



# Research on Financing Strategies of Small and Medium-sized Enterprises - Based on Capital Structure Theory

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**Abstract.** Small and medium-sized enterprises (SMEs) play an important role in China's economic construction and have made great contributions to the country's economic development. However, the difficulty of financing for SMEs is also becoming more and more prominent, which has become the primary problem restricting their development. Based on the development of capital structure theory, this paper summarizes the different financing strategies of enterprises and proposes corresponding financing strategies for the financing difficulties of SMEs.

**Keywords:** capital structure; MM theory; SME financing

## 1 Introduction

Since the reform and opening up, China has been improving the construction of the market economy and promoting the development of SMEs, and the state has been paying more and more attention to the status of SMEs in the national economy. For example, the economic crisis in 2008 caused China's SMEs to be hit hard as never before. The national government, at this time, did not turn a blind eye, but introduced a series of relief measures to protect the healthy development of Chinese enterprises. However, under the premise of various national policies, such as repeatedly lowering quotas and interest rates, protecting the capital interests of SMEs through relevant policies cannot completely change the incompatibility between China's traditional economic system and the financing of SMEs, coupled with the small scale of these enterprises, the weak ability to resist risks, and the low survival rate, these factors determine that compared with large enterprises, SMEs are at a disadvantage in financing. The financing problem is a major problem that plagues the development of SMEs. The decision of enterprise financing is usually based on the capital structure of the enterprise, and this paper proposes the financing strategy of SMEs from the capital structure theory and the actual situation of SMEs in China.

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The research of this paper is divided into 5 main chapters. The first chapter is an introduction, which introduces the research topic. Chapter 2 is an overview of capital structure, which outlines the basic concepts of capital structure, Chapter 3 is the evolution of capital structure theory, Chapter 4 is a basic introduction to three capital structure theories: MM theory, trade-off theory, and optimal-order financing theory, and Chapter 5 is a related proposal for SME financing strategies.

## 2 Overview of Capital Structure

Capital structure refers to the value composition and proportional relationship of various kinds of capital of an enterprise, and is the result of the combination of financing of an enterprise for a certain period. Broadly speaking, capital structure refers to the composition of all the capital of an enterprise and its proportional relationship. The capital of an enterprise in a certain period can be divided into debt capital and equity capital, and also into short-term capital and long-term capital. The capital structure in a narrow sense refers to the composition and proportional relationship of various long-term capital of an enterprise, especially the composition and proportional relationship between long-term debt capital and (long-term) equity capital. It reflects the financial relationship of the enterprise under the market economy, that is, with capital and credit as the link, the best capital structure that restricts the interest relationship between shareholders, bondholders and operators through investment and borrowing is the capital structure that maximizes shareholder wealth or stock price, even the capital structure with the smallest capital cost.

In addition to the relationship between liabilities and owner's equity, the capital structure can be further classified into levels. Liabilities of enterprises are composed of current liabilities and long-term liabilities, which form the structure of current liabilities and long-term liabilities accordingly, while owner's equity is composed of invested capital and accumulated capital of enterprises, which form the structure of invested capital and accumulated capital accordingly.

The composition of the enterprise's liabilities is usually used to analyze the adaptation and balance of the capital structure with the asset structure, which allows to indicate the type of capital (conservative, moderate and aggressive). In the case of joint-stock companies it is divided into common and preferred shares, which are classified by the nature of the stock. The proportion of capital in different channels specifically regulates the nature of the enterprise, if the state capital reaches the level of holding, the enterprise is also a state owned enterprise, and accordingly various other capital reaches the level of holding, the nature of the enterprise is also determined. The perspective of the study of the different nature of the enterprise also differs accordingly.

### 3 Evolution of Capital Structure Theory

The evolution of capital structure theory can be broadly divided into three stages: early capital structure theory stage, classical capital structure theory stage and modern capital structure theory stage.

#### 3.1 Early Capital Structure Theory Stage

Early capital structure theories refer to the theories before 1958. According to Durand's summary, the main theories in this stage include: net income theory, net operating income theory and traditional compromise theory.

The net income theory means that enterprises can reduce the cost of capital by changing the capital structure ( increasing the degree of financial leverage ), and ultimately achieve the goal of maximizing value. Moreover, the optimal capital structure will appear dramatically in the extreme case where debt capital accounts for 100 %.

The net operating income theory suggests that capital structure is independent of firm value. The traditional trade-off theory is essentially a compromise between the two extreme theories, net income theory and net operating income theory. This theory suggests the existence of a non-extreme optimal capital structure.

#### 3.2 Classical Capital Structure Theory Stage

The classical capital structure theory stage starts from 1958 to the late 1970s. At this stage, Modigliani and Miller founded and revised the MM theory ; on the other hand, around the MM theorem, two branches of the tax difference school and the bankruptcy cost school have been formed, and finally the trade-off theory has been formed.

Modigliani and Miller used the arbitrage method to prove and explain the irrelevance of capital structure. After that, Hamada and Stiglitz used the famous capital asset pricing model and general equilibrium theory to prove the MM theorem again. Modigliani and Miller found that the assumption that the market value of the enterprise is proportional to the expected after-tax compensation does not hold, which means that the tax advantage of debt financing is greater than they originally thought[1]. So they revised the no-tax model.

In the revised MM theory, the consideration of tax is too simplified. In-depth research in this area has led to the formation of the tax difference school. This school mainly starts from two kinds of tax differences that influence capital structure : one is the difference among corporate income tax, individual income tax and capital gains tax ; the second is the difference formed by the nonlinear tax rate under the progressive tax system. According to Stapleton, it is tax differences, rather than uncertainty, that are most likely to make the cost of capital a function of financial policy[2]. Miller systematically expounds the capital structure model including personal income tax[3]. Since then, DeAngelo and Masulis reinterpreted the Miller model and proved it again [4].

The trade-off theory combines the views of the tax difference school and the bankruptcy cost school, and believes that the optimal capital structure of the enterprise is the trade-off between the tax advantage of the debt and the present value of the bankruptcy cost [5]. The idea of trade-off theory is most clearly expressed by Robichek and Myers that "the optimal level of debt structure is at the point where the present value of tax benefits associated with financial leverage The optimal level of debt structure is at the point where the present value of tax benefits associated with marginal increases in financial leverage is equal to the present value of marginal costs that are unfavorable to financial leverage." Kraus and Litzenberger use a state choice model to further demonstrate this idea, and Scott more succinctly demonstrates that there is "a single optimal capital structure" for a firm under two sufficient conditions.

### 3.3 Modern Capital Structure Theory Stage

Modern capital structure theory began in the late 1970s and its distinguishing feature from classical capital structure theory is the introduction of the analytical framework of information economics regarding asymmetric information. There are many schools of modern capital structure theory, the main ones include agency cost theory and the derivation of financial contract theory and signal display model, in addition to the new pecking order theory [6].

The representative literature of agency cost theory mainly includes: Jensen and Meckling transformed the capital structure problem into the ownership structure problem, introduced the concept of agency cost including supervision cost, constraint cost and residual loss, and pointed out that the optimal capital structure of the enterprise should be the debt-to-equity ratio that can minimize the agency cost under a given internal capital level. Myers found that debt also has another type of agency cost, that is, "any agreed payment to creditors that would cause the firm to abandon an investment project with a future net present value greater than zero" [7].

Smith and Warner, the leading representatives of financial covenant theory, argue that controlling conflicts between creditors and shareholders through financial covenants can increase the total value of the firm. Among the classic literature on the conditions of optimal financial covenants, Townsend introduced a comprehensive covenant theory using the Cost State Verification (CSV) method, Diamond (1984) argued that debt is the optimal covenant between entrepreneurs and lenders, and Gale and Hellwing argued that an optimal incentive-compatible debt covenant is the standard debt covenant. Hart explained the financial structure of firms using incomplete contracts [8].

The signaling model explores how firms with asymmetric information can influence investors' decisions by sending signals about the value of the firm to the market in an appropriate way [9]. Ross proposed the 'excitation-signal display' model. It evolves an optimal financial structure decision theory which is consistent with MM theorem through the connection with manager incentive structure. Leland and Pyle pointed out that in the presence of information asymmetry, the willingness of entrepreneurs to invest can itself be used as a signal of the quality of an investment project.

Peckingorder refers to the preference order of enterprises when using different financing channels. Myers introduced the analytical framework of asymmetric information to theoretically explain that firms "prefer internal financing; if external financing is needed, they prefer debt financing". Myers and Majluf used a model to show that asymmetric information about firm value determines the firm's capital structure more than asymmetric information about risk [10].

## **4 Corporate Financing Strategy**

### **4.1 Financing Methods**

Financing methods are generally divided into debt financing and equity financing.

#### **4.1.1 Debt Financing**

Debt financing includes bank loans, bond financing, finance leasing, etc.

Bank loans are one of the most common ways of financing for businesses. Moreover, in the financing activities of enterprises, banks are one of the important channels. According to the nature of funds, they are divided into three types of loans, such as working capital, fixed assets and special assets. Generally, special loans are used for special purposes and have favorable loan ratios, and mainly contain several types of credit loans, guarantee loans and bill discounting [11].

Bond financing mainly includes corporate bonds and convertible bonds. Bondholders cannot participate in the day-to-day management of the enterprise but can recover the principal and interest regularly. In bankruptcy and liquidation, they have priority over shareholders in claiming the remaining assets of the enterprise, which are similar to stocks and are freely transferable securities. Convertible bonds are bonds that can be converted into common stock under certain conditions.

Financial leasing is based on the combination of financing and accommodation, playing the function of finance and trade, so as to enhance the effectiveness of enterprise financing and accelerate the technological progress of enterprises. It mainly contains three forms: direct purchase, sale and leaseback and leveraged leasing. To a certain extent, financial leasing has broadened the channels of technological transformation of enterprises, and through the combination of new financing and accommodations, accelerates the introduction of advanced production equipment and technology, reduces capital investment, and significantly improves the efficiency of capital use.

#### **4.1.2 Equity Financing**

The main method of equity financing is the issuance of shares. Stocks are generally divided into common and preferred stocks.

The main characteristics of stock financing are permanent, no period, no repayment or even no repayment of principal and interest, so the financing risk is not significant. The stock market can promote the conversion of the business mechanism of enterprises, fundamentally realizing independent operation, profit and loss,

development and discipline as one legal entity and market competition subject. In addition, the stock market provides a platform for asset restructuring, where the organizational structure of the enterprise is optimized and the integration capacity of the enterprise is enhanced [12].

However, the use of equity financing can create equity dilution problems for the original shareholders and infringe upon the inherent rights and interests of the original shareholders. Therefore, excessive use of equity financing may cause opposition from the original shareholders. In addition, the newly introduced shareholders may be ill-intentioned. Excessive equity ownership by new shareholders may result in a transfer of control of the company. Therefore, when using equity financing, it is important to fully consider the impact of the shareholder's shareholding ratio.

## **4.2 SME Financing Strategy**

According to the modern capital structure theory, a reasonable financing sequence for SMEs should be internal financing, private equity financing, and debt financing.

### **4.2.1 Internal Financing**

Internal financing refers to the retained earnings, depreciation fund, upgrading fund, new product development fund, accrued unpaid wages or accounts receivable in the course of operation. Therefore, the size of endogenous financing depends on the profit level, net asset scale and investor expectation of the enterprise. Endogenous financing has the characteristics of originality, autonomy, low cost and risk resistance for the capital formation of enterprises.

Small and medium-sized enterprises should actively promote the construction of modern enterprise system according to the Company Law to improve enterprise organization and corporate governance structure to improve the technical content of products and service quality in the direction of "small but fine, small but special, small but specialized, small but new" to maximize efficiency and reduce business risks [13].

### **4.2.2 Private Equity Financing**

Active private equity financing is another channel of financing for SMEs.

On the one hand, private equity financing is necessary to avoid financial risks. The lower tax shield effect and the higher financial crisis costs determine the need for SMEs to avoid financial risks. Taxes and financial crisis costs make SMEs face much greater financial risks than large enterprises, while the smaller size and weaker factors make SMEs generally less able to withstand risks, so to prevent the need for financial risk SMEs should adopt a sound and conservative low financial leverage financing strategy.

On the other hand, SMEs require continuity of capital investment in their growth process, so the maturity of financing and its mix is also an issue that SMEs must consider to avoid financial risks. From various sources of financing, SMEs use short-term debt capital instead of long-term debt capital. However, short-term

financing is difficult to meet the capital needs of SMEs' growth and each negotiation increases the cost of financing, so SMEs must adjust their capital structure and adopt a capital structure approach supplemented by equity financing [14].

SMEs generally have difficulty in obtaining support from creditors due to their short operating period, low profit record, few assets available for collateral and security, and poor credit base. Although debt financing is less costly than equity financing, SMEs have to make a trade-off between the cost of financing and the availability of financing in the face of financing difficulties. Although the financing cost of private equity financing is high, it generally does not require mortgage, pledge or guarantee. In addition, private equity capital usually comes from wealthy individuals, strategic investors, venture capital funds, etc. These investors usually have rich investment strength or investment management experience and thus have the ability to identify risks and can intervene in the early stage of enterprise development, thus making financing more convenient for SMEs.

#### **4.2.3 Credit Financing**

Improving corporate credit and securing more credit funds are important channels for SME financing.

As soon as external financing occurs, it immediately involves the issue of enterprise's liabilities and credit capacity. Only when the debt of the enterprise is consistent with the credit capacity of the enterprise can the enterprise establish its own credibility in the financing process to obtain more financing and establish a good corporate image of honesty and trustworthiness.

At present, SMEs in China also suffer from behaviors such as payment default, breach of contract, sale of counterfeit and shoddy products, disclosure of false information, quality fraud, price fraud and other behaviors that seriously affect corporate creditworthiness. As a result of enterprise creditworthiness ultimately makes it more difficult for SMEs to obtain bank loan support mainly in the following ways: the overall credit of SMEs is not very satisfactory, the management system is not standardized, the operating conditions are not stable and the credit conditions are not sound. The collateral and guarantee conditions available to SMEs often do not meet the requirements of lending banks. These problems rely to a large extent on SMEs themselves to face and solve them courageously [15].

In addition, small and medium-sized enterprises should enlarge their financing vision to learn and make use of other financing methods suitable for their own financing, such as leasing financing. Since the introduction of the 1980s to the current China's franchise or part-time financial leasing institutions have more than 1,000. Business covers the whole country has a wide use of the channel of small and medium-sized enterprises to be good at using financial leasing to solve the technical transformation in the bonus gap; such as shell listing. At present, many enterprises are undergoing restructuring, and small and medium-sized enterprises with strength should actively participate in it through shareholding or even holding state-owned listed companies to achieve the purpose of shell listing financing; such as borrowing other people's credit financing in recent years, China's membership management credit guarantee institutions are developing rapidly, and small and medium-sized

enterprises should proactively seek membership in order to borrow other people's credit to obtain bank loans when necessary. In addition, there are compensation trade, project financing, pawn, insurance trust, bill discounting and international financial institution loans and other financing methods to be recognized and used by SMEs.

## 5 Conclusions

The growth and development of SMEs are related to the stability of the society and the healthy development of the national economy, so it is important to solve the current difficulties that restrict the development of SMEs and promote their healthy growth. The financing problem of SMEs is related to all aspects. Administrative departments, banking institutions and individual enterprises should recognize their own efforts in solving this problem and actively cooperate with other members to solve a series of problems, taking into account various factors, so as to finally promote the solution of SME financing problems. The government should play a leading role and increase support for SMEs.

First, the government should increase policy support funds for SMEs, and more so for startups with development prospects but insufficient initial capital. 2015 saw only 2.8 trillion yuan of direct government loans in China, less than one-tenth of the credit needs of SMEs. Only by increasing the financial support for SMEs can the guiding function and leverage effect of policy funds be brought into play on this basis.

Second, the government should adopt differentiated tax rates for SMEs of different sizes and in different lifecycles, with phased tax exemptions for start-ups and progressively higher tax rates according to the time of establishment, scale of development and profitability. At the same time, it should implement preferential tax policies such as VAT exemptions or equipment investment tax credits for SMEs in key national support areas such as information technology, energy conservation and environmental protection, and high-end manufacturing. In addition, the tax supervision mechanism should be improved, and effective supervision and reporting channels should be established to achieve strict law enforcement, reduce repeated tax collection and abusive charging by taxation workers, and reduce the burden of expenses other than regular taxes on SMEs.

Third, in addition to strengthening market management and improving support for SMEs, the government should also motivate SMEs to improve their internal management system. The government should encourage SMEs to establish proper legal and financial management consciousness, avoid tax evasion and false accounting, and build a perfect financial management system. At the same time, SMEs with a certain scale of development are encouraged to hire professional financial personnel or strengthen managers' own financial management knowledge. Only after the development risks of SMEs are solved from the inside, the improvement of external environment can really work for SME financing.



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