# Research on Credit Rating System Based on the Value of Small and Medium-sized Logistics Enterprises

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Abstract: With the development and application of modern information technology, modern logistics not only becomes a third-party professional service provider, but also extends more and more new value-added services. Many small and medium-sized logistics enterprises have also developed, but the accompanying financing problems seriously restrict the growth of small and medium-sized logistics enterprises. Credit evaluation is the key link of credit risk control. An effective credit evaluation system can not only ensure the safety of bank credit funds, but also ensure the continuous and efficient development of credit business. On the basis of comprehensive reference to the general enterprise credit evaluation index system, fully consider the characteristics of small and medium-sized logistics enterprises, and introduce the five aspects of capital structure, management capability, economic strength, loan credit reputation and development potential around the factors affecting the credit of small and medium-sized logistics enterprises. In the credit evaluation system of small and medium-sized logistics enterprises, an evaluation system that can reasonably reflect the credit of small and medium-sized logistics enterprises was established, and an empirical analysis was carried out to test the feasibility of the system.

#### 1. Introduction

Enterprises are the cells of the national economy and the main market economy subjects. Their credit status has a decisive impact on the healthy development of the entire national economy [1]. At present, the research on small and medium-sized logistics enterprises mainly focuses on the development of small and medium-sized logistics enterprises, alliance performance, integration, information technology, enterprise value and credit rating [2]. In addition, the economic situation at home and abroad is becoming more and more grim. The European debt crisis, the global economic slowdown, the weak growth of external demand, the rise of trade protectionism and other issues emerge in endlessly. For logistics enterprises belonging to the tertiary industry, the uncertainties of enterprise prospects are aggravated [3]. In financial services, the service level of logistics enterprises has also become a major source of financial risk. The key and difficult points of the evaluation are the establishment of the indicator system and the selection of the evaluation model, that is, how to integrate the multidimensional indicators [4]. The rating index is the specificization of credit evaluation, and the scientific nature of the index system determines the rationality and usefulness of the credit evaluation results. The rapid development of the economy has brought huge development space and market opportunities for China's small and medium-sized logistics enterprises. Some problems exposed at the same time as the rapid development of small and medium-sized logistics enterprises will become one of the factors restricting the sustainable and healthy development of China's small and medium-sized logistics enterprises [5].

For the sake of development, small and medium-sized logistics enterprises often use liquidity to carry out technological improvement and infrastructure construction, resulting in liquidity shortage [6]. However, it is difficult for small and medium-sized logistics enterprises to obtain long-term equity capital, and they do not have sufficient conditions to issue bonds or raise funds by listing at a lower cost. At present, China's logistics market has not yet established a sound credit classification system, many small and medium-sized logistics enterprises over-promised, unable to fulfill the contract; leakage of trade secrets, harming the interests of customers; price war between enterprises, and then vicious competition. Credit evaluation is more and more widely used, not only as a tool to

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measure the risk of financial products in the financial market, but also in business contacts between enterprises, bidding and other fields, providing risk assessment services for various investors [7]. The economic and social benefits of finance are very prominent. With the innovation of "group purchase" development model and risk control means, the income-cost ratio of small and medium-sized logistics enterprises' financing is improved, and the economies of scale are obvious [8]. In financial practice, financial institutions such as banks are usually in a dominant position, while logistics enterprises in an information-inferior position are prone to follow-up behaviors. When they do not improve their assessment, they implement business and there is a risk of default [9]. Applicable to China's actual situation of enterprises and personal credit rating system and unified credit evaluation standards, each department is different, credit evaluation results are not consistent, coupled with low information transparency, it is difficult to find comprehensive and real corporate credit information through the market, this The information resources between the two parties are different. This paper studies the credit rating system based on the value of small and medium-sized logistics enterprises [10].

### 2. Development of Small and Medium-sized Logistics Enterprises and Related Theory Analysis

#### 2.1. Necessity of Credit Rating System for Small and Medium-sized Logistics Enterprises

Establishing credit evaluation system of small and medium-sized logistics enterprises based on credit investigation can improve social morality on the one hand, and activate Finance on the other. Trusted enterprises have a clear understanding of their own business conditions and operational risks, while it is difficult for the trustee to obtain the real information of this side, and the credit information is asymmetric. There are few credit investigation service organizations with independence, objectivity and authenticity, and the service level is low. The phenomenon of credit information distortion is serious. The overall economic strength of small and medium-sized logistics enterprises is not strong, but the growth is very good. If we do not distinguish between them, and completely copy the traditional enterprise credit rating index system to investigate small and medium-sized logistics enterprises, then the current credit rating system of small and medium-sized logistics enterprises is not only cumbersome, but also can not accurately reflect the real situation of small and medium-sized logistics enterprises to choose more convenient to measure. And the indicators that measure the more accurate results are analyzed. While reducing the cumbersomeness of the operational indicator system, it also increases the overall effectiveness of the indicator system. Incorporate the current economic situation to establish an applicable credit risk assessment system to improve the credit risk assessment method for small and medium-sized logistics enterprises. I hope that this evaluation system can be continuously summarized and interpreted according to the changes in the new economic environment.

## 2.2. Basic Principles of Credit Rating System for Small and Medium-sized Logistics Enterprises

Financial stability is the most important characteristic of small and medium-sized logistics enterprises. Financial indicators also reflect the solvency, profitability and sustainable development ability of small and medium-sized logistics enterprises, which are important aspects of reflecting the level of enterprise credit. For commercial banks, credit risk is the primary aspect of risk management. Customer's credit risk mainly manifests as default risk, especially the default risk that the principal and interest of the loan can not be repaid at maturity. It is of great theoretical and practical significance to evaluate the credit rating of small and medium-sized logistics enterprises scientifically, objectively and impartially. The key to solve the problem lies in whether a scientific and reasonable credit rating evaluation system for small and medium-sized logistics enterprises can be set up and how to apply the rating results. The main related to credit risk are non-systematic factors, such as the direction of loan investment, the financial status of borrowers, and risk appetite. For credit risk, non-systematic is its main feature. It is similar to the influencing factors of small and medium-sized logistics enterprises, the influencing factors of pledges, the correlation analysis of indicators under

macro environmental influence factors and the above-mentioned customer risk influencing factors, so other The calculation result of the influencing factors. The bank cannot judge the true financial and operating conditions of the company. Therefore, in the credit rating of small and medium-sized logistics enterprises, the financial statement analysis cannot be relied too much. Otherwise, the grades assessed are often inconsistent with the real credit status of the enterprise.

The direct or indirect correlation between the active fiscal policy and the small and medium-sized logistics enterprises is embodied in the continued implementation of the fiscal policy to reduce the burden on the small and medium-sized logistics enterprises. The profitability of an enterprise is the basis of its value. Increase the amount and speed of capital circulation, and stimulate the rapid economic development, so that the financial and commercial virtuous cycle. In addition, it can also activate business and trade activities, whether foreign trade or domestic trade, credit mode will inevitably become more and more important with the development of market economy. If they lose the ability to make profits, they will not be able to develop and survive, lose their value, and will not trade in the market. Therefore, the enterprise value is determined by the potential profitability of the enterprise in the future. Enterprise credit is a very complex concept. There are not only many indicators reflecting enterprise credit from different aspects, but also different attributes and dimensions. In view of this, in the construction of the credit rating system of small and medium-sized logistics enterprises, compared with the credit rating system of large and medium-sized enterprises, the role of financial statements should be diluted, while focusing on the analysis of historical performance of enterprises. Five aspects of capital structure, management capacity, economic strength, creditworthiness and development potential are important parts for measuring the risk assessment of small and medium-sized logistics enterprises. The credit rating index system for small and medium-sized logistics enterprises is shown in Table 1.

Table 1 Credit Rating Index System of Small and Medium-sized Logistics Enterprises

	Weight	Factor
Capital structure	Asset-liability ratio	0.26
	Net cash flow from operating activities	0.31
Business Capability	Gross Asset Profit Rate	0.28
	Net interest rate on sales	0.35
Economic strength	Owner's Rights and Interests	0.38
	Long-term assets	0.19
Credit standing	Interest payments on loans	0.24
	Deposit-loan ratio	0.30
Development potential	Capital appreciation rate	0.32
	Sales growth rate	0.28

#### 3. Suggestions on Credit Risk Control

### 3.1. Strengthen dynamic risk monitoring

Strengthen dynamic risk monitoring is a very important link to prevent credit risk of small and medium-sized logistics enterprises. Banks often have more in-depth and comprehensive understanding of the actual situation of customers after credit business transactions with customers. Through the analysis of financial strategy, business strategy, historical operation situation and operation ability of small and medium-sized logistics enterprises, we should have a certain grasp of the core competitiveness of small and medium-sized logistics enterprises. Establish the system evaluation index system, select a set of multiple evaluation indexes according to the evaluation objectives, and try to achieve comprehensiveness and measurability. Establish the system evaluation model, and select the appropriate evaluation model according to the system evaluation objectives and the characteristics of the evaluation objects. Options are valuable, so creating, identifying and utilizing options will bring higher returns to investors while reducing investment risks. After paying a

certain cost to obtain the option, the uncertainty of the future is the source of the option value. The greater the uncertainty, the greater the value of the option. Understand the future development strategy and core technology of the company, quantify the qualitative factors, give the industry's industry status score, and correctly judge the company's ability to create cash flow in the future.

## 3.2. Establishment of Credit Incentive Mechanism and penalty mechanism for breach of contract

Credit evaluation originates from information asymmetry. It has a set of comprehensive and scientific ways to reveal credit information disclosure. It can comprehensively assess the current operating environment, management level, guarantee risk, quality of secured assets and future sustainability of guarantee institutions. In the game between banks and enterprises, financing enterprises as agents often have information advantages, while banks as principals have information disadvantages. In the case of asymmetric information, the credit risks faced by principals often increase, in order to reduce the damage of principal-agent to principals. Enterprise value is a comprehensive concept. When evaluating the value of small and medium-sized logistics enterprises, that is, to predict the future cash flow of small and medium-sized logistics enterprises, we should consider all the factors that need to be considered comprehensively, and aim at the future cash inflow and outflow of enterprises. Under the conditions of market economy, the optimal allocation of funds is achieved through the operation of the market mechanism. The so-called market mechanism refers to the function of guiding, regulating and regulating various market entities in the market economy, such as price, competition, supply and demand, etc. It is widely used. It deepens people's understanding of the value of the enterprise, and reflects the value of the opportunity owned by the enterprise to the value of the enterprise, which makes people's grasp of the credit value of the enterprise more accurate, and represents the latest direction of the enterprise value evaluation theory.

Modern enterprise value theory regards the enterprise as a set of contracts of investors. The purpose of investors is to increase the value of capital by organizing various enterprises, producing and operating activities. The purpose of purchasing and merging enterprises is also to realize the value-added and benefits and to obtain satisfactory returns. Improve the level of customer service. Through the above specialization measures, the existing business is further integrated, which can promote small and medium-sized logistics enterprises to improve their comprehensive competitiveness. The degree of market competition and capital investment are different; the volatility and periodicity of the market are also different; the growth and future development prospects of the market are completely different in different regions. These situations more or less affect the credit rating of enterprises. When small and medium-sized logistics enterprises develop to a certain scale, the business model will surely change, and the product structure will also face adjustment. Therefore, the matching of management systems and stable operation are also important inspection points. . The forecast of cash flow for small and medium-sized logistics companies already covers all the factors worth considering. Therefore, the enterprise value derived from cash flow is relatively complete and has high credibility. Banks and logistics companies can grasp the pulse of market conditions, grasp the market value of goods and the changing rules of sales, and obtain real-time information in time to facilitate the evaluation and selection of pledges, and avoid the evaluation of pledge goods under asymmetric information. distortion.

#### 4. Conclusion

This paper studies the credit rating system based on the value of small and medium-sized logistics enterprises. Credit evaluation is based on the comprehensive understanding, investigation, research and analysis of enterprise capital structure, operation ability, economic strength, credit standing and development potential by professional credit evaluation institutions, and combined with social credit environment. Enterprise credit can make it easier for enterprises to gain the trust of investors and the support of financial institutions, so as to broaden financing channels, expand financing scale and reduce financing costs. For small and medium-sized logistics enterprises, improving the level of logistics management can not only save their own transportation costs, but also improve their own

credibility to a certain extent, which is conducive to more customers, thus achieving higher economic benefits. The use of this credit rating system based on the value of small and medium-sized logistics enterprises will help us to establish a future-oriented perspective, a thinking ability to see the business management capabilities, and help credit decision-making to develop in a scientific and refined way. Banks have new developments in the field of risk management. The index system constructed in this paper enhances its representativeness while simplifying it. However, its completeness and applicability need to be tested and continuously improved in the application process.

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