

The Cause and Prevention of the E-commerce Credit Risk *

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Abstract: It is definite that e-commerce has entered into another prosperous time since the last stagnancy of internet industry one decade ago. However, the problem of credit risk is becoming more and more remarkable with the rapid growth of e-commerce in China. Thus it's really meaningful and interesting for the authors to conduct this analysis. After reviewing the status quo of the research on risk of e-commerce in China and overseas, the conception and connotation of the credit risk of e-commerce have been defined and scrutinized, as well its influencing factors have been detected and analyzed. Consequently, corresponding measures to overcome the risk has been presented.

Key words: E-commerce; Credit risk; Risk prevention

1 Introduction

The credit risk of e-commerce appeared with credit problems, and it's a major obstacle affecting the development of e-commerce. Mayer^[1] (2000) argued that the Credit risk of e-commerce mainly comes from the space-time separation caused by the Internet. Some other scholars discussed some effect factors on credit risk of e-commerces, such as product factors^[2] (Resnick et al. 2000), trading partners^[3] (Tan, Y and Thoen, w., 2000) and the experience of being cheated^[4] (Weber & Milliman, 1997) and so on. In the credit risk of e-commerce classification, Nena Lim^[5] (2003) proposed four dimensions: perception technology risk, perception seller risk, perception product risk and Personal psychological risk. Ding & Wang^[6] (2004) reckoned that credit risk of e-commerce is caused by the virtualization and the particularity of the network and the uncomprehending of main credit information for each other. This definition reveals the major source of credit risk of e-commerce - the virtualization of the network and the asymmetry of transaction information. As to credit risk factors, Wei^[7] (2003) believed that credit risk of e-commerce is a complex system, including technical factors, market factors, management factors, cultural factors, trading factors and personal factors, and further pointed out that credit risk of e-commerce system has the characteristics of the super-cycle system, such as self-stability and self-optimization.

We can see from above that scholars focused on individual factors, ignoring the properties and their interactions among affecting factors when they study the affecting factors of credit risk of e-commerce. This paper focuses on the system analysis of affecting factors of credit risk of e-commerce, and proposes appropriate preventive measures.

2 Credit Risk of E-commerce and Its Influencing Factors

2.1 The definition of credit risk of e-commerce

2.1.1 The meaning of credit

In the 79 edition of "Citing", Credit is to comply with its promise, as some practice, to obtain the confidence of others. This definition has the following two steps: ① abide by your agreement with other people, and with the practical action to perform the contract reflects compliance with the agreement; ② you made other people trust you when you fulfill the promise with practical actions, which means you are a credible person to others. In short, the composition of credit is faith and trust. Figure 1 shows a benign cycle of credit, when the two sides establish a trust relationship, you can quickly reach a deal as the same, if trust is damaged, the repair work will be very difficult.

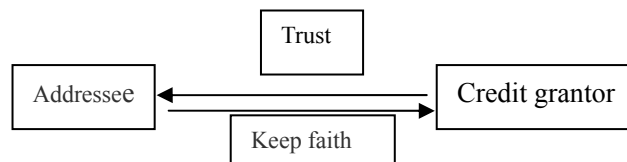


Figure 1 Trust Relationship

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In any transaction, the information asymmetry is a main factor of impeding deal, and mutual trust is an effective way to solve this problem, but the mutual trust is the basis of good credit among them. Therefore, e-commerce is a credit economy in its real sense.

"The Prisoner's Dilemma" theory points that they will consider the future long-term interests, not to deceive each other for short-term interest, so that the two sides can establish long-term cooperation relations, if the game between both parties not once but several times. In e-commerce, there are many participants, including buyers, sellers, financial services institutions, credit certification agency, logistics services companies, etc., and all participants must participate in the transaction. Thus, a transaction involves a number of e-commerce players and need mutual trust among all participants in order to make the successful completion of the transaction. And Everyone in order to avoid the risk caused by credit they will take multi-information investigation, credit certification, quality inspection, contract and other means, they are time-consuming and consumption wealth, which will influencing the progress of the transaction.

2.1.2 The meaning of credit risk of e-commerce

According to domestic and foreign scholars, this paper argues that credit risk of e-commerce is the possibility of failing to perform transaction agreed and bringing losses to the transaction participants, under the interaction factors of the macro and micro factors. Among them, the macro factors including: social ethics, laws and regulations, information technology security, etc.; micro-factors including: buyers, sellers, logistics sectors, financial services institutions, platform operators and so on loss including: monetary loss, product loss, human loss, time loss, reputation loss and future profits loss, etc.; Risk refers to the possibility of losses, the cause of this risk are various.

Credit risk has been enlarged in the virtual trading environment. In traditional transactions, buyers and sellers increase trust in trading through dealing something in the physical environment, such as negotiating face to face, inspecting goods, etc. However, the dehumanization, non face to face, virtuality and other characteristics of network environment make direct observation to products and transaction object very difficult, which makes trust greatly diminished. The specific characteristics of Internet, such as being open, sharing, and being easy to be hacked, lead to consumers' unwilling to participate in business activities which need their information published on the Internet, because they fear of leakage or theft of private information, which also led to sales are not easily believed by buyers online. Because of network environment, the establishment of trust in e-commerce activities is more difficult than in traditional environment. In this case, the network credit risk has come into being.

2.2 Affecting factors of credit risk of e-commerce formation

2.2.1 Subjective factors

(1) The trading participants' awareness level of credit

Awareness of the credit is reflected in the participants' attention to credit, and it also the embodiment of values and ethics. People's ideas dominated their behavior to a large extent, when people understanding the importance of credit from the concept, they will show their attention to credit through their behaviors and will follow the transaction contracts. If the transaction participants felt that the credit is not important, or no sense of credit, he will be the direct creator of credit risk.

(2) Cooperate willingness

Cooperate willingness depends on three aspects: ① Their own reasons, whether there is a long-term vision, whether there is a long-term cooperation program; ② Partner reasons, whether the partner has long-term cooperation intention, whether the partner has the ability to carry long-term cooperation, meet our needs and provide timely solutions; ③ Environment, whether there are judicial system, trading platforms in order to guarantee a long-term security between each other. There are many factors influencing cooperate willingness, and cooperate willingness has a direct impact on the two sides behaviors in the transaction process.

2.2.2 Objective factors

(1) The incomplete and asymmetry information

Incomplete information means that traders acquire information is not complete and there is information missing phenomenon, for example, the seller doesn't understand the buyer's past transaction records, especially credit records, In this way they have to rely on information provided by the current contract to reduce the risk perception of the seller to ensure the successful conclusion of the transaction, while to the sellers, there is still a psychological risk. Of course, in a transaction process, there is a more or less credit risk to each participant.

Information asymmetry refers to some trading participants have information, while other participants are not have the information. Information asymmetry is inevitable, because some information about the transaction is asymmetric in the distribution of the two sides in the transaction,

such as product cost. The parties relative position is different in the possession of information, resulting in credit risk distribute uneven between the parties in the transaction, generally speaking, the buyer in a weak position in possession of information, may be have to face more risk. The objective causes of incomplete and asymmetric information case, the information owner will have a greater risk, if he is unable to screen information more effectively and make right decisions.

(2) Information technology

Whether e-commerce trading platform can provide adequate security technology to protect transactions proceed smoothly, and whether identify and monitor network fraud effectively, is another objective factors affecting the credit. In this virtual environment, in order to obtain more trust, it requires participants to provide more personal information, especially in the delivery of funds, will involve personal bank card password security. According to the "2009 Chinese Internet users of network information security survey" showed that in 2009, 52% of Internet users encountered network security incidents, of which 2.5% of the users' password and account bank card were stolen, although the ratio is not high, but the property damage is greatest, and will affect people's confidence in the network transaction. Thus, cryptography, digital authentication technology and the ability to prevent hacker attacks will affect the people's trust level of this virtual platform.

(3) Legal regulations

When these mandatory arms which ensure trader's fundamental rights can't protect their basic rights well, they will naturally perceive t risks of Exchange. Once the trade disputes happen, if no corresponding laws safeguard the rights of the parties, they will naturally produce panic and anger, this situation results in termination of related trading activity.

Over the last decade, Construction of corresponding laws and regulations failed to keep up with the rapid development of e-commerce in china. Most cases rely on the corresponding agreement formulated by platform operators to constrain the behavior of other participants in the transaction, after all it isn't a law, it can't play a role of warning and deterrent in punishment for offenders because of lack of enforcement. Loopholes in laws and regulations make the possibility of risk arising increase, resulting in more of a concern when people make online transactions. To make the development of e-commerce more healthful and more quickly, it must be supported by laws and regulations.

(4)The lack of social ethics

After reforming and opening up, with the rapid economic development, the social and moral decline seriously, especially in a market economy, credit problems are particularly prominent. After the introduction of e-commerce, the loss caused by the problem is incalculable. The virtual of network, the limitations of verify technical and the difficulty of accountability become the hotbed for illegal activities. All sorts of dishonest fraud not only result in the victim's loss of property and time, but also make victims lost confidence in such transactions. Therefore, the lack of social ethics is also a produce-risk factor for participants.

3 The Construction of Credit System and Measures of Prevention

3.1Constuction of credit system

In China the construction of credit system is still in its infancy, and in the beginning of the century Shanghai and Shenzhen began the construction of credit system, and a corresponding legislation is enacted . Shenzhen has been involved in a nationwide credit system. However, due to complex of credit information collection and processing and its high cost, but now faced with the duplication and waste of resources situation, coupled with the urgent need for economic development, must be integrated with its own characteristics, to create a credit system with Chinese characteristics ^[1].

Credit construction has been for nearly a century in foreign countries, the Systems have matured and there are three models: the European model, American model and Japan model. European model, also was known as government-led model, in which the central bank or other financial regulatory authorities to establish a central credit registration system as the main personal credit management. It is mainly funded by the state central credit registration system, the integrity of the database to establish a nationwide network of ownership belong to the state, its major supplier of commercial banking products for internal use. The mandatory of government ensure that the data is comprehensive, true and accurate, but there will be the lack of competition and easily lost vitality. American model is market-driven credit system mode, the integrity of the company to establish and operate their own personal integrity of the database. With the development of credit market, there appear industry alliance, and ultimately the integrity of the formation of a small number of huge databases. It relies entirely on the operation of the market economy, credit service, high efficiency, but will appear incomplete information, lack of

authenticity possible. At the same time they are benefit-oriented, there will be disclosure of such credit risk. Japanese model is typical of membership. Like the U.S. model, there is incomplete information problem.

In our country most enterprises are state-owned enterprises holding, other types of ownership shares of the business model. According to this model features, combined with overseas experience in the construction of credit system, China can develop the credit system construction model of government-led and market operation. Government leadership is out of the coercive power of government and people's trust in government. According to 2009 Edelman Survey of China's credit report, compared with the other region of the world, the Chinese is more reliable to government^[3]. Therefore, in the construction work of the credit system, We must lead by the government. This is not only able to collect real comprehensive information, but also from the work on the macro-control, to avoid duplication and waste of resources. Market can ensure that the construction work will start high-efficiency, and form a powerful platform for information sharing. This model can be very effective in building a credit information database and to contribute to China's economic development.

3.2 Improvement of laws and regulations

Legal protection as e-commerce transactions, must keep up with e-business. China has enacted (or amended) many e-commerce and Internet laws and regulations, such as "Computer Software Protection Regulations," "Regulations on Protection of Computer Information System Security", "Computer Information Network and the Internet Management Interim Provisions", "China Internet Domain Name Registration Interim Measures," "Patent Law", "Copyright Law", "trademark Law "and so on. Again the e-commerce and Internet-related terms are added in the "Contract Law" and "Criminal Law".

However, these laws cannot meet the needs of e-commerce development. In the formulation of relevant laws, when we must take into account the following factors: 1) There are a series of new parties in business activities, such as the certification center, etc., to some extent they are involved in e-commerce activities, but they are in the legal status of e-commerce, traditional law is not found. 2) The rapid development of e-commerce needs the laws can be modified at any time in order to prevent loopholes in behavior. 3) Due to a global e-commerce features, thus requiring related laws of e-commerce cope with international standards on e-commerce law. 4) E-commerce covers a wide range of requirements of the relevant supporting laws to keep up with. 5) Law enforcement force is very important, a sound legal system is just as the dummy if the lack of execution.

4 Conclusions

The paper indicates the reasons for the formation of e-commerce, including subjective factors, such as The trading participants' awareness level of credit and cooperate willingness, as well as objective factors such as information asymmetry and incomplete, information technology, legal regulations and the lack of social ethics and so on.. Risk prevention measures based on these factors, we can promote E-commerce transactions by reducing the participants' risk perception through the construction of credit system and the improvement of laws and regulations .

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