior managers into four aspects: (1) no cost; (2) have cost but lower than the bank rate; (3) have cost but higher than the bank rate; (4) have cost and near to the rate of bank loans. 37% of rural small and medium-sized enterprises think the commercial

^④ The cost here mainly means the suppliers reckon the interest of deferred payment from the purchaser in the price contract to increase the price of goods in disguised form, or directly require the purchaser to pay the interest in credit period.

credit obtained by them does not have cost. 73% of enterprises think it has cost. Only 12% of enterprises think the price of commercial credit financing is higher than the rate of bank loan. It goes against the opinion of foreign scholars that the price of commercial credit is much higher than bank credit. [4][5][6] It has inseparable relationship with the opinion mentioned above that there are differences between the commercial credit terms of Chinese rural small and medium-sized enterprises and foreign enterprises. The use-cost of commercial credit calculated by foreign scholars refers to the hidden cost (or called opportunity cost)^① calculated according to the difference between choosing to enjoy the discount and neglecting the discount in the two parts terms. It is different from the actual cost of funds of rural small and medium-sized enterprises calculated in this article. Generally speaking, only few rural small and medium-sized enterprises will give clear indication of the interest rate in the contract signed by both sides when the purchaser makes deferred payment.

V. CONCLUSIONS AND ENLIGHTENMENT

Because of lacking qualified collateral security, it is difficult for rural small and medium-sized enterprises to loan. As a form of informal finance, the commercial credit can effectively make up for the deficiency of financial market development on financing function. It is important for the development of small and medium-sized enterprises. This article researches the commercial credit financing of rural small and medium-sized enterprises from the quantity of commercial credit financing, financing terms and duration, ways of financing as well as perception of commercial credit financing, reaching the following conclusions: (1) in "Infancy Stage" when it is most difficult for rural small and medium-sized enterprises to get external funds, the quantity of commercial credit financing is low; (2) because of the differences of industry characteristics, rural small and medium-sized enterprises of different enterprises have different commercial credit financing; (3) because laws and regulations are not perfect, the dispose of default behavior in commercial credit financing cannot effectively guarantee the rights of creditor; (4) Enterprise senior managers underestimate the effect of commercial credit financing.

VI. CONCLUSION

On the basis of the above research, the policy suggestions are showed as follows:

Firstly, bring the commercial credit into the credit system and protect the rights of creditor on legislation. It helps to protect the rights of creditor through bringing the commercial

^① Cost of giving up cash discount

$$\frac{\text{Cash discount rate}}{1 - \text{Cash discount rate}} * \frac{360}{\text{Credit period} - \text{Cash discount period}} *$$
 (Single interest)
 or Cost of giving up cash discount =

$$\frac{\text{Cash discount rate}}{1 - \text{Cash discount rate}} * \frac{360}{\text{Credit period} - \text{Cash discount period}}$$
 (Compound interest)

credit into the credit system to record the trade information and establishing reasonable credit memory period of negative records of enterprises. [7] Refer to the legislation of developed countries and actual situation of rural small and medium-sized enterprises in China, set up matched punishment system of the breach of contract to ensure normal operation of the commercial credit.

Secondly, promote the shifting mechanism of commercial credit and bank credit. Shifting mechanisms such as "commercial bill discounting" and "pledge of accounts receivable" can make commercial credit suppliers call in the funds provided for rural small and medium-sized enterprises as soon as possible. It greatly improves the enthusiasm of suppliers to provide commercial credit and helps to increase commercial credit financing of rural small and medium-sized enterprises.

Thirdly, strengthen industrial cluster building. Enterprises in the cluster center on the same or similar industry to develop, with close geographical location and high degree of dependence. It can reduce the adverse selection and moral hazard brought by information asymmetry in commercial credit financing and helps the mutual supervision of them. In addition, stable supply and sales cooperative relationship is easy to form in the cluster, to further promote the development of commercial credit.

Fourthly, regularly or timelessly hold meetings of financing guidance for rural small and medium-sized enterprises. Introduce the commercial credit financing mechanism in detail and deepen the cognition of rural small and medium-sized enterprises for commercial credit financing.

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