

Financial Management of Supply Chain Based on Strategy Management

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ABSTRACT

Modern enterprise supply chain management is primarily influenced by the five market, company, manager, financial system, and financial management factors. Therefore, the paper will focus on the aspect of financial management to reveal the importance of financial management to the enterprise supply chain level. This paper aims at supply chain management at the level of financial management. Three dimensions are involved: introduction to the background of various financial departments outside the enterprise; how to make a correct financial valuation investment; how to make strategic planning of the supply chain. The results show that the external financial system structure of the enterprise is very complete, and the enterprise has a good prerequisite foundation in the process of supply chain financial management. In the decision-making of supply chain management, the focus can be shifted to working capital management, and different working capital investment strategies can be adopted for different situations in the enterprise's supply chain.

Keywords: *Financial sector system, supply chain management, NPV, working capital management, strategic planning*

1. INTRODUCTION

At present, with the progress of social science, the importance of supply chain management to the development of an enterprise has become increasingly prominent, and how to carry out supply chain management can be discussed from many aspects. For example, Yu Le'an and others believe that [1] the market can intervene in the pricing decision of the supply chain, and after the intervention of market access, the supply chain is forced to be reconstructed. Zhang Jingfeng and Zhou Shouhua [2] from the perspective of the current situation of capital management, combining industrial symbiosis and ecological finance. If the enterprise supply chain can be managed from the perspective of financial management, some financial decisions on the supply chain will be more targeted, more accurate, and the whole supply chain will be more complete because there will be a series of data support, more rigorous logic, and the credibility of the enterprise will be improved. At the same time, the improvement of supply chain management will also improve the integrity of the whole market system, improve its resource liquidity, and optimize its resource allocation. At the same time, according to Wang Qiaoting [3], the rational use of marketing resources within the supply chain will also improve the financial management efficiency of enterprises, promote the expansion of sales channels and strengthen the use of market information.

Based on the relevant literature research, the paper puts forward some suggestions on the valuation of NPV in the process of capital management. At the same time, the paper also studies the external financial system of enterprises and the strategic planning adopted in different situations. The paper can not only improve the enterprise managers' understanding of the external financial environment, but also further apply the methods of NPV and Tobin's q value to the financial investment decision-making, which is more scientific. It can enable enterprises to flexibly formulate different strategic plans according to different situations.

2. FINANCIAL MANAGEMENT FRAMEWORK OF EACH FINANCIAL SECTOR SYSTEM OUTSIDE THE ENTERPRISE

2.1. Central bank

It is a leading financial center institution in the country and an important tool for the state to intervene and regulate the development of the national economy. It is responsible for formulating and implementing the national monetary and credit policies, has the unique right to issue money, and implements financial control. The implementation of financial management by the central bank mainly includes the following three aspects.

(1) regulating the money supply. Monetary policy is one of the main means for the state to regulate the economy and an important part of the state machine. It can also be analyzed through the money multiplier. In summary, the money supply depends on the product of the base currency and a multiplier, which is expressed as: $M=MB$. M represents the money supply, B represents the base currency, and M represents the money multiplier[4].

(2)management of interest rate. The central bank interest rate refers to the loan interest rate between the central bank and financial institutions, including legal and excess deposit reserve interest rate, refinancing (rediscount) interest rate and open market operation interest rate. The refinancing(rediscount) floating interest rate system straightens out the capital interest rate relationship between the central bank and the borrower and improves the ability of the central bank to guide the market interest rate[5]. Among them, the benchmark interest rate is the most critical tool. Through it, both the central bank and commercial banks set loan interest rates, which not only maintains social financial order but also the political balance between employment rate, inflation, and redistribution.

(3)Foreign exchange management. Firstly, the exchange rate can be controlled directly or indirectly. Secondly, foreign exchange reserves can be accumulated. Because economic policies are uncertain, for preventive motivation, foreign exchange reserve accumulation provides an additional government guarantee and reduces the uncertainty of economic policies. Under normal circumstances, enterprises whose stock price and cash flow are vulnerable to uncertainty will have a lower debt level so as to avoid financial distress[6]. Finally, foreign exchange reserves can be used to stabilize the local currency when the country is in danger.

2.2. Ordinary bank

It mainly has the functions of traditional savings, investment, and loan, and some typical business models: state-owned banks and professional banks; private banks and commercial banks; quasi-bank models; and other divisions, such as "savings and loan" and "Construction Association." When enterprises conduct financial management, they can make demand deposits or commercial loans through these business models to make the working capital turnover of enterprises more flexible.

2.3. Stock market

The stock market is a place for the transfer, trading, and circulation of issued shares, including the exchange market and OTC market. It is based on the distribution market and is also called the secondary market, which

refers to the transfer market engaged in the trading of old securities or bills and other financial instruments that have been listed. Here are its three main functions:

The main function of the stock market is to raise funds. By issuing shares in the stock market, enterprises have established scattered and concentrated idle funds in society and formed huge long-term capital to support socialized large-scale operations and large-scale production. The second one is the allocation function. Through the transfer of resources from inefficient to efficient departments, the stock market can most effectively allocate the economic resources of a society in the most effective and efficient way, realize the rational allocation and effective utilization of scarce resources, and also play the role of transforming the system. The stock market can promote the company to change the operating mechanism and establish a modern enterprise system. If an enterprise wants to become a listed company, it must first be restructured into a joint stock limited company and improve its internal control system. After listing, it is necessary to fulfill the obligation of information disclosure, which keeps the enterprise always under the supervision of all aspects, and the corporate governance is perfect. The third one is the regulation function. The macro-economy through the regulation function of the stock market. The stock market connects depositors and investors. The operation mechanism of the stock market plays a role through its influence on depositors and investors in further optimizing the allocation of resources. It can be realized by financing in the primary market and by stock flow in the secondary market. Through the timely disclosure of various information, investors can choose stocks with great profit potential and good growth, so that funds can gradually flow to enterprises with good development prospects and benefits.

However, a number of policies are still needed to regulate the stock market: improving the quality of listed companies and putting a listing and delisting system in place; unblocking the channels connecting the money market and the capital market; and taking prudent policy responses to reasonably intervene in stock price fluctuations[7].

2.4. Other investment institutions

There are commonalities among various private equity funds. Most private equity funds have high investment risks. The requirements for qualified investors and private offerings should be strictly enforced when raising funds to balance investment risk and information disclosure. With the continuous development of the market, the primary and secondary markets appear. The economic potential is further explored. More and more people choose to invest, but their investment direction and expectations of income are different. Thus, the differences between different

types of private equity funds will become more and more obvious. Therefore, discriminating and identifying different types of private equity funds and adopting differentiated supervision has long-term and important policy value[8].

2.5. Insurance

A security mechanism is a tool used to plan life finance, a basic means of risk management under the conditions of a market economy, and an important pillar of the financial system and social security system. Because of another meaning of insurance, it can be considered that it is a commercial insurance act in which the applicant pays the insurance premium to the insurer according to the contract, and the insurer is liable to compensate for the property loss caused by the possible accident agreed in the contract, or the insured is liable to pay the insurance premium when he dies, is injured, disabled, sick, or reaches the age, time limit, and other conditions agreed in the contract. Therefore, can we consider it regulated gambling in an economic sense? Of course, the emergence of this system and mechanism has also contributed to economic growth and diversity.

Through the understanding of the financial departments outside the above enterprises, it is conducive to understanding the whole financial management system, facilitating managers to start from the overall financial structure, and enabling managers to better understand the external financial environment of the enterprise and formulate appropriate strategic planning according to the corresponding environment and financial policies.

3. USING FINANCIAL VALUATION FOR INVESTMENT CORRECTLY

Investment is defined as “the act of generating costs immediately to expect future returns”. For the overall evaluation of investment, we can adopt the following methods:

3.1. Net Present Value method

The relevant formula of NPV is used to calculate and analyze the value of a current investment relative to no investment. On the basis of net present value, if it is expected to obtain sufficient potential benefits from the information obtained at the same time so as to improve the decision-making, the relative value of delayed(all or part) investment should also be considered. However, it still relies on the “efficient market” hypothesis. It is necessary to calculate the current expected value of future income flow: the income generated by investment in its life cycle; investment-related operating expenses; and the required return on equity.

Invest whenever the $NPV > 0$. When the net present value of the project is greater than 0, it indicates that the cash flow generated by the project can provide investors with income beyond their requirements.

In this approach, the capitalized value of the marginal investment is also included. As far as possible, it is based on the market value of the ownership of the investment in the secondary market. Or it chooses its estimated value, which is the expected present value based on the net profit stream.

$$NPV = \sum (CI - CO) / (1+i)^t$$

CI = present value of future net cash flow

CO = present value of original investment

CI-CO = the net cash flow of the first year, the benchmark discount rate.

I = discount rate

t = number of periods

t = 0 in the calculation of initial investment

t = 1 in the first year after investment[9]

t refers to the construction period and production period of the project, which can be calculated by the market life of the project product or the forecast period of cash flow.

Firstly, the NPV rule helps to use the above formula to compare investment projects with investment opportunities in financial markets. Secondly, NPV rules help to independently judge whether each project invested in and each strategy implemented by the enterprise can bring positive cash flow, so as to provide a judgment basis for various investment decisions. By calculating the net present value of the project, the enterprise can judge whether to accept the project. From the perspective of enterprise strategy, enterprises can evaluate projects in financing, investment, and business activities and formulate corresponding policies. According to the calculation formula of the net present value rule, in order to obtain a positive net present value, the enterprise can take the following three actions: reducing the initial investment cost C_0 ; increasing future cash flow in period C; and reducing the discount rate of future cash flow R. Since reducing the discount rate is beyond the control of the enterprise itself, the first two methods to improve the net present value are mainly discussed[10].

3.2. Tobin's q approach

Similar to NPV, invest only if $q > 1$. $q = (\text{capitalized marginal investment value}) / (\text{replacement cost})$. Because If the Tobin's q of a company is greater than 1, it indicates that the market valuation of the company is higher than its own replacement cost, and the market value of the company is higher.

4. MAKING STRATEGIC PLANNING OF SUPPLY CHAIN FROM THE PERSPECTIVE OF WORKING CAPITAL MANAGEMENT

Working capital refers to financial liquidity and viability for participants in a supply chain, and it is important to understand how firms can maximize their working capital when trade credit is part of their business transactions. While working capital has always been critical to every business, supply chain professionals' active engagement in coordinating financing in their area of expertise has taken off only in the last decade[11]. The strategic planning for supply chain management is mainly from the perspective of working capital management in financial management, because working capital management is not only an eternal topic of corporate finance but also closely related to the company's supply chain. The liquidity, safety, and profitability of current assets determine its indispensable position in the company's short-term investment. Decision-makers must make decisions on the optimal amount of current asset investment, and the benefits and risks must be weighed in the decision-making.

4.1. Determination of target cash holdings

First of all, it needs to determine the target cash holdings of the enterprise in the process of working capital management to formulate the corresponding strategic planning. However, in the process of calculation, we need to clarify four different calculation modes:

1) Under the cost analysis mode. The cash holding amount with the smallest sum of cash holding cost, management cost, and shortage cost can be regarded as the best cash holding amount of the company. 2) In the inventory mode. The sum of cash holding and cash transaction cost is the total cost of holding cash. Finally, the function of the total cost of holding cash can be derived to obtain the best cash holding. 3) In the mode of cash turnover. The optimal cash holding is determined according to the cash turnover speed. 4) In the random mode. The "Miller Auer model" can be introduced. The model was proposed by Morton Miller and Daniel Auer in 1965. It is a model that can determine the target cash balance based on the daily random fluctuation of cash inflow and outflow[12]. According to a large number of times of random phenomena, the probability and mathematical statistics in mathematics are used to calculate the average level of various possible results, so as to determine the best cash holding.

4.2. Different types of investment strategies

For different target cash holdings, there are three

strategic plans for working capital investment:

(1) A conservative investment strategy

Enterprises with sufficient cash and securities, sufficient inventory supply, loose payment terms for customers, and a high level of accounts receivable are manifested in a high ratio of current assets to income. This strategy requires more current asset investment and bears a large holding cost of current assets, mainly the opportunity cost of capital, and sometimes other holding costs. However, sufficient cash, inventory, and loose credit conditions make the risk of enterprise terminal operation very small, and its shortage cost is small.

(2) An aggressive investment strategy

The company invests as little cash and as little securities as possible before making a small investment in inventory. It adopts a strict sales credit policy or credit sales, which shows a low ratio of current assets to income. This strategy saves the cost of holding current assets such as the opportunity cost of saving capital. At the same time, the company bears greater risk of shortage costs such as business interruption and lost sales revenue.

(3) Suitable medium-sized investment strategy

Enterprises should weigh the gains and losses, determine the optimal investment demand, and minimize the sum of shortage cost and holding cost.

When making strategic planning, enterprises should choose the above investment strategy types in combination with their own actual situation. At the same time, they should also pay attention to the following problems: the assets correspond to the debt repayment period; the net working capital is settled by long-term capital sources; and certain capital or financing capacity is retained.

5. CONCLUSION

Therefore, it can be seen that the external financial system architecture of the enterprise is very complete, and the enterprise can have a good premise foundation in the process of financial management of the supply chain. For example, the cash inflow and outflow of the company is stable and predictable. Finally, in the decision-making of supply chain management, the focus is shifted to working capital management, and management decisions are made by adopting different working capital investment strategies for different situations in the enterprise supply chain (here we use different target cash holdings). At present, in this paper, NPV has not been used for specific case analysis. After that, a typical enterprise can be selected for calculation and analysis according to the cash flow statement provided by the enterprise. With the increasing importance of supply chain, the author will focus on

how to combine the internal supply chain structure of the enterprise with the external financial environment in the future, that is, various financial systems mentioned in the first part, so that the decision-makers of the enterprise can make better decisions on supply chain management.

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