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LOGISTICS CORPORATE STRUCTURES SUPPLY CHAIN FINANCING EXPERIENCE OF DEVELOPED COUNTRIES

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Abstract: This article covers the technological development of the logistics industry in developed countries, globalization and expected and growing demands of consumers. Logistics company corporate structures are designed to optimize supply chain efficiency, reduce costs, and improve customer service. In addition, important aspects of supply chain financing that enable smooth operations and mitigate financial risks are explained.

Keywords: National Economy, Logistics Infrastructure, Logistics Corporate Structures, Expenses, Financial Income, Capital Sources, Profitability Indicators, Financial Analysis.

Introduction

Logistics corporate structures in developed countries emphasize the integration of logistic resources, development of advanced infrastructure, adoption of appropriate technology, and the establishment of comprehensive policy systems [1,2]. Supply chain financing plays a crucial role in addressing financial difficulties for small and medium enterprises, focusing on credit control, property control, third-party controls, and financing modes within stable trading channels [3,4,5]. International logistics operations in developed nations require a deep understanding of the global financial system, including managing foreign exchange rate volatilities and market risks through derivatives and strategic planning [6,7]. Additionally, a supply chain financing system involves a financing platform that records supplier and plant identification information, account payable data, and financing approval rules, facilitating efficient financing processes [8,9]. These insights highlight the importance of robust corporate structures and financial strategies in the logistics industry of developed countries.

Large logistics firms in developed countries often adopt an integrated approach, offering a full range of services from transportation, warehousing, inventory management, to distribution. Companies like DHL, UPS, and FedEx exemplify this model, providing end-to-end solutions that enhance operational efficiency and customer satisfaction[10,11].

Horizontal integration involves merging with or acquiring other logistics firms to expand market share and geographic reach [12,13]. Vertical integration, on the other hand, includes acquiring companies in different stages of the supply chain, such as suppliers or retailers, to control the entire value chain and improve coordination.

Developed countries have a mature market for trade finance instruments such as letters of credit, trade credit insurance, and factoring [13,14,15]. These instruments help mitigate risks associated with international trade and provide liquidity to suppliers, enabling smoother transactions and stability within the supply chain.

The advent of fintech has introduced innovative supply chain financing solutions like dynamic discounting, supply chain finance platforms, and blockchain-based financing. These solutions improve transparency, reduce fraud, and accelerate payment cycles, thereby enhancing the overall efficiency of the supply chain [16,17].

The logistics and supply chain financing landscape in developed countries is characterized by advanced corporate structures and innovative financial solutions that drive efficiency and resilience. The experience of these countries highlights the importance of technology adoption, sustainability, and collaborative models in building a robust logistics infrastructure [18,19,20]. These best practices provide valuable insights for developing countries looking to enhance their logistics and supply chain capabilities.

Literature Review

Theoretical and practical aspects of the importance of financing logistics corporate structures, as well as issues of their introduction, have been researched by a number of foreign economists. Also, many theoretical scientific works and definitions were made on the methodology of effective financial management of the logistics industry.

According to research by Jia-Chen Fu et al., supply chain finance is important in supporting logistics companies, especially SMEs, by providing financial support and overcoming barriers such as information asymmetry and insufficient collateral becomes important [21].

According to research by Feng, Chen logistics 4.0 introduces blockchain-based financing schemes to simplify financing steps, strengthen privacy protections, and improve credit-checking processes for logistics companies, ultimately increasing their access to financial resources [22]. According to Sumeer Chakuu in addition, collaboration between logistics service providers and banks to offer inventory financing as a supply chain financing service can address credit requirements that exceed traditional banking capabilities, LSPs leverage risk assessment and monitoring capabilities to provide customized financing solutions develops [23].

Effective supply chain financing strategies are necessary to optimize cash flow efficiency and ensure sustainable profits for organizations, emphasizing the need for a balanced operational and financial strategy in logistics companies' supply chain management [24].According to T. E. Gorgodze financing logistics enterprises is crucial due to its role in addressing capital turnover challenges for SMEs [25].

According to Wen-Yuan Teng et all logistics finance facilitates efficient fund flow, benefiting logistics, financial, and financing entities through close cooperation [26].

However, the development of logistics finance faces credit risks, necessitating the establishment of risk prevention systems for sustainable growth [27]. The integration of neural network algorithms and logistics financial models is essential to mitigate risks and enhance financing efficiency for small and medium-sized enterprises [28]. Additionally, the quality of credit in logistics finance is vital for bank management and economic development, with business management, prospects, and financial conditions being key evaluation dimensions [29]. Overall, financing logistics enterprises not only supports their growth but also contributes to economic development and market activation, making it a critical aspect of financial management.

Methods

Scientific abstraction, grouping, comparison, retrospective and prospective, empirical analysis and other methods were used in the research. In the article, the importance and necessity of financing sources of logistics corporate structures in the economic system was justified using the method of scientific abstraction. Also, the financial analysis of enterprises in the logistics system was developed and evaluated.

Results and Discussion

When studying the foreign experiences of financing the activities of corporate structures in the logistics system, it is particularly noteworthy that the logistics system is one of the diverse sectors in the United States, and it is observed that the costs related to this sector have decreased relatively. In the United States, there is a profession of logistics that analyzes and coordinates the supply chain of enterprises in the logistics system, and the owners of this profession conduct all practices related to the field of logistics. Currently, the average salary of logisticians in the USA is around 70,000-80,000 dollars per year.

In general, the logistics industry in the country has been stable over the past few years, with a growth rate of about 2-2.5 percent. The logistics and transportation sector of the United States of America achieved revenue of 1.56 trillion dollars in 2020, which was 7.4% of the annual gross domestic product (GDP), and in 2021, it achieved revenue of 1.85 trillion dollars, corresponding to this annual gross domestic product (GDP). made 8 percent of domestic products (GDP). These huge growth numbers. It is predicted to continue in 2022-2025. In the United States, most of the companies in the logistics system provide supply chains for companies in various industries. (See Figure 1).

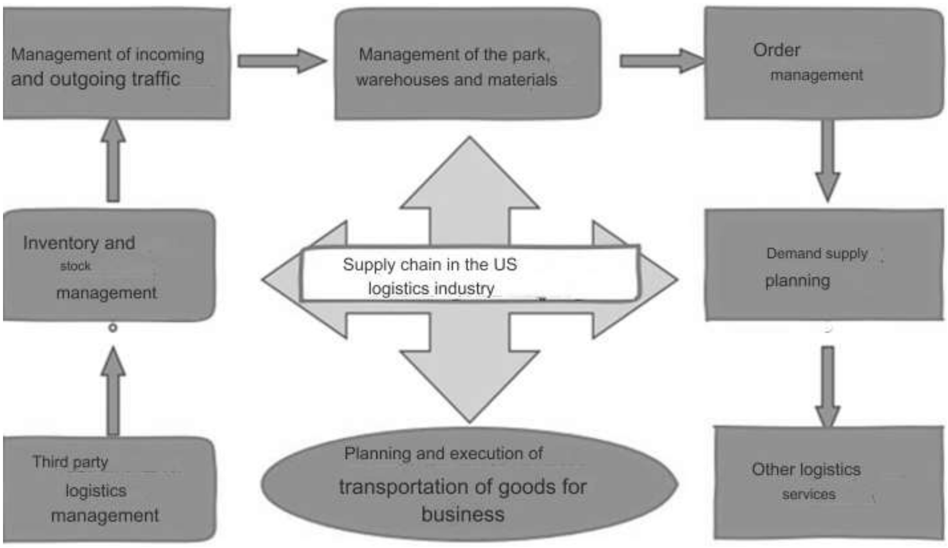

Figure 1. US logistics supply chain[1]

In the United States, investments in the financing of enterprises in the logistics system are a part of financial planning, and logistics enterprises play an important role in long-term and short-term economic growth. Enterprises in the logistics system make decisions about investing in new technologies and vehicles, based on their financial structure, market share, the geography of the vehicle, and the cargo characteristics of their current and potential customers. The transportation and logistics industry in the United States is a constantly changing industry. In this country, it has been observed that improper organization of distribution, transportation, storage and delivery of valuable resources such as all branches of the industrial economy, agriculture, coal, metallurgy, oil and gas industry, etc. leads to emergency situations. The further development of logistics services in the

[1] Independently developed by the author

United States has created the need for infrastructure financing, and alternative financing types are being implemented for the logistics industry.

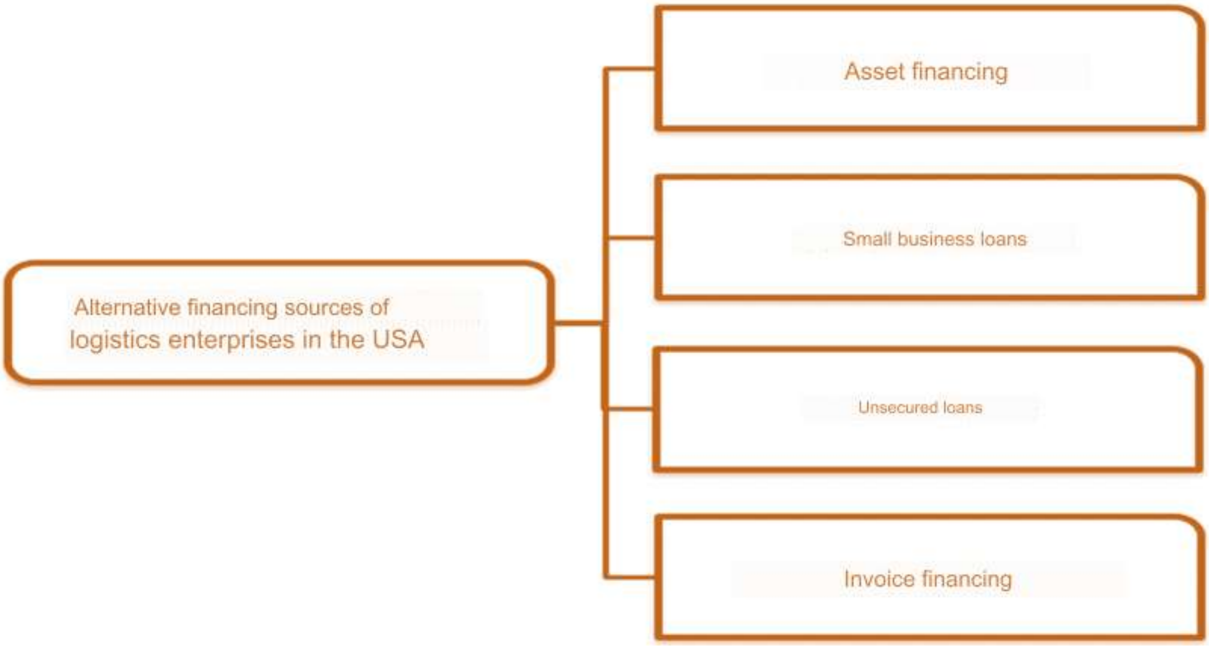

Figure 2. Types of financing logistics enterprises in the USA[2]

1. Asset financing. With the emergence of new alternative technologies in the field of transport and logistics, i.e. fixed assets, even if they do not have a transformative effect, the purchase of this expensive modern equipment is considered an important part of logistics services. In logistics services, fleet renewal is a very important industry. They also lead to increased efficiency and lower fuel costs.

2. Small business loans. This is a type of loan specially designed for newly established logistics enterprises, whose activity may consist of less sales or credit history than other enterprises. This loan application is made taking into account the future goals and past performance of logistics enterprises. In the US and European countries, small businesses in logistics enterprises are usually defined as enterprises with an annual turnover of less than 6.5 million dollars and 50 or fewer employees.

3. Unsecured loans. If the logistics company requires funds urgently, but does not have sufficient collateral, it is appropriate to choose an unsecured loan. This loan option offers similar benefits to small business loans.

4. Invoice financing. This financing solution is unique for logistics businesses in aligning their cash flow with their current sales book. In order to maintain the cash flow and ensure the rapid development of the economic activity of the enterprise, settlement is made according to the existing invoices.

Existing internal resources can also be freed up, so the business can devote more resources to growing its business, as the lender acts as a credit controller to keep track of unpaid invoices.

Supply chain finance is generally defined as "the integration of financing processes with customers, suppliers, and service providers to optimize intercompany financing as well as increase value for all participating companies." Applying a resource-based perspective to logistics companies, effectively combining supply chain and financial practices in an integrated manner can create a

[2] Independently developed by the author

sustainable competitive advantage.

According to foreign scholars, traditional factoring is a supplier-initiated approach that sells receivables to a third party at a discount to immediate cash to improve working capital. Financing of inventory in logistics enterprises is new from short-term credit or line of credit of enterprises

means that the inventory will be used for later sale or purchase. Inventory is also used as collateral for a loan. Logistics supply chain financing is often replaced by reverse factoring.

The main difference between reverse factoring and traditional factoring is that the financing process is initiated by the buyer and applied to the supplier's financial institution. The buyer uses the supplier's credit rating to provide access to cash. Also, instead of paying the supplier directly, the buyer allows the financing firm to act as an intermediary between their company and the supplier.

The invoice sent by the supplier is paid relatively quickly by the financial institution at a lower interest rate than the market, which allows the buyer to pay off the financing company later, together with the principle of credit. Logistics companies in the United States and Europe are benefiting from implementing logistics supply chain financing through their multiple supporting roles. At the same time, its value-enhancing role, where increased collaboration and reduced risk helps the firm lower its cost of capital and creates new opportunities for loans that improve financial performance. In general, the advantages of reverse factoring in the financing of logistics companies in the United States and European countries include standardization of payment terms, improvement of relations with suppliers, transparency and reduction of conflicts between participants.

The adoption of reverse factoring in logistics financing creates strong partnerships between supply chain members that help increase commitment, improve information sharing, and improve communication. Reverse factoring is created by the members of a network of many types of relationships with each other.

Logistics companies use factoring and reverse factoring in financing to help both the buyer and the supplier gain a competitive advantage in the industry when the participants in the relationship have few resources or are difficult to imitate. Thus, supply chain members are more closely connected and conflicts are mitigated through relationships and supply chain collaboration.

According to foreign experience, it was found that in the implementation of factoring and reverse factoring practices in the financing of logistics enterprises, cooperation with the supplier can create harmony that helps reduce the costs of enterprises' purchases. This shows that reverse factoring can help customers reduce their costs.

Financing the logistics industry in the US and European countries shows that the implementation of reverse factoring leads to increased profitability for the acquisition of enterprises. In this case, increasing the profitability of logistics enterprises can be achieved by increasing sales or reducing costs.

Foreign scholars Chuk and Lori found that companies that use reverse factoring in the logistics industry perform better in terms of several accounting results related to higher return on assets (ROA), higher profit margins, and operational performance compared to companies that do not use reverse factoring. They also noted that the implementation of factoring practices can lead to an increase in the income of logistics enterprises [30].

In addition to increasing revenues, before it becomes clear in the discussion, factoring and reverse factoring can help buying companies reduce costs, thereby increasing the overall profitability of the buyer's logistics company. It is known from foreign practice that the practice of factoring and reverse factoring in financing the supply chain in the logistics industry has a positive effect on the profitability indicators and operating profit margins of enterprises. In the logistics industry, supply chain finance depends not only on its efficiency management, but also on the liquidity of supply chain finance. Also, in the implementation of supply chain finance, the activity of logistics enterprises is evaluated from the aspects of logistics operations ability, supply chain dynamic management ability, online platform performance ability, and financial activity ability.

Logistics industry is of particular importance in China when foreign experiences of supply chain financing are studied. At present, the practice of online supply chain finance has been widely implemented in the financing of China's logistics industry. Online supply chain finance is the financial institutions of the main enterprises in the supply chain, upstream and downstream, through the Internet technology, under the condition of obtaining information to reduce financial losses. implementation of the interconnection of information systems of stream enterprises. Compared with traditional supply chain finance, online supply chain finance has more effective information communication, more accurate management process and manageable financial risks.

Compared with traditional supply chain finance dominated by logistics enterprises, online supply chain finance has a wider credit scope, is no longer limited to large enterprises, and has dynamic collateral to complete a transparent process on time.

According to China's experience, in the dynamic collateral mode of online supply chain finance managed by logistics enterprises, financing enterprises apply for financing to the cooperative bank of the online platform through the electronic warehouse receipt presented on the online platform of logistics enterprises. Online supply chain finance, which is dominated by logistics enterprises, credit enterprises and debtor enterprises, adopts the collection model.

Banks sign contracts on the online supply chain financial platform provided by logistics companies and provide financial services to supply chain related companies through e-commerce.

Making the financing process easier, the online financial supply chain is not a commercial bank that owns the goods in the cargo cycle, but rather, the online platform provides the first choice of credit investigation list for enterprises in the supply chain to build a good competition and credit investigation system. In determining the efficiency of supply chain finance in China, logistics is a source of capital for enterprises. Enterprises have their own advantages in participating in supply chain financing, and the advantages of logistics enterprises' professional service.

The whole system of logistics supply chain finance in China is shown in the diagram below (see Figure 3).

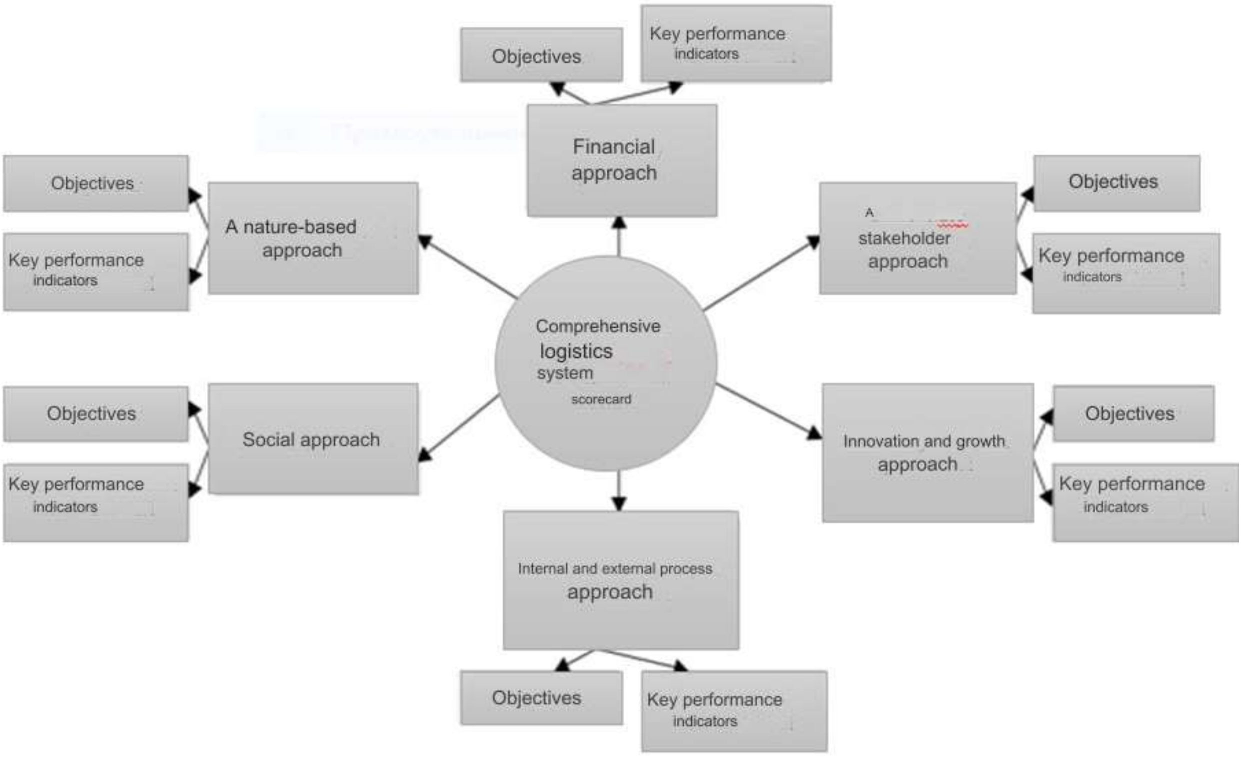

Figure 3. The entire system of the Chinese logistics supply chain

According to the above diagram, in the process of determining the exact three-level indicators, financial indicators are selected as the standard of financial indicators of listed companies, and non-financial indicators of warehousing and logistics enterprises are high-frequency indicators developed by the country or industry. indicators and other relevant standards

According to the characteristic index of logistics enterprises, choose different methods to determine the weight of the logistics index system, and finally, the analytical hierarchy process was used to determine the index system of financial performance evaluation.

With the emergence of the modern new mode of production organization, supply chain financing has become a research point. However, companies are required to have their own unique set of conditions, the ability to take the most drastic and effective action, and achieve the best performance in order to implement supply chain financing. It is known from foreign practice that every aspect of financing the activities of logistics enterprises has a positive or negative effect on the profitability of enterprises. Therefore, it is very important to consider, understand and evaluate the importance of the functions of financial and economic issues within the enterprise and their impact on economic profitability.

Enterprises in the logistics system offer all logistics services, playing a key role in ensuring the delivery of products to the target market, customer satisfaction and cost minimization in order to ensure the competitiveness and profitability of the enterprise.

Also, the income of logistics enterprises in a certain period, for example, the amount received from the sale of products or services in a year, its costs are the costs associated with the production and distribution of products or services during this period, and the excess of income over costs, profitability indicators includes. In general, the level of economic profitability of logistics enterprises is one of the main goals for logistics enterprises, like any other enterprise.

Therefore, in logistics, the supply chain finance performance of warehousing and transportation enterprises continues to increase, and the need to study the supply chain finance performance of enterprises in order to facilitate the development of supply chain finance of enterprises is increasing.

Conclusion

As a result of the analysis and conclusions made on the advanced foreign experience of financing the activities of logistics corporate structures, the following suggestions and recommendations were developed.

1. The supply chain of material (informational and financial) resources in the logistics economy covers the scientific and practical spectrum of organizing and managing the supply of flows from relevant sources to the final consumer.
2. Modernization of the national logistics system and the effectiveness of their financial support also serves the function of reducing transportation costs and delivery time by delivering goods and services in the country's economy, and minimizing transaction costs by saving production costs.
3. By effectively financing the logistics system, they will create a financial basis for the development of their activities, moving socially important goods, for example, basic food products, to a new level in terms of quality, moving them faster and at a lower price within the country.
4. The development of logistics in the economic system is measured by the logistics performance index (LPI) and its components. This efficiency depends primarily on the quality and competence of customs and border management, trade and transport infrastructure, and logistics services.
5. Organization of finance of business entities operating in the field of logistics infrastructure in the market economy is traditionally based on the principles of self-financing, self-recovery and complete economic independence. Based on these principles, the maximization of private capital through the full mobilization of internal financial potential in the formation of capital advanced to assets is the main financial factor of sustainable development. In addition, by attracting financial resources from the capital market in order to increase the indicators of business activity, business entities will have the opportunity to maximize the market value.

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