

Research on the development and risk control of e-commerce finance in China

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Abstract : Information asymmetry and poor financial conditions caused the financing problems of small and medium enterprises (SMEs) in china. The produce and development of e-commerce finance reduced the information asymmetry between supply and demand of capitals, and offer the chance to SMEs active in e-commerce platform the chance to get loans in low interest rates. In this article we investigated the development of e-commerce, summed up the background and development of e-commerce finance, the evidence indicates that e-commerce and e-commerce finance play an important role in China's economic; then, we compared the similarities and differences of finance transactions between different platform, we found that the characteristics of e-commerce finance related to the e-commerce business model; finally, risk control of e-commerce finance was discussed in later, a conclusion was made that technical risk, operating risk and reputation risk, the specific risk of e-commerce finance should be controlled strictly.

Keywords: *E-commerce, E-commerce finance, SMEs, risk control*

I. INTRODUCTION

Enterprises in growth period with the lower information transparency, or more difficult to deal with business information, will face higher lending rates, less chance to get loans, compared with companies with good financial condition and high degree of transparency. E-commerce platforms offer the chance to such companies to get loans in low interest rates, by use of analysis of financial records, transaction records and cash flow information, etc, generated by the business activity in e-commerce platform to increase the knowledge of the banks to loan applier, reduce information asymmetry.

E-commerce finance refers to the provision of financial services and markets by use of e-commerce platforms collection and procession and the configuration

process of financial assets. Work as the key place on e-commerce transactions, the platforms is easy to obtain information such as capital, logistics, and merchandise of small and medium enterprises (SMEs). The influence of information asymmetry is limited with transaction records in e-commerce platform act as complements or substitutes, by contrast, the opportunity costs of loan defaults are increased. As a result, automatically selecting information can be realized in e-commerce model, which also decrease the costs of obsession. It is worth noticing that only the SMEs or individuals who active in e-commerce eco-system have the chance to acquire e-commerce loan.

II. E-COMMERCE AND E-COMMERCE FINANCE

A. The Current Situation of E-commerce

The data of China E-commerce Research Center shows that: as of December 2013, the amount of e-commerce transaction in China up to RMB10.2 trillion, among them, the turnover of B2B (business to business) up to RMB8.2 trillion, online retail market to RMB1.8851 trillion. The scale of business users of third-party e-commerce platform (including the same enterprise registered in different platform but not including the repeated enterprise in the same platform) has topped 19 million. The data of e-commerce transactions in China are showed in Figure1 and Figure2.

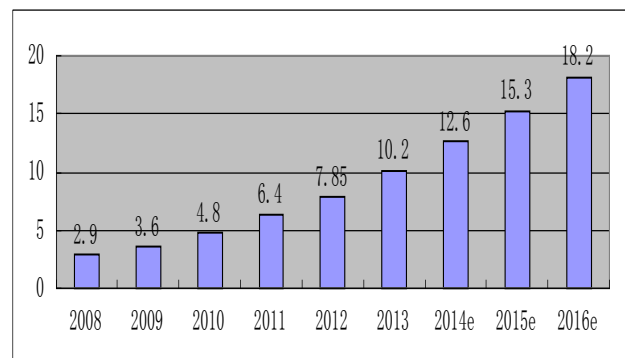


Figure 1. the growth transaction scale chart

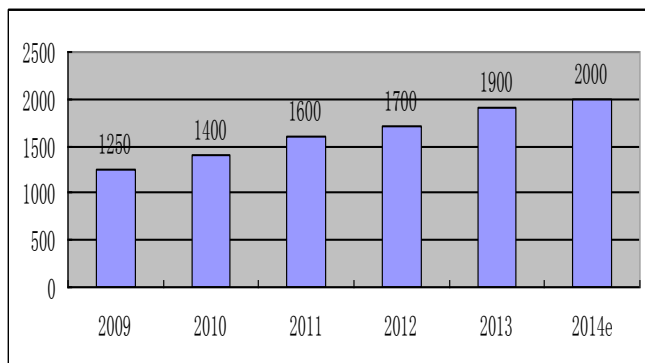


Figure 2. Amount of business users

Source from: China E-commerce Research Center

The rapid development of e-commerce further promote the economic growth and influence the live of people, e-commerce will be widely used in various fields

such as production, consumption and all aspects of social life. A new perspective of e-commerce service industry is forming, which will become a new growth point of national economy in future. Therefore, solving the problem of SMEs activity in e-commerce financing becomes a pressing task.

B. E-commerce Finance

With the rapid development of e-commerce, the network finance based on e-commerce platform was rapidly produced and spread in some large e-commerce platform.

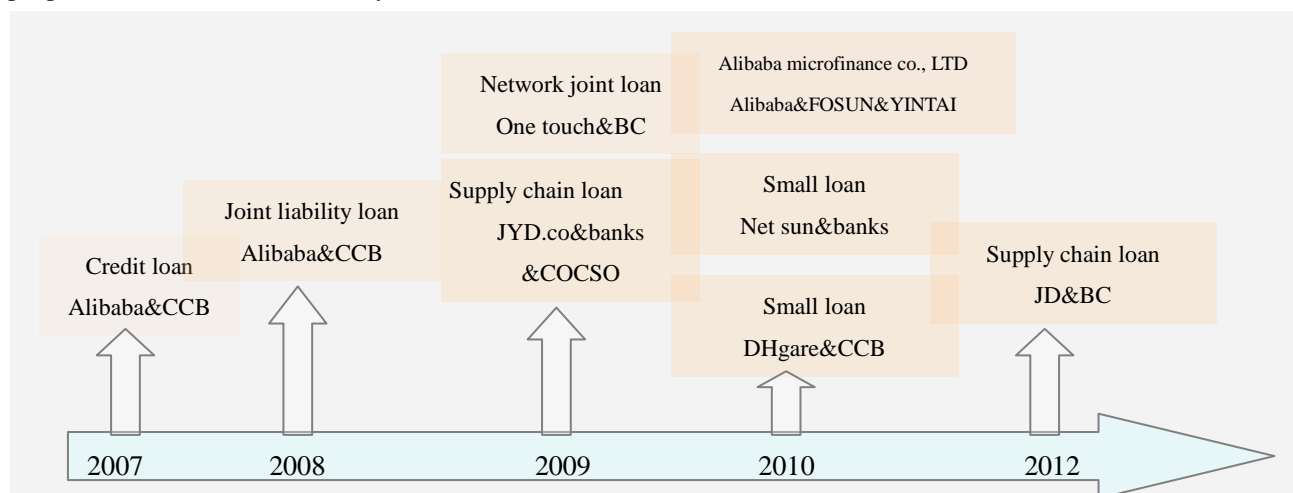


Figure 3. The development of e-commerce finance

Source from: Enfodesk

Cooperation with banks or e-finance companies is the main way of e-commerce finance model, such as HC360, Net sun, DHgate and so on. Besides, there are also the small loan companies invested by e-commerce platform, like Alibaba Microfinance Company, which not only solve the problem of financing of SMEs, also revitalize the idle fund of e-commerce platform. We investigated the case of e-commerce finance and summed up the four basic characteristics as follows: first,

candidates must be the customer of e-commerce platform; secondly, credit level reflects the transaction records, financial conditions and cash flows of SMEs on the platform; again, financial statement like tax return also needed in most cases; finally, interest rate always higher than traditional finance products of banks. Meanwhile, the main business processes are handled on the internet, such as loan application, approval, entertain, etc.

TABLE 1. The Comparison of E-commerce Finance in Different Platform

Platform	Alibaba	Net sun	DH gate	Ali One Touch	JYD
Characteristic of platform	Retail, Wholesale	Industry alliance	Small foreign trade platform	Foreign trade platform	Commodity trading platform
Customer	Members of China Supplier or CXT	Identified members of Net sun	Identified enterprises of DH gate	Foreign trade enterprise	Commodity traders
Partner	—	ICBC, BC, etc.	CCB	BC, SINOSURE	CCB, COCSO
Way of cooperate	Operated by Alibaba only, assess loan application via internet computer	Net sun offer the transaction and credit records to banks, meanwhile, offer loan to SMEs.	DH gate offer the transaction and credit records to banks, banks assess the applications and offer loan to SMEs.	BC offer capitals, Ali One Touch assess the applications, capitals, JYD and COCSO monitor the security of loan.	Banks assess loan applications and offer capitals, JYD and COCSO monitor the security of loan.
Scope of loan	20000-100000000	50000-500000000	No upper limit	10000-100000000	Over 500000000
Interest rate	18.25%-21.9%	6.5%-13.3%	6.52%	14.6%-20.08%	8%-9%

Source from: Guotai Junan Securities

E-commerce decreases the difficulties of delivery of information between banks and SMEs, which is conducive to less enterprises' financing costs and promote the development of e-commerce platform. Compared with the traditional financial intermediary finance, e-commerce finance reduces the financing costs; improve the credit level of borrowers by taking into account the financial records, transaction records and cash flow information, etc. according to Alibaba Corporation, the average audit cost of Alibaba to small credit loan is RMB 2.3, which is far below the cost of banks to each loan application.

III . RISK CONTROL OF E-COMMERCE

A. The Process of E-commerce Finance

As to risk control of e-commerce finance, the key lies in monitoring the trading process because the financial productions are designed based on the characteristics of e-commerce trading. There are two important parts in e-commerce finance trading, trading platform and payment platform. Banks obtain the trading information through trading platform and monitor the information of capitals via payment platform; besides, logistics information also be monitored in e-commerce supply chain finance, such as JYD supply chain finance. The process of e-commerce finance in general as follow.

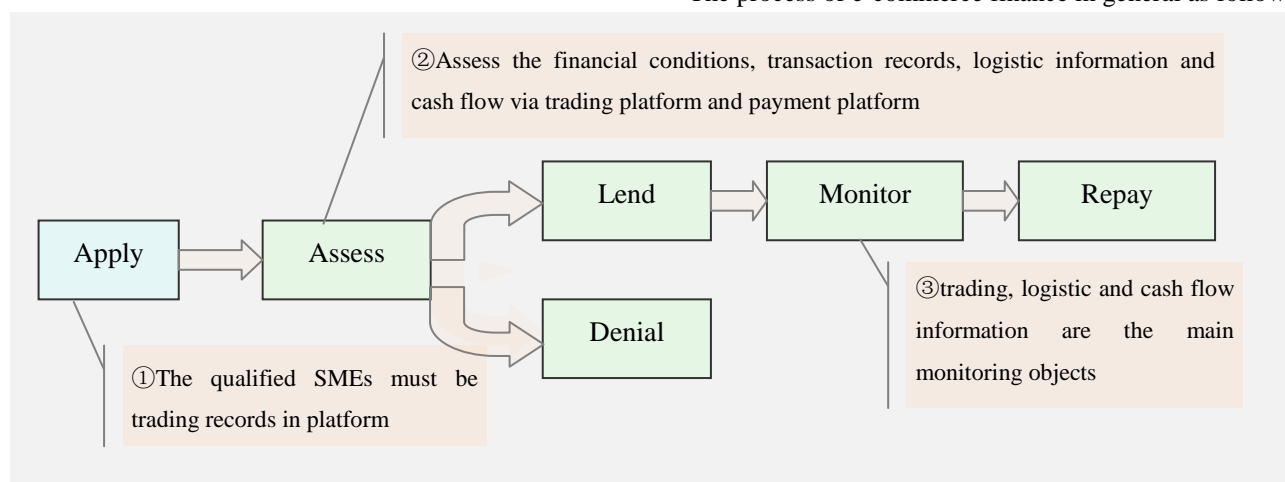


Figure 4. The process of e-commerce finance in general

Just as our investigation, only the SMEs which trading in the e-commerce platform of purchasing the

services of platform have the chance to get loans through platform. This is the first step of risk control of e-commerce finance, which limits the customer scope into familiar industry or SMEs. Then, banks or platform assess the financial conditions, transaction records, logistic information and cash flow information based on specific rule, and evaluate the credit level of SMEs and make lending decisions. Finally, platform will monitor the related information of SMEs get loans and take measures timely.

B. Analysis of Risks in E-commerce Finance

Many defects needed to solve actively in the development of China's e-commerce finance. Liquidity risk, interest rate risk, market risk just like traditional financial institutions, there are also specific risks, such as technical risk, business risk, law risk, etc, existing only in e-commerce finance model. We analyzed the e-commerce finance specific risks and ways of regulation as follows.

1.The security risk in technical

The produce and development of e-commerce finance relay on the open computer network, both business transaction and risk control are handled by computer system. Thereby, e-commerce finance is influenced easily by the technical problem such as system downtime, storage devices are destroyed, or hacker attacks, the rights of players are also damaged.

2.The operating risk

Operating risk refers to the risk of loss which

directly or indirectly caused by imperfect or defective operating process, personal, systems or external. The e-commerce finance is an innovative product, so that the operating risk may come from the negligence because of unfamiliar with it, the product defects of design, or the system vulnerabilities.

3.The reputation risk

The transactions can be achieved via internet without meeting; the convenience also causes the risk. Besides, the e-commerce platform are often controlled by non-financial firms, free from the financial regulatory, it is difficult for traders to verify the authenticity of identity and transaction information. Meanwhile, imperfect social credit system tends to cause adverse selection and moral hazard, and cause the capitals security problems. The problems in e-commerce finance will cause huge losses to the user and serious adverse effects on society, which forms the reputational risks, decrease the public confidence in e-commerce finance.

C. Process of Risk Control in E-commerce Finance

As we analysis previous, the selection of customers, accession of applications and monitoring after lending consists of the process of risk control in e-commerce finance, we discussed the monitor process after lending in this part and draw the process chart as follow.

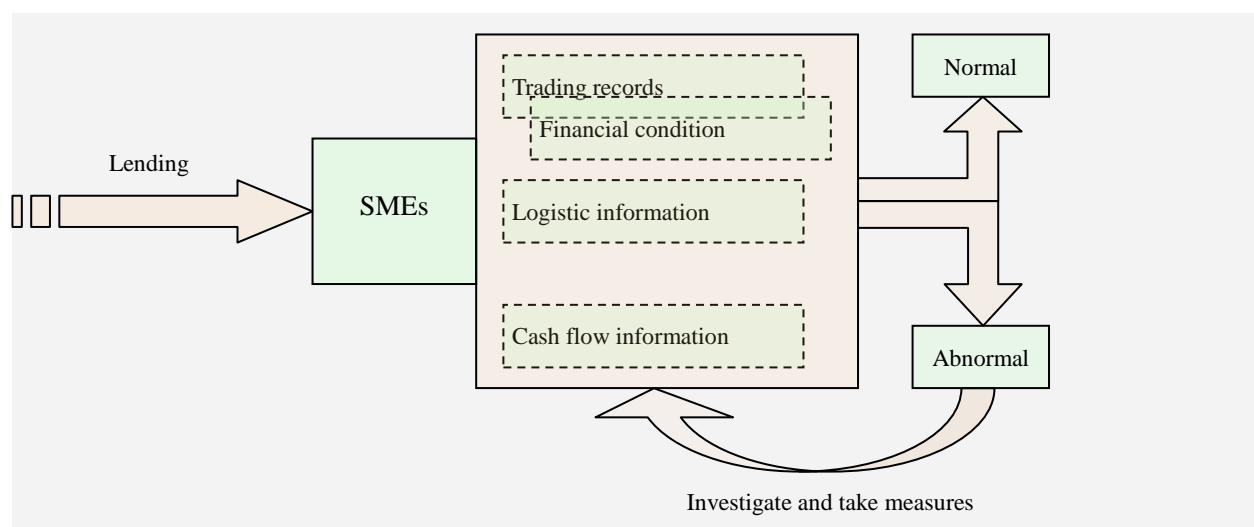


Figure 5. The process of risk control in e-commerce finance

We can infer from above that information of SMEs is the key of risk control in e-commerce finance, and an

e-commerce platform which provides more comprehensive services is conducive to obtain

information and ensure cash security. Thereby, e-commerce platform should also develop value-added services and promote the influence to SMEs.

IV. CONCLUSION

E-commerce and e-commerce finance play an important role in China's economic, the produce and development of e-commerce finance reduced the information asymmetry between supply and demand of capitals, and offer the chance to SMEs active in e-commerce platform the chance to get loans in low interest rates and the characteristics of e-commerce finance related to the e-commerce business model. E-commerce platform should develop value-added services and promote the influence to SMEs, which is good for obtaining information with fewer costs and controlling financing risk more effective.

ACKNOWLEDGEMENTS

supported by "Outstanding young teacher training program of NCUT—The innovation and risk control of e-finance in China"

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