The Formation Mechanism of Export Credit Risk of Countries along the Belt and Road: A literature Review

Jie Zhu^{1, *}, Ming Liu²

¹ School of Economics and Management, Nanjing Polytechnic Institute, Nanjing, China

² China Export and Credit Insurance Corporation Jiangsu Branch, Nanjing, China *Corresponding author: zhujie8457@163.com

Abstract

The export credit risk of countries along the Belt and Road is an integral part of the risk of the Belt and Road construction. Effective export credit risk management and control plays a key role in ensuring and promoting the economic cooperation of countries along the Belt and Road, and is of great significance in promoting the high-quality development of China's foreign trade and building a new system of a higher level open economy. This paper first reviews the literature of the Belt and Road risk as export credit risk of countries along the Belt and Road is one of the components of the Belt and Road risk research. Then classify and analyze the research on the formation mechanism, evaluation, and control of export credit risk. Finally, an evaluation of the existing research results is conducted and its shortcomings is identified.

Keywords

Belt and Road; Export Credit Risk Formation Mechanism; Risk Control; Literature Research.

1. Introduction

The implementation of the Belt and Road initiative is the basic strategy of China's High-Standard opening up and building a community with a shared future for mankind in the new era, as well as an important way to realize and develop China's national interests. Compared with the traditional developed countries, the countries along the Belt and Road have lower economic development level, higher political and social development volatility, and higher credit risk level, which makes Chinese enterprises often suffer higher losses in exports to countries along the Belt and Road, thus leading to damage to China's overall overseas interests. Therefore, effective management and control of export credit risk plays a key role in ensuring and promoting the economic cooperation of countries along the Belt and Road, and is of great significance in promoting the high-quality development of China's foreign trade and building a new open economic system of a higher level.

This paper deeply analyzes the research status and deficiencies in the field of export credit risk formation mechanism and control of countries along the Belt and Road.

2. Risks of Countries along Belt and Road

The Belt and Road initiative is of great significance and broad prospects, but it also faces huge risks and challenges in its development. The academic circles has analyzed the risks of building the Belt and Road from political, economic, cultural, social and other perspectives, and on this basis, proposed risk prevention and response strategies. In general, the existing research results on the risks of the Belt and Road mainly focus on political risks, economic risks and environmental risks:

2.1. Political Risks

Case (2016) analyzed the difficulties brought by the launch of TPP and the establishment of another trade agreement by the United States to China's realization of free trade in the Asia Pacific region such as the Belt and Road; Hu Junchao (2016) conducted a classified assessment of the country risks of 65 countries along the Belt and Road; Shah D.P. (2016) pointed out that the South China Sea dispute has aggravated the security threat of countries in the Belt and Road related region, thus leading to the increased risk of regional local conflicts; Cai Ningwei (2020) took the business practice of banks in high-risk countries as an example to analyze how to avoid and prevent the sanctions and money laundering risks of the Belt and Road countries; Song Xin (2020) found that China's export trade to countries along the Belt and Road would be affected by the political risk of the third country. The higher the political risk of the third country, the less the export trade to importing countries; Zhang Jianwu (2020) analyzed the impact of geopolitical risks of countries along the Belt and Road on the survival and sustainability of China's export trade links, and found that the rise of geopolitical risks significantly reduced the survival and sustainability of China's export trade links with countries along the Belt and Road; Wang Falong (2022) analyzed the impact and impact of non-traditional political risks such as cognitive fallacy, emotional rejection, and will confrontation on the Belt and Road market, and proposed that we should enhance conceptual identity, benefit sharing, and strategic mutual trust with relevant countries; Liu Fang (2022) analyzed the religious risks of countries along the Belt and Road from the perspective of global religious risk theory, and proposed to strengthen structural and dynamic tracking and response at the same time.

2.2. Economic Risks

Huang Yiping (2015) emphasized that enterprises participating in the Belt and Road should not stick to short-term factors, and strengthen the learning of the capabilities required for the operation of the target market country; Hua Guihong and Huang Yi (2019) used the Bayesian network model to analyze and evaluate the economic and financial risks of countries along the Belt and Road, and found that the economic and financial risks of most countries were on a downward trend or at a lower level; Bi Daojun (2017) analyzed China's national risk appetite for outbound investment through panel data analysis of countries along the Belt and Road; Shuyoulin (2020) took the high-end equipment manufacturing industry as the entry point, analyzed the M&A risks of enterprises in the Belt and Road market, identified three risk sources, including value assessment risk, cultural integration risk, policy and legal risk, and proposed countermeasures; Dong Zhe (2020) analyzed the WTO subsidy risk of China's export credit insurance in the context of the Belt and Road Initiative and proposed that China should safeguard its legitimate rights and interests through improving the legal system, actively conducting FTA negotiations and multilateral mechanisms; Li Yipeng (2022) studied the impact of the Belt and Road cooperation on the sovereign debt risk of the countries along Belt and Road as a whole and four typical countries, found that the sovereign debt risk of the countries along Belt and Road has been significantly reduced, and proposed that the sovereign debt risk can be further prevented and resolved from two dimensions: reducing the uncertainty of government expenditure responsibilities and obligations, and reducing the uncertainty of government repayable resources; Zhang Shuai (2022) measured and analyzed the difference of financial risks in the Belt and Road market, and found that the overall financial market risk showed a slow rise trend, and the difference of financial market risks between regions was the main reason for the overall difference; Yao Dengbao (2022) analyzed the exchange rate transmission effect of the international oil price risk under the impact of the COVID-19, and proposed that the international oil price risk has a strong one-way transmission effect on the exchange rate markets of countries along the Belt and Road.

2.3. Environmental Risks

The environmental risk referred to in this paper is a general term for other risks besides political risk and economic risk, mainly including internal environmental risk and external environmental risk, in which internal environmental risk is the risk caused by internal environmental defects caused by domestic macro and micro factors. For example, Zhou Fangyin (2015) proposed that strategic efforts and direction, inefficient resource utilization, insufficient promotion system and weak sustainability are important internal risk factors that need to be considered when carrying out the Belt and Road construction in China. Ma Lirong (2015) analyzed the importance of domestic security and environmental factors for the Belt and Road construction from the perspective of the status quo of domestic territorial independence. External environmental risks are the risks brought about by social, religious, ecological and other factors in the countries along the Belt and Road. For example, Lei Jianqiang (2021) analyzed the adverse impact of ecological problems and disaster risks in the countries along the Belt and Road on the construction of the green Belt and Road; Li Pengcheng (2021) analyzed the legal risks of intellectual property faced by Chinese enterprises in countries along the Belt and Road; Shao Yinghong (2021) studied the impact of psychological distance and risk sharing on PPP projects in countries along the Belt and Road; Zhao Zhenyu (2022) defined and measured the social risks of countries along the Belt and Road; Shen Yibing (2022) analyzed the types of cultural risks and cultural governance demands faced by the Belt and Road in combination with the characteristics of cultural trends in the post epidemic era, and proposed the fundamental governance path to resolve cultural risks in the post epidemic era - building an inclusive cultural community of the Belt and Road.

3. Formation Mechanism of Export Credit Risk

Export credit risk, as a branch of credit risk, has received relatively little theoretical research in the academic field. However, since China's accession to the WTO in 2001, it has gradually increased, reflecting the accelerating pace of China's full integration into the international market and participation in the division of labor in the international industrial chain and supply chain. As the "three carriages" of economic development, export growth is constantly enhancing its influence on promoting China's development. At the same time, overseas foreign exchange risk has also received increasing attention from the academic community.

Huang Rongwen (2002) was the first to conduct a systematic analysis of international trade risks, proposing that international trade risks can be divided into three categories: national risks, market risks, and fraudulent risks. He also proposed methods for predicting and evaluating risks and measures to prevent risks; Sheng Bin (2003) analyzed the risks and adverse effects of changes in the international trade mechanism on the exports of developing countries from a macro perspective of the international trade system; Tang Haiyan (2008) analyzed the relationship between international trade and economic growth, and proposed that foreign trade may pose risks to economic growth by triggering other factors; Chen Huan (2017) analyzed the risk sources and contagion mechanisms of international trade financing for commodities from the perspective of information asymmetry.

After introducing the impact analysis of third-party intermediary institutions such as guarantees, banks, and credit evaluations, the research on export credit risk has been further developed. Monica and Trevi (2002) studied the relationship between exports, credit risk, and credit guarantee measures, and found that default risk leads to a decrease in the elasticity of the export curve, while credit insurance measures can increase the elasticity coefficient; Miwa and Ramsay (2005) analyzed the differences between trade creditors and bank creditors and proposed that a financial crisis would lead to the contagion of trade credit risks; Du Kuanqi (2013) proposed that the likelihood of default for small and medium-sized foreign trade

enterprises is higher during the period of credit risk contagion, and found that banks prioritize the contraction of small and medium-sized enterprises with higher foreign trade accounts receivable in harsh environments; Wang Yaoning (2009) argued for five export credit risk avoidance models in international trade, including conducting credit investigations and strengthening technology transfer; Du Suyin (2008) focused on analyzing the impact of international trade settlement methods on export credit risk, and based on this, analyzed how enterprises should optimize settlement methods and supplement them with other means to avoid and control export credit risk; Ye Lihong and Yang Guang (2008) analyzed how internal auditing in enterprises can promote the strengthening of export credit risk control by strengthening internal control methods; Li Xiaoying (2018) used the dynamic game signal model to study the path of reducing information asymmetry between buyers and sellers and avoiding credit risk by using the economic investigation complaint mechanism under the Internet background.

With the continuous development of new forms and models of international trade, the academic circles is increasingly paying attention to the analysis framework and management ideas of export credit risk in cross-border supply chain management from the perspective of crossborder supply chain and international industrial chain cooperation, based on the combined effect of trade and financing in international trade. Lu Xiaoming (2002) was the first to summarize and analyze the development and changes of international trade settlement and financing markets from the perspective of international trade accounts receivable management; Zhang Yan and Sun Puyang (2016) studied how the contractual factors of buyers and sellers in international trade affect trade continuity by influencing risk based on the framework of heterogeneous trade theory; Zhang Zuomin (2017) studied the impact of bank credit financing constraints on export decisions and export intensity based on balanced panel data analysis of enterprises from 1998 to 2014, and further used the Heckman two-stage model to study the impact of different commercial credits on export decisions of enterprises; Cui Mingyang (2018) analyzed the credit risk characteristics of banks in international trade financing business from the perspective of banks; Xie Xiaofeng (2020) analyzed the credit risk contagion mechanism between supply chain enterprises based on the multiple correlation relationships between them, and pointed out the contagion effects of commercial credit limits and costs on credit risk in different directions under the optimal transaction correlation strength.

4. Export Credit Risk Assessment and Control

Export Credit Risk Assessment 4.1.

Risk identification and Rsik evaluation refer to the process of identifying risk factors through perception, judgment, and classification, as well as determining potential loss thresholds by setting specific risk assessment indicators. There are various research methods available (as shown in Table 1).

Evaluation Methods	Concrete Content
5C	1.character 2.capacity 3.capital4.collateral5.condition
LAPP	1.liquidity 2.activity 3.profitability 4.potentialities
CAMEL	1.capital adequacy 2.asset quality 3.management 4.earnings 5.liquidity
5P	1.personal 2.purpose 3.payment 4.protection 5.perspective
CAMPARI	1.character 2.ability 3.margin 4.purpose 5.amount 6.repayment 7.insurance
6A	1.economic aspects 2.technical aspects 3.managerial aspects 4.organizational aspects 5.commercial aspects 6.financial aspects
5W	1.who 2.why 3.what 4.when 5.how

Table 1. Main credit risk identification and assessment methods

At present, international research on credit risk quantification includes three categories: statistical models, value based credit risk models, neural networks, and support vector machine models. The credit risk statistical models mainly include three types: discriminant analysis (DA) models, conditional probability models (Logit and Probit models), and survival analysis models. The discriminant analysis model is an analytical method that distinguishes the category of the research object based on the known classification of the observation object and several characteristic variable values. Edmister (1972) used the Z-value model method to study the default behavior of small businesses. Martin (1976) studied the early warning of corporate financial crises using the Logit model; Olson (1980) conducted a Logit analysis on bankrupt and non bankrupt companies between 1970 and 1976; Zmijevsky (1984) established a credit rating model using the Probit model and explored the prediction of financial distress using logical ratio analysis; Chen Mingxian (1984) attempted to select financial indicators through stepwise regression analysis and used the Probit model to provide early warning of corporate failures; Ryan (1986) used stepwise regression to determine financial variables and established two Cox models to predict the probability of bank bankruptcy; Jaro and Turnbull (1995) introduced the strength process (risk rate function) and proposed the first simplified model for corporate default. Lando (1998), Medan, and Yunal (2000) treated default intensity as a random variable and used Cox processes to describe the default counting process, making it easy to estimate default probabilities using statistical methods; Li and Turnbull (1996) empirically compared the survival model based on Weibull distribution with the Logit model, and concluded that the survival model has higher accuracy in predicting insurance company bankruptcy; Chava and Jaro (2004) added industry effects to the survival model variables, proving that different industries have a significant impact on bankruptcy probability.

In recent years, with the popularization of credit risk research technology in China, research on export credit risk has been greatly improved. Wang Chengjun (2014) used the KMV model to measure and predict credit risk of high-tech listed companies; Sun Xiaolei (2014) analyzed the correlation between systemic risk and national risk levels in the BRICS countries as research subjects; Li Yuan (2015) evaluated the country risk levels of 140 countries worldwide using the ICRG (International Country Risk Guide) indicator; Hu Junchao (2016) conducted a classified assessment of the country risks of 65 countries along the Belt and Road; Wang Lei (2022) constructed a chain structure, network structure, and super network structure for the association between non bank financial institutions and enterprises; Liu Chao (2022) established a three objective optimization model for credit risk feature recognition using highdimensional credit risk data, and designed a multi-objective subspace clustering algorithm based on decomposition; Wang Ruyuan (2022) used Propensity Score Matching double-Differences-in-Differences method (PSM-DID) to study and found that blockchain technology can significantly reduce credit risk in supply chain finance.

Export Credit Risk Control 4.2.

Risk management refers to the various measures and methods taken by risk managers to reduce the likelihood of risk events occurring, or to minimize the losses caused by risk events. The research results on export credit risk control mainly focus on the transfer and mitigation of export credit risk, as well as the impact of related tool applications on the country and enterprises themselves. From the current research results, it can be seen that the academic and practical circles have different applications of terms such as credit risk management, control, and measurement. Based on an in-depth analysis of relevant research, this article summarizes the relevant achievements that meet the definition of export credit risk control in this article. From the perspective of enhancing export credit risk control technology, Zhao Jingmin (2004)

constructed a warning indicator system for foreign trade credit risk from a qualitative analysis perspective; Zhuo Jun (2005) explored the dynamic monitoring function of credit risk warning systems; Zhou Qifeng (2005) used Support Vector Machine (SVM) to model credit risk assessment and studied the balance control of two types of errors in credit risk: rejection of truth and acceptance of falsehood; Pang Jianmin (2006) established a credit risk measurement model based on neural networks and proposed a new path for a credit risk warning system on this basis; Wang Bo (2007) established an overall risk management model with a relatively complete structure and comprehensive functions guided by system theory; Xu Zhichun (2008) introduced non-financial indicators into the traditional credit risk warning model for small and medium-sized enterprises, which improved the practicality of the warning system; Gu Haifeng (2013) explored the credit risk warning model and its application of commercial banks using the preference entropy weighted matter element extension method; He Jianjun (2017) analyzed the situation of buyers picking up goods without a bill of lading in international trade; Chen Mingkang (2021) conducted a study on the early warning method for the export trade risks of aquatic products in China based on the background of China US trade frictions.

From the perspective of the main body of export credit risk control, Zhang Gu Haifeng (2013) analyzed the cooperative credit model between banks and insurance companies, studied the internal mechanism of adverse selection and the formation of objective credit risk in commercial banks, and designed control strategies for objective credit risk in commercial banks from the perspective of adverse selection governance; Guo Lianfang (2013) used the Credit Metrics model to calculate and demonstrate how commercial banks can reasonably allocate economic capital to strengthen their own credit risk control capabilities; Wang Quan and Cao Yang (2014) innovatively explored the credit risk control of technology finance, using the "SPECIAL" credit evaluation method to measure the level of technology finance risk, and proposed methods such as building technology finance specialized institutions, developing adaptive financial products, and transferring risks through performance guarantee insurance to effectively control technology finance risks; Sun Jiaxun (2016) analyzed the buyer's payment obligation under the letter of credit payment method. Through the analysis of international trade rules and judicial practices of various countries, it was pointed out that the letter of credit belongs to the "Collateral Warranties" under the trade contract, but it does not deny the primacy of the bank's payment obligation; Wang Zhongbao (2018) measured the credit risk level of new rural financial institutions such as rural banks and microcredit institutions based on CVaR constraints, and analyzed the credit risk control path of new rural financial institutions on this basis.

From the perspective of product innovation in export credit risk control, Wang Qiong and Chen Jinxian (2003) explored the important role of credit derivatives and loan securitization as two financial innovation tools in achieving effective credit risk control for asset holders; Shi Jinzhao (2014) studied the dynamic optimization and adjustment mechanism of loan structure in bank supply chain finance business based on the VaR model, achieving the goal of effective risk control in supply chain finance business through dynamic adjustment of admission conditions; Lei Chengyao and Wang Xingqi (2017) used an improved KMV model to combine the evaluation of two attributes: ordinary non listed companies and urban investment platforms, forming an improved Logistic KMV model and improving the credit risk control method of corporate bonds on similar platforms; Yang Peibei and Zhang Xiaoguang (2021) analyzed the credit risk of ship mortgage financing product models and proposed the idea of introducing blockchain technology to achieve effective credit risk control in ship financing. Based on the VaR-GARCH model to measure risk, blockchain smart contracts and PoS consensus mechanisms were used to achieve credit risk control.

It should be pointed out that with the continuous expansion of the application scope of export credit insurance, the attention of academia to export credit insurance as a specialized tool for export credit risk control is increasing, and research results on the risk control role and related risks of export credit insurance are increasing day by day. Wei Hualin (2015) found that there

is a long-term equilibrium relationship between the penetration rate of export credit insurance and the effective exchange rate of the Chinese yuan, and the appreciation of the Chinese yuan has a positive impact on export credit insurance; Wang Guojun (2016) studied the problems in trade financing business under the current export credit insurance, and believed that the problems in the current mechanism have given rise to new adverse selection and moral hazard; Wang Wen (2020) found that export credit insurance can effectively hedge against the impact of the epidemic, and the stronger the impact of the epidemic, the more obvious the supportive effect of export credit insurance on trade; Xu Wei (2021) explored the common types and countermeasures of credit insurance financing fraud in short-term export credit insurance business based on precedents triggered by credit insurance financing business; Li Ran (2021) studied the risk of reverse fraud by exporters using the influence of export credit insurance through examples.

5. Conclusion

With the continuous deepening of the Belt and Road research and the continuous accumulation of practical experience in the Belt and Road construction, the analysis of risk factors faced in the process of co-building the Belt and Road has gone deeper from pure theoretical discussion to the combination of theory and practice. The analysis of risk factors has gradually gone deeper from conceptual national risk, sovereign risk and economic risk to specific risk areas, covering political, economic, social, cultural, ecological civilization and other fields of specific risk analysis, showing the development characteristics of diversification of analysis objects, systematization of analysis system, concretization of analysis objects and coupling of analysis elements, laying a solid idea for carrying out the export credit risk analysis of countries along the Belt and Road and theoretical basis. However, from the perspective of credit risk management and control, especially when studying the credit risks faced by Chinese enterprises in the process of carrying out market exports of countries along the Belt and Road, there are still some shortcomings in the existing research, which are mainly reflected in three aspects:

Firstly, in terms of the mechanism of credit risk and its control, existing research results are relatively scarce, especially in the overall impact of micro subject credit risk on macro factors, and the position and role of policy finance in the national trade policy system. With the changes in the international political and economic situation and the continuous deepening of social and technological progress, especially in the context of national relations, geopolitics, and the continuous impact of the pandemic on the process of global economic integration, in the process of technological progress, industrial and supply chain reconstruction, and the reconfiguration of international market resources, the politicization of political and economic issues tends to be intertwined. The credit risks faced by micro market entities such as enterprises and financial institutions are increasingly affected by more and more factors, which directly affect the macro level. Governments of various countries also inevitably need to use policy finance and other means that comply with international trade rules to protect their own interests, which is obviously a lack of existing research results.

Secondly, in terms of research on the triggering factors of credit risk, there is still a lack of existing research in terms of transmission mechanisms, risk classification, and systematic analysis. In terms of country factor analysis, the existing results mainly focus on the impact of country indicators on long-term treasury bond or stock price trends, financial product rating results, etc., but in fact, such indicators, as financial products, are greatly affected by the volatility of the secondary market, and the formation factors are extremely complex, so the effectiveness of the analysis needs to be verified. At the same time, existing research often lacks differentiated analysis of export risk and investment risk. The same indicator system is often

used for both investment risk and export risk assessment. However, in actual economic operation, the manifestations and influencing factors of these two types of risks are greatly different: when project investment payback period is long, influencing factors are complex, country risk influencing factors should focus on medium - long-term indicators and trend indicators, while when export trade repayment period is short, and influencing factors are relatively single, country risk influencing factors should focus on medium -short-term macro indicators and real-time data. In terms of enterprise factor analysis, existing research results focus more on explaining the principles, analyzing mechanisms, and other aspects of risk analysis for trading entities. There is a clear lack of research on the direct impact and correlation analysis of risk factors. At the same time, research on the buyer's behavior and the game process between the two parties in trade contracts is insufficient, and exploration of the complexity of the nodes and problems generated in the international trade process is insufficient either. Also research on the interaction between the "Three Flows" of goods logistics, document flow, and fund flow in international trade, as well as their impact on risk levels, is not enough. The analysis of the impact of macro environmental factors on international trade buyer behavior and default probability is still blank, resulting in a lack of comprehensive and in-depth analysis of the impact of buyer export credit risk. It needs to be strengthened and improved in subsequent research.

Thirdly, in terms of credit risk control research, existing research still needs to be improved in terms of evaluation dimensions, combination of subjective and objective evaluations, and application of results. The existing credit risk assessment methods are often too simple and lack foresight. Their qualitative analysis methods mainly rely on empirical factors, and the evaluation subjectivity is too strong. Quantitative analysis methods overly focus on financial indicators and do not consider the impact of external factors in the real world enough; In the research results of credit risk control, there is a lack of consideration for important influencing factors such as political risk, macroeconomic risk, and industry risk. Often, the assumption requirements are strict, the data applicability is poor, and the method model is relatively single and one-sided, making the traditional credit risk warning model lack reference significance for export credit risk. Therefore, for future research on credit risk assessment and measurement, while further improving reality fit, relaxing data distribution requirements, and innovating measurement techniques, it should serve the needs of overall credit risk management, improve reality applicability and feasibility of results.

In addition, through the analysis of existing research results, it is not difficult to find that the definitions of credit risk measurement, credit risk assessment, credit risk warning, and credit risk control in existing research results are relatively vague, and their definitions and usage are not standardized enough. Especially in the case of multiple links in basic theory, data foundation, model construction, and other fields, the above expressions are often misused and mixed, which has a certain degree of adverse impact on the comprehensive and standardized management of credit risk throughout the entire process. From the perspective of logic and operability, based on the basic idea of "Theoretical Analysis - Characteristics Induction -Formation Mechanism - Assessment Indicators - Control System", it is necessary to conduct a comprehensive analysis of the assessment and control of trade credit risk faced by Chinese enterprises in exporting to countries along the Belt and Road, explore the control path of export credit risk of countries along the Belt and Road, and ultimately achieve the goal of effective export credit risk control.

Acknowledgments

The authors gratefully acknowledge the financial support from: Jiangsu Universities "Qinglan" Project; Jiangsu Overseas Visiting Sscholar Program for University Prominent Young&Middle-aged Teachers and Presidents.

References

- [1] Li Jiajun The Game of Credit Risk Control [M] Xi'an: Northwestern Polytechnical University Press, 2006 46-173.
- [2] Zhao Zhenyu, Liu Yufan, Liu Shancun, Ma Haibo. Social risks of countries along the "Belt and Road" empirical analysis based on BP neural network [J/OL]. Journal of Beijing University of Aeronautics and Astronautics (Social Sciences Edition) https://doi.org/10.13766/j.bhsk.1008-2204.2021.0707.
- [3] Zhang Shuai, Li Yating Analysis on financial market risk differences of countries along the "Belt and Road" [J] Friends of Accounting, 2022, (14): 68-75.
- [4] Li Yipeng Research on the impact of the "Belt and Road" on sovereign debt risk of countries along the Belt and Road [J] Southern Finance, 2022, (3): 51-62.
- [5] Liu Yingchun Research on the Application of Creditrisk+Model in Credit Risk Measurement of Credit Portfolios [J] Practice and Understanding of Mathematics, 2012, 42 (9): 45-51.
- [6] Lu Gui Research on Credit Risk Identification for Small and Medium sized Enterprise Customers of C Guarantee Company [D] Nanjing: Nanjing University of Technology, 2013.
- [7] Ding Dongyang, Zhou Lili, Liu Leping A review of research on the application of Bayesian methods in credit risk measurement [J] Mathematical Statistics and Management, 2013, 32 (1): 42-56.
- [8] Mehmet, Baha, Karan, Aydın, Ulucan, Mustafa, Kaya. Credit risk estimation using payment history data: a comparative study of Turkish retail stores[J]. CEJOR, 2013, (21): 479-494.
- [9] Katharina, Martina, Engemann, Monika, Schnitzer. How trade credits foster exporting[J]. Rev World Econ, 2014, (09): 56-176.