

Research and Thoughts on the Innovation Mode of Financial Risk Management in Commercial Bank Supply Chain

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Abstract: Supply chain finance belongs to a new type of financial products, which is of great significance to promote the stable and healthy development of China's financial market. Supply chain finance can integrate various enterprises through core enterprises, and organically integrate commercial capital with the real economy to promote sustainable economic development. This paper analyses the financial meaning of supply chain, studies the financial risk management process of supply chain, and explores the innovation mode of financial risk management of supply chain in commercial banks.

1. Introduction

Supply chain finance can be integrated with supply chain production methods to provide various financial services to enterprises in the supply chain, ensuring that enterprises in the supply chain can normally produce and operate, and at the same time strengthen the relationship of banks, enterprises and supply chains, establish a mutually beneficial ecological industry model. In this context, commercial banks need to take effective measures to control various risks and ensure that commercial banks can operate stably.

2. Meaning of supply chain finance

The concept of supply chain finance was proposed by Shenzhen Development Bank. In recent years, supply chain finance has gradually developed in China, and the innovation model is gradually increasing. This paper mainly analyzes the financial risk management of supply chain in commercial banks. Therefore, the financial implications of supply chain are analyzed from the perspective of commercial banks.

Supply chain finance refers to: Combining all enterprises in the supply chain by commercial banks and treating them as a whole, and comprehensively analyzing the capital flow, logistics situation, information flow of all enterprises, etc., and ensuring that the entire supply chain can be a new type of finance that works normally.

This financial model pays more attention to the management of the entire business process, not only to check the creditworthiness of the credit enterprise, but also to grasp the stability of the entire supply chain and the credit status of the corporate trade object. In addition, it is necessary to analyze

and compare the financing credit line and the time limit with the real trading behavior, so that the commercial bank can understand the use of the financing credit line. Supply chain finance needs to adopt dynamic and systematic management.

3. Risk management process of supply chain finance

3.1. Risk identification

In order to ensure the quality of risk management work, it is necessary to pay attention to risk identification work. Risk identification refers to the estimation of possible hazards and possible losses in a variety of ways before serious damage is caused. In short: the type and nature of the risks need to be analysed in detail, and the possible losses caused by the risks should be studied. In this session, it is necessary to identify possible risks and to study the reasons for the risks. In the process of market changes, various risks will also change, so the risk identification work needs to be carried out as the risk changes. Since supply chain finance will involve multiple companies, the main risk involved is credit risk. In the operation process of supply chain finance, it will involve various tasks such as collection and approval of information, management and control of operation process, and thus another important risk of supply chain finance is operational risk. In addition, when implementing risk management measures, it is necessary to analyse the types and nature of risks of each financial product. For example, as the price of products changes, project-guaranteed financing needs to face market risks.

3.2. Risk assessment

Risk assessment is required after risk identification: in the most appropriate assessment method, quantitative analysis and comprehensive research, collecting a variety of information, analyzing the probability and loss of risk events, and also determining the ability of commercial banks to withstand risks, it is then necessary to clarify what measures need to be taken to control the risks. Risk assessment work is important for controlling risk. At this stage, China is in the process of transformation, and the risk assessment of commercial banks has not been greatly developed. Since the macro economy, the business environment and other factors will have a certain impact on the risk control mechanism, it is not yet possible to establish a general risk control model. In addition, it is precisely because of the insufficient accumulation of data and experience in the field of supply chain finance that quantitative analysis of risks cannot be effectively carried out and model analysis of risk types and nature cannot be established. However, with the continuous development of the financial industry, the need to actively establish quantitative model risk assessment tools need to meet the following requirements: First, the risk assessment tools need to fully reflect the sequence of various risks, or reflect the various risks Secondly, it fully demonstrates whether each risk factor has a causal relationship; finally, it is necessary to transform the abstracted risk concept into an article commercial bank that can adopt multiple risk assessment methods such as subjective comprehensive evaluation method and probability analysis method.

3.3. Risk control

Finally, it is the risk control link. Commercial banks need to take targeted measures to control various risks based on the results of risk assessment (control risk within the scope of the standard), and if it is not free of losses, it is necessary to minimize bank losses. If necessary, it is necessary to control risk by means of decentralization, hedging, and transfer. Risk control is mainly divided into several stages: pre-existing control, in-process control and post-event control. Ex ante control refers

to the establishment of corresponding standards and control procedures before the start of business activities, so as to avoid the risk of causing huge economic losses to the bank; the control in the event refers to the timely understanding of the actual situation and timely discovery when implementing the control objectives or standards. Problems in the risk control process, solving problems, and taking reasonable measures to ensure the quality of risk control work; after-the-fact control refers to risk detection, clearing the degree of risk and risk changes, using risk transfer, mitigation and other measures to reduce risks of the impact on commercial banks. Banks can control risks by means of prevention, evasion, decentralization, and transfer.

In supply chain finance, operational methods can be used to prevent and control risks, which shows the important foundation of supply chain finance development in operational risk management. The international bank's supply chain financial business is single-weight, and risk transfer and insurance can be used to control risks. However, because China's financial market development level is not high enough, this method has not been widely used in China. Another risk management innovation is information risk screening technology. In short, it is necessary to automatically repay credit by controlling logistics and capital flow, thus separating credit from credit rating. In addition, another innovation in supply chain finance is to bundle the credit of core customers to absorb risk takers.

4. Risk management innovation model of commercial bank supply chain finance

4.1. Reform business products and product structure of supply chain finance

In order to do a good job in supply chain financial risk management, commercial banks take the following measures to prevent and control risks from the root:

(1) Determining the definition and characteristics of supply chain finance

Supply chain finance refers to the sum of all trading products for enterprises in the supply chain based on the characteristics of transactions such as purchasing and sales in the entire supply chain. The main characteristics of the supply chain financial business are: control and reduce risks by controlling the “three streams”; commercial banks can provide financial support for lenders by means of structured financing and scientific credit enhancement.

(2) Determining the range of products involved in the business of supply chain finance

According to the provisions of commercial banks on supply chain financial services and the characteristics of supply chain financial services, it can be clarified that supply chain financial services mainly include several modules of receivables, prepayments and stocks, which will involve the demand for funds in various trade links of the supply chain.

(3) Identify the types of business that cannot be included in the supply chain financial business

Acceptance, discounting, ticketing, etc. outside the scope of supply chain finance business; pledge of general movable property, business without the characteristics of trade financing.

(4) Identify supply chain financial products

The commercial banking department is responsible for identifying the supply chain financial products, and it is necessary to ensure that the standardized products are in conformity with the requirements of the banking product management measures, and the non-standardized projects are approved by the business department.

(5) Determining supply chain financial business authorization

Its business authorization needs to be implemented in accordance with the provisions of the “Business Authorization” and related documents.

In addition, commercial banks need to analyze the risks that supply chain financial services will face based on macroeconomic development and industry development, and take effective measures to adjust business structure to control risks.

First, the industry is divided, and it is clear that the key industry commercial banks need to adjust the access conditions of the customers in the production process. (such as: steel enterprises, cement companies, etc.), increase the core customer access conditions in accordance with the trading quota regulations, increase the asset default rate, capacity utilization and other indicators.

If the core customers of the supply chain finance business of commercial banks belong to iron and steel enterprises, electric power enterprises, etc., the banks also need to analyze whether the production methods of the customers meet the national regulations, whether they have environmental approval documents, and land review conditions. Commercial banks need to minimize quotas or add access mechanisms in the production process industry. For some approved quotas, if they fail to meet the new access criteria, they cannot expand the quota for such customers.

Second, choose quality, key customers. Take effective measures to prevent and control credit risks. Commercial banks need to actively avoid financing risks. For some core customer affiliates or warehouse management affiliates, the bank needs to conduct a detailed inspection of its credit status and commodity commitments, and conduct a rigorous review to ensure the rationality of loan issuance. Commercial banks need to adopt a variety of ways to avoid over-funding. Commercial banks need to control and rationally adjust the credit line of core customers with high wind direction and control the transactions between core customers and small and medium-sized enterprises.

Compared with small and medium-sized private enterprises, large state-owned enterprises have higher risk resistance against market positives and policy changes. Therefore, commercial banks should try to avoid selecting small-scale enterprises with low risk resistance and low environmental protection quality as core customers. Commercial banks should try to choose large-scale and competitive enterprises as core customers.

4.2. Strengthen investigation, audit and risk management of customer access

4.2.1 Detailed review of customers

First, when the core customer first enters, the bank must conduct a detailed investigation according to relevant regulations, and the credit approval personnel must also conduct detailed verification in accordance with relevant regulations. Secondly, before crediting a customer loan, the commercial bank needs to conduct a detailed investigation of the contact and trade situation between the credit client and the core customer, and the business department needs to actively review it. Before conducting an investigation on the customer, it is necessary to ensure the accuracy and completeness of all the information, and to prepare an evaluation model, which is responsible for review by the department head, the wind control department and other departments.

The risk control department of the commercial bank and the relevant departments shall conduct a detailed review of the customer data, such as whether there is any contradiction in the data; whether the bank has any business dealings with the customer. After collecting the data, the risk control department needs to cooperate with other departments to analyze the customer's credit status, and score, and divide the customer into multiple grades according to the rating. Commercial banks need to focus on cultivating Class A customers, strengthen supervision and adjustment of Class B customers, and disrupt cooperation with C-level customers.

Commercial banks need to strengthen the analysis of customer's operational capability and cash flow. They should not only analyze and evaluate the financial characteristics and industry status of credit customers. Commercial banks should pay attention to the analysis and evaluation of credit customers' cash flow and default costs.

4.2.2 Improve the access management system

Commercial banks need to set a number of product access standards such as prepayments, inventory, and receivables, and rationally adjust the product range and apply the access standards according to the economic situation and market development.

4.2.3 Adopt quantitative evaluation model

The risk assessment mechanism is mainly used to analyze various risks in supply chain finance, which can help commercial banks to identify various risks of supply chain finance, so that commercial banks can scientifically develop preventive measures based on these risks and promote the stable development of supply chain finance.

First, commercial banks need to develop assessment indicators. Commercial banks need to conduct detailed analysis based on the metrics system, and clarify the types of financial risks in the supply chain, and set the risks involved as risk assessment indicators.

Second, the evaluation method. Commercial banks use the expert consultation method and the analytic hierarchy process to evaluate and analyze according to the supply chain financial wind power measurement.

Finally, the evaluation process. The first step is to assess the financial risk of the supply chain; the second step is to clarify the value assigned to the variable; and the third step is to analyze the relevance of the evaluation indicator.

According to the survey results, analyze and calculate various influencing factors and clarify the matrix values.

4.3. Adopt professional and refined management methods

4.3.1 Strengthen the authenticity of the trade background

First of all, the commercial bank needs to study whether the customer's goods flow and capital flow match, check the customer's right to complete the transaction, check whether the invoice and other documents are true, and whether the accounting subject is consistent with the trade data. In short, the commercial bank needs to strictly check the real trade background to the customer; secondly, the commercial bank needs to analyze in detail the analysis of the relevance of the credit upstream and downstream customers and core customers. If it is found that there is false content in the customer trade background, it is necessary to stop the quota use and exit.

4.3.2 Strengthen business operation mode audit

First, commercial banks need to analyze the supply chain financial business, and the risk factors or the services that are not applicable to the market need to stop the relevant business in a timely manner and formulate corresponding systems. Second, the commercial banks need to target the financial services based on the supply chain. The model carries out credit approval, but the business that is not strictly managed according to the process needs to stop the quota use in time, and cannot continue to approve afterwards.

4.3.3 Strengthen the management of the redemption period of the confirming warehouse business

First of all, commercial banks need to strengthen the management of the redemption period of strong bond warehouse business, scientifically set the redemption period, so as to strengthen the management of funds and increase the speed of capital withdrawal. Secondly, commercial banks

need to supervise whether credit customers are strictly enforced according to the ransom regulations. If the customer does not comply with the regulations, they need to stop using or withdraw.

4.3.4 Increase the risk management of core customer transaction quotas

First, commercial banks cannot consider a non-independent legal entity's branch as a core customer. If the core customer of a commercial bank belongs to a foreign bank credit customer, the credit line must clarify its core customer qualifications and quotas. Second, the commercial bank needs to analyze the core customer's cross-line financing according to the core customer's operating ability and financial situation, and According to the relevant regulations, the operation of the quota declaration and verification is carried out.

4.3.5 Strictly control the financing period

First of all, commercial banks need to investigate in detail the development of the industry, trade transactions of customers' business, capital flow, and accounts receivable turnover period, etc., to clarify the customer trade cycle, so as to ensure that the financing period is consistent with the customer trade cycle; secondly, For trade enterprises, commercial banks need to carefully issue financing funds with a maturity of more than 6 months (if the financing period is more than half a year, they must be verified by the management department and the credit approval department at the same time).

5. Conclusion

Supply chain finance will not only bring certain development opportunities to commercial banks, but also bring new challenges to its development. Therefore, commercial banks need to strengthen research on supply chain finance, analyze their various risks, and take targeted measures to control and reduce various risks, so as to improve the operational efficiency of commercial banks and promote the stable and sustainable development of China's economy.

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