Study on the Corporate Financing Strategy of a Chemical Enterprise as an Example

Kexuan Xue*

Master of Management (finance), The University of Melbourne, Melbourne 3010, Australia

Abstract

With the Chinese government's increasing awareness of environmental protection. In recent years, relevant policies have been introduced to promote the industrial upgrading and transformation of chemical enterprises. The transformation and adjustment of chemical enterprises require a large amount of capital investment. Therefore, this paper takes G chemical enterprise as an example, analyzes its financial report, uses the life cycle theory to determine its life cycle stage, and puts forward scientific financing planning and strategies according to the development characteristics and financing needs of enterprises at this stage, establishes diversified financing channels, and improves its financing ability.

Keywords

Enterprise financing, chemical enterprise, financing strategy.

1. Introduction

The chemical industry is an important part of the national economy. It not only contributes directly to economic growth but also drives the coordinated development of upstream and downstream industries through the extension of its industrial chain and supply chain. Chemical companies are an important source of tax revenue and provide a large number of jobs, boosting consumption and investment growth. Chemical enterprises have the characteristics of large volume, long industrial chain, intensive capital and technology, and wide driving role. Based on the uniqueness of the chemical industry itself, the processing involves a wide range, and there are many uncertain factors in the production process. In addition, with the enhancement of national environmental awareness, relevant policies and laws have been introduced to promote industrial upgrading, green transformation, and fine development of chemical enterprises. Therefore, from 2022 to the present, many chemical enterprises are facing the problem of upgrading and transformation. The transformation, upgrading, and development of enterprises need financial support. The chemical industry is a typical energy-intensive and capital-intensive industry, and chemical construction projects generally have a large demand for funds, especially the investment of fixed assets in the early stage, the depreciation of related assets, and the technical improvement of existing assembly [1]. Therefore, financing is a difficult problem faced by chemical enterprises. Especially for small and medium-sized chemical enterprises. Because most small and medium-sized chemical enterprises have small assets, weak strength, and weak ability to create high technology, coupled with their limited capital, it is difficult to provide banks with collateral of the same value to obtain full funding. In addition, financial institutions have less support for the special funds of chemical enterprises, and the implementation of policies is more rigid. Considering the credit risk of small and medium-sized chemical enterprises, state-owned banks are more willing to support leading enterprises with low credit risk, relatively large scale, and good economic benefits to reduce their risks. As a result, the channels of small and medium-sized chemical enterprises are too single. With the further tightening of credit, the financing threshold of small and medium-sized chemical enterprises is higher and the financing difficulty is greater, so that small and medium-sized chemical enterprises are faced with greater survival and competitive pressure [2]. According to the research data of the China Census network, the working capital that can meet the operating needs of small and medium-sized chemical enterprises accounts for less than 18%[3], and most small and medium-sized chemical enterprises can not obtain long-term loans to develop themselves.

Taking G chemical enterprise as an example, this paper analyzes its financial report, makes scientific financing plan, establishes diversified financing channels, and improves its financing ability.

2. Basic Theory

2.1. Enterprise Financing Theory

Financing refers to a series of fund-raising actions and processes taken by a company to meet its own operational needs [4]. The company develops reasonable strategies based on the current financial situation, future development plans and the amount of capital required, and chooses appropriate methods, such as attracting investors and borrowers, to obtain the necessary capital supply and ensure the smooth operation of daily business. Therefore, corporate financing can be understood as the company obtains the required funds through the best way according to its own needs.

Corporate financing can be divided into internal financing and external financing according to capital sources [5]. Internal financing refers to the process in which enterprises continuously obtain funds from their own internal (that is, retained profits of enterprises) and convert them into capital investment, which has the characteristics of originality, autonomy, low cost and risk resistance for enterprise capital formation [6]. The superiority of internal financing is reflected in the company's higher control power and lower financing risk and cost. Because the source of internal funds is the profits and assets of the company, there is no need to bear any interest and other expenses on the funds.

External financing is a way to seek financial help from external institutions of a company. It can be divided into debt financing and equity financing. Debt financing includes bank loans, private lending, corporate bonds, trusts, leases and commercial credit [7]. A Bank loan is a kind of economic behavior in which funds are lent to those who need funds, the repayment period is agreed and the agreed interest rate is paid. Private lending is a private agreement with private or non-financial institutions to determine the amount of financing, interest rates, terms, and other conditions. Corporate bonds are securities issued by a company following legal procedures and agreeing to repay the principal and interest at a certain time. Trust means that the truster entrusts the trustee with his or her property rights out of his or her trust, and the trustee manages or disposes of the property rights in his or her name for the benefit of the beneficiary or for a specific purpose as required by the truster. Leasing is equipment financing, which means that some equipment can be used through leasing during the company's operation. The lease contract includes the lessee's interest cost and the lessor's interest yield. Commercial credit is financing enterprises and business partners through favorable payment terms. For example, "Accounts payable", "other payable", and "deposit received". Commercial credit is a financing method with lower cost and less risk [8].

Equity financing refers to a financing method in which the shareholders of an enterprise are willing to transfer part of the ownership of the enterprise and introduce new shareholders through the way of capital increase. Financing methods include property rights transactions, equity transfers, capital increase and share expansion, equity pledges and venture capital [9]. Property rights transactions refer to a kind of financing method that deals with the assets of enterprises in the form of commodities. The purpose is to optimize the equity structure, facilitate the allocation of resources and improve the efficiency of resource use. Equity transfer financing means that the funds needed to be raised by the enterprise can be realized by transferring part of the equity of the enterprise. This approach can attract direct investment and introduce new partners, but it will have a significant impact on the enterprise's development goals and management methods. Equity pledge means that the debtor or a third party pledges the equity of the company to the creditor as the guarantee of the creditor's right. When the debtor fails to perform the debt, the creditor has the right to discount the equity or the price of the auction or sale of the equity by the law. Venture capital is a combination of financing and investment, capital supply, and management services to provide investment to risk projects. The purpose of investment is to make the invested enterprise bigger and stronger through investment and providing value-added services, and then exit through listing, merger, acquisition, or other means so that the investment can realize value-added realization in the flow of property rights [10].

In 1984, Myers and Majluf (1984) put forward the pecking order theory. According to this theory, when making investment and financing decisions, enterprises will comprehensively consider the credit spread and financing cost, and determine the priority sequence of investment based on multi-party credit [11]. That is to say, when enterprises raise financing, they evaluate the existing financing conditions, borrowing rates and possible risks under various lending modes according to their own conditions, so as to find the optimal capital allocation that meets their own needs. For chemical enterprises, the financing priority of enterprises usually inclines to internal financing, debt financing and equity financing. However, for small and medium-sized chemical enterprises, financing channels are relatively simple, mainly self-owned funds, inter-private lending, short-term bank mortgage loans. Private lending and bank mortgage loans will increase the debt ratio of small and medium-sized chemical enterprises, resulting in slow capital return of enterprises, increase the financing cost of small and medium-sized chemical enterprises in terms of mortgage guarantee, increase the risk of capital operation of enterprises, and easily lead to internal financial crisis of enterprises. Therefore, how to expand diversified financing channels and financing methods is an urgent problem for enterprises to solve. Therefore, combined with the enterprise life cycle theory, this paper studies the financing strategy of G enterprise.

3. Analysis of Financing of Chemical Enterprises

3.1. Introduction of Chemical Enterprises

G Chemical Enterprise is located in Jiangxi Province, China. At the beginning of its establishment, it mainly produced potassium nitrate, sodium nitrate, ammonium chloride, and other chemical auxiliaries for ceramics. In 2012, the company was restructured and upgraded to produce environmentally friendly rubber and plastic auxiliaries, including zinc borate, composite plasticizer, composite flame retardant, and composite stabilizer. The company focuses on the research and development of environmentally friendly rubber and plastic additives. Has several patents. Enterprises expand market share by reducing costs and expanding price advantages and quality advantages. The rubber and plastic auxiliaries produced by the company have the characteristics of environmental protection, non-toxicity, high efficiency, and multi-function. It has high-cost performance, safety, and environmental protection, is easy to operate, and has good market prospects.

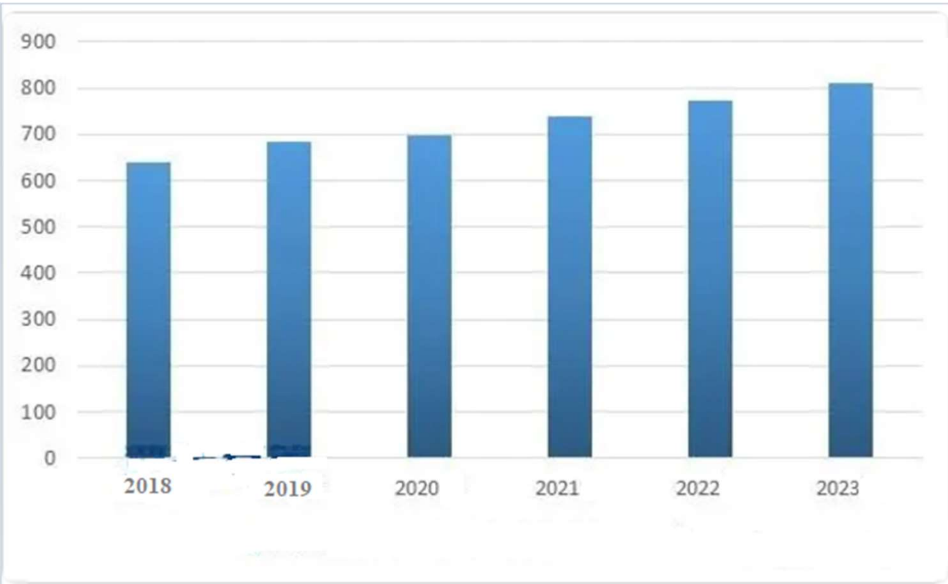
The company has more than 280 employees. The legal representative of the company has 15 years of experience and good personal credit. Since its establishment, the company has standardized operation and environmental protection standards. Good credit history for a long time. No major violations in the past three years. The short-term goal of the enterprise is to integrate and optimize the company's resources, increase the enterprise's production process research and development and scientific research and innovation capabilities, highlight the characteristics of product refinement and environmental protection, stabilize and expand domestic market share, and seize the international market. Therefore, it is necessary to add production equipment and improve production capacity. It can be seen that the financing purpose of G chemical enterprises is to expand production scale for enterprises, expand market share, optimize equity structure, and improve financial status. 3.2 Enterprise financial analysis

3.2. Enterprise Financial Analysis

The key factors that determine the financing method of a company include the overall atmosphere of the industry, the asset composition of the company, the financial performance and development potential, the management thoughts of shareholders or management, etc. [12]. This paper first analyzes the industry prospects and then analyzes the financial situation of the enterprise, including the company's asset structure, profitability analysis, operating capability and solvency.

First of all, from the perspective of the development prospects of the plastic additives industry, its development degree is closely related to the development of the plastics industry. From 2015 to 2023, global plastic consumption increased by 50%, and the global production and consumption growth rate of plastics in the past decade exceeds that of any material, which is an industry with full potential for development. The production of plastics in Asia accounts for 51% of the world's total production, especially the largest number of manufacturers gathered in China. Therefore, it can be concluded that with the increase of plastic demand, the demand for plastic additives will also grow rapidly, and China has gradually become the world's largest and fastest growing market [13]. In 2022, the output of plastic auxiliaries in China reached 7.74 million tons, an increase of 5.02% over the previous year. In 2022, China's consumption of plastic additives reached 7.28 million tons, an increase of 5.97% over the previous year. With the continuous improvement of capacity utilization and the continuous investment of new production capacity, the production and consumption of plastic auxiliaries in China will maintain steady growth, and the output of plastic auxiliaries in China will reach 8.09 million tons in 2023, and the consumption will reach 7.68 million tons (as shown in Figure 1). From 2018 to 2023, the market size of plastic auxiliaries in China has shown an overall growth trend year by year, increasing from $6.8 billion in 2018 to $8.4 billion in 2023 [14].

Table 1. Market size of plastic auxiliaries in China from 2018 to 2023(Ten thousand tons)



In addition, with the rapid development of downstream markets such as environmentally friendly buildings, electric vehicles, aerospace, and high-end civil electronic products, the market size of China's plastic additives industry will continue to expand. It is expected to reach 9.781 billion US dollars in 2026, with a compound annual growth rate of 4.90% from 2021 to 2026 [15]. It can be seen that with the continuous expansion of downstream industries, as well as the innovative development concept of green and high efficiency, it is expected that the market size of plastic additives will gradually expand in the future, and the industry has good development prospects.

Secondly, this paper analyzes the asset structure, profitability, operating ability and solvency of G enterprise. The asset allocation table of Enterprise G from 2021-2023 is shown in Table 2. It can be seen that from 2021 to 2023, the assets of G enterprise are constantly increasing, and the inventory accounts for a relatively high proportion of current assets, and the inventory is mainly raw materials and inventory goods. Since 2022, Company G has increased its trading financial assets, which are mainly purchased financial products, which shows that the company's asset structure is becoming more and more diversified.

Table 2. The asset allocation table of Enterprise G from 2021-2023

Unit: Ten thousand yuan

Item	2021	2022	2023
Trading financial assets	/	350	800
Notes receivable	2480	3562	3049
Accounts receivable	3640	3138	3530
Prepayment	239	423	986
Other receivables	825	936	1087
Inventory	4893	5042	5145
Total current assets	13476	15970	17038
Fixed assets	7932	9012	9146
Total assets	21408	24982	26184

Table 3 shows the operating revenue, gross margin, net profit margin, return on equity(ROE), and return on total assets(ROA) of Enterprise G, which is used to measure the profitability of Enterprise G. It can be seen from the table that from 2021 to 2023, the operating revenue, gross margin, net profit margin and return on equity of G enterprise show a steady increase trend year by year. The sales ability and profitability of enterprises are on the rise. This is mainly due to the fact that G enterprises pay attention to operating cost control, achieve diversified purchase channels, negotiate price reduction with suppliers, improve procurement processes, etc., which effectively reduce procurement costs. In addition, GCompany also uses technological innovation and equipment update to increase production capacity and reduce production costs.

Table 3. Analysis of Enterprise Profitability

Unit: Ten thousand yuan

Item	2021	2022	2023
Operating revenue	16386	19083	24551
Gross margin	13.49%	18.63%	23.43%
Net profit margin	4.36%	6.02%	8.17%
ROE	2.04%	2.19%	3.58%

As shown in Table 4, the operating capacity of G enterprise is analyzed. Key data used to assess a company's operational efficiency include days sales outstanding (DSD), inventory cycle times, and overall capital utilization and circulation. Operational capacity reveals the use of a company's various resources and its management level. If a company's various assets are running quickly and efficiently, it means that it has good liquidity and stable sources of income, and is better able to cope with debt repayment pressures. First of all, the DSD of G enterprise decreased year by year, and the inventory cycle times were 53.87. Generally speaking, the common inventory cycle times of chemical enterprises are in the range of 30-90 days, which means that G enterprise has a faster inventory turnover speed, can achieve faster sales, and has a strong sales ability and collection ability. G Enterprises adopt a supply chain collaborative office, which improves operation efficiency. Through the visualization and real-time monitoring of the whole process of the supply chain system, problems in the supply chain can be discovered and solved in time, production line downtime and procurement costs can be reduced, and production efficiency can be improved. Through fine inventory management, overstock and overstock can be reduced, and the capital occupation cost of enterprises. Therefore, the turnover days of its accounts receivable are gradually reduced. Total asset turnover is a key indicator to evaluate the efficiency of the whole operation, which represents the overall operating rate of the company's assets. The standard value set by the chemical industry is 80%, and the total asset turnover rate of the enterprise is 82% at present, which is slightly higher than the standard value, indicating that the enterprise has a high level of management and operation.

Table 4. The Operating Capacity of G Enterprise

Item	2021	2022	2023
DSD	18.39	15.12	15.56
Inventory cycle times	55.39	53.16	53.07
Total asset turnover	81	84	80

As shown in Table 5, this paper uses debt-to-asset ratio, current ratio, quick ratio and long-term capital debt ratio to analyze the solvency of G enterprise. First of all, debt-to-asset ratio is used to measure the financial health of the enterprise and debt repayment ability, the debt-to-asset ratio of plastic additives enterprises is generally between 20% and 50%, and the debt-to-asset ratio of G enterprises is in the normal range, and at a lower level, without greater volatility, indicating that the financial risk of the enterprise is low, that is, the enterprise has long-term debt repayment ability. The current ratio and quick ratio examine the short-term solvency of enterprises. The current ratio of G enterprises in the past three years is about 120%, and the quick ratio is about 95%. The current ratio of normal enterprises is between 150% and 200%, and the quick ratio is 100%. It can be seen that the current ratio of this enterprise is slightly lower than the normal value, and the quick ratio fluctuates slightly around the normal value, indicating that the asset liquidity of G enterprise is relatively low, although there is some short-term debt repayment pressure, the debt repayment ability is still within a reasonable range.

Table 5. Solvency of G enterprise

Item	2021	2022	2023
Debt-to-Asset Ratio	24%	32%	28%
Current Ratio	120%	117%	125%
Quick Ratio	97%	103%	101%

To sum up, the industry environment of G enterprise is better and has the support of various national policies. In addition, it has diversified capital structure, good operating capacity, management ability, sales profitability, short-term solvency and long-term solvency, and is in the stage of stable and healthy development.

3.3. Analysis of Corporate Financing Needs and Financing situation

This paper uses the theory of enterprise life cycle to judge the stage of enterprise life cycle and enterprise financing needs. Dickinson(2006) proposed to use the positive and negative conditions of a company's working capital, investment capital and financing capital to judge the life cycle of an enterprise. The life cycle of an enterprise is divided into introduction period, expansion period, stability period, shock period and decline period [16]. According to the cash flow of three activity modules of G enterprise in the recent 7 years, such as operation, investment and financing, this paper preliminarily determines that G enterprise is in the expansion period of enterprise life cycle.

At this stage, the performance and sales revenue of G company grew, and it quickly occupied the market relying on the price advantage of the product. At this stage, G company increased R&D funds to update technology and products, improve product quality, and thus achieve rapid sales growth, expand the scale, create sustainable profits for the company, and achieve further improvement of profitability and operating capacity. With the continuous increase of market share and profit of G enterprises, G enterprises strengthen the degree of specialization, enhance the ability of technological innovation, improve the level of management, and gradually mature.

At this stage, G enterprises need sufficient funds to invest in the purchase of new production equipment, reduce production costs, improve production efficiency and capacity, consolidate their position in the market and obtain continuous growth of profits. Strengthen product research and development and innovation capabilities. This requires H company to invest a lot of capital to purchase research and development equipment, personnel training, patent applications and other aspects. To adapt to the needs and changes of the market. In addition, G company needs funds to improve production safety, environmental protection facilities and environmental protection measures to ensure the safety and environmental protection of the production process. And make sure you have enough working capital to cover your daily expenses. It can be seen that at this stage, Company G has a large demand for funds, and financing is its urgent task to be solved.

4. G Corporate Financing Strategies and Optimization Suggestions

G enterprises in the stage of development and expansion have more assets, and their ability and level of resisting risks have been significantly improved. In order to further expand the company's funding sources, Company G should combine short-term financing with long-term financing. We can not only apply for long-term loans from banks to obtain long-term funds, but also use the strong profitability of the company to raise funds through internal financing. At this stage, G enterprises should attach importance to the scientific financing structure, which can make the company's financing behavior adapt to and cooperate with the growth strategy of the enterprise in a timely manner, reduce the financial risk and capital burden of the enterprise, improve the ability of internal capital raising, expand diversified external financing channels and methods, and actively seek solutions to various financing problems.

According to the principle of priority financing, the financing of G enterprises should be carried out in accordance with the internal resources first, and then the debt as the final asset. New approaches to project development can also be sought to promote synergies with companies in key industries. In doing so, they have not only expanded their fundraising areas and methods. It can also improve financing efficiency, reduce financing costs, and form a benign relationship between relevant stakeholders.

In terms of external financing methods, commercial credit financing can be considered, and commercial credit borrowing usually brings lower costs. G Enterprises may use commercial credit borrowings for receivables and payables to customers and suppliers. In addition, bank loans are generally regarded as the most common financing method for enterprises. G enterprises can obtain funds by borrowing from banks through mortgaging assets, and at the same time, they need to repay according to the loan interest rate and repayment period of the bank. However, it is necessary to take into account that enterprises will need to bear greater repayment pressure, greater costs, and rely on banks and other financial institutions such as a single financing method, once the financing failure, then the enterprise is equivalent to the capital chain break, will cause a fatal impact on the enterprise. Therefore, enterprises can also consider debt financing notes and market financing when conducting external financing. And the enterprise has a number of national patent authorization, and a number of key technology transformation capabilities. Therefore, we can consider the intellectual property pledge financing loan or intellectual property as a supporting form of financing combination. In terms of activating accounts receivable, Company G can also undertake pledge financing in the form of accounts receivable or notes receivable. In addition, G enterprise is a chemical enterprise with scientific and technological content, so the enterprise can seek industry policy support, or the support of relevant industry guidance funds. In recent years, the support of the state in the chemical industry has gradually increased, and there is support in many aspects such as industry subsidies and industry discount interest. Therefore, seeking the support of national taxes, subsidies and other policies can not only obtain funds, but also improve the influence of enterprises and establish corporate image.

In short, when choosing financing methods, G enterprises should fully measure the cost of various financing methods, select financing strategies with lower cost, evaluate the structure of long-term financing and short-term financing, the cost-benefit ratio of internal financing and external financing, and the cost of debt financing and debt financing, so that the financing strategy can improve the economic benefits of the company.

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