Possible Factors Affecting Companies' Capital Structure

Kaiyi Bao(✉)

Durham University, Durham, England
bobbybao2002@163.com

Abstract. The capital structure shows the composition of a public corporation. The decision to change a company's capital structure made by managers is not only a method of increasing the profitability of the firm but also the prediction of the future development of the market. Thus, some of the most common ways of changing structure will be explained in this paper, and a major proportion of factors that may lead to the change of capital structure, including internal and external factors, as well as the process of influencing the change and the possible consequences. After the analysis, it can be summarized that these factors do not all affect the profitability of a firm, but some of them influence the survival of the firm. So the board of directors and managers of the firm should make the proper decision at the right time to make sure the positive trend of the company's development.

Keywords: Capital Structure · Change · Factors · Aims

1 Introduction

The assets of a company are composed of equity and debt, and capital structure is always used to express the condition of composition of debt and equity. The change in capital structure is a signal of the company's operation. For example, based on the background of the rapid development of the world, companies need to develop accompany with the economy. Thus, published companies have to raise sufficient capital for the future development, and it will lead to a change of capital structure. Also, there are a series of reasons that will make companies to change, not only for investing but also to protect the firm from bankruptcy and other dangers. This essay aims to list the pros and cons of stock and debt, common approaches to changing capital structure, and a possible portion of factors of changing capital structure, and discuss the relation between these factors and the possible action the company will take to overcome these problems through referring to some examples in the real world.

2 Basic Definition

The capital structure is defined as the mix of debt and equity. It can be expressed by the debt-to-equity-ratio, which is calculated by the formula Debt/Equity = Total Liabilities/Total Shareholders' Equity [1]. Based on the background of the world and company,

F. Balli et al. (Eds.): ESFCT 2022, AEBMR 226, pp. 1447–1453, 2022.
https://doi.org/10.2991/978-94-6463-052-7_160

there are many factors that drive the change in the capital structure of a company, including internal and external factors, in order to adjust the debt-to-equity ratio to the best for the development of the company. When a company wants to change its capital structure, they must take the pro and con of stocks into consideration. It is changed through several combinations of methods: issuing debt and purchasing back the stocks, issuing debt, and paying a large dividend to equity holders or issuing equity and repaying debt. This essay will analyze the reasons for changing the capital structure and the anticipated results of the action they decide to take and the influences on the company, like the stock price of the company.

3 Stocks and Debts Pros and Cons

A company's capital structure is defined by the number of stocks and debts it holds on its balance sheet. When the company wants to change it, the advantages of it are the primary reasons they will consider since they must get benefit from holding it. For holding stocks, the company does not need to pay the interest to shareholders before the maturity date than debt. What's more, companies are not necessarily required to pay the dividend to the shareholder since the residual income can be reinvested in other projects to increase the value of the company, and thus the value of the stock they own tends to improve. However, for stockholders in a company, increasing the number of stocks will dilute the percentage holders originally have, which means it is possible that the right of vote of one shareholder is going to decrease if common stocks are issued. Then the major manager must be changed as the change of voting right and it will inevitably cause the loss of management. Moreover, the cost of capital is higher than that of debt since the risk of investing in debt is higher than stocks for investors. Because of the higher expected return, the risk for company with lower leverage (the value of stock is higher than debt) will be required to earn a larger profit than high leverage companies to satisfy the expectation even though it is flexible to distribute the dividend. In contrast, the disadvantage of stock is the advantage of debt. Moreover, the cost of issuing debt is less than that of stock, and the interest payment to the debt holder can offset the tax paid to the government. Companies, therefore, are more willing to raise capital and then change their capital structure. This theory is called the pecking order theory [2]. However, in real life there are other reasons affecting the choice of financing. In Poland, bond issuing is not a popular financing polish because of too many legal restrictions. Although the Polish government canceled some restrictions in 2000, companies are not willing to issue bond. The main reason of this phenomenon may be the information failure in the bond issuer [3].

4 Capital Structure Change Approach

In order to change the capital structure, companies can only change the percentage value of debt or stock to the total value of the company. There are three general approaches companies would like to use in general.

4.1 The First Combination

The first one is the combination of issuing debt and purchasing equity. It changed the capital structure by selling debt to the public to raise money and using them to buy back the stock sold in the secondary. This could make the percentage of debt value on the balance sheet increase and the company would become more leveraged.

4.2 The Second Combination

The second method is issuing debt and pay a large dividend to equity investors. Companies firstly give debts to lenders. Then, the goal of altering the capital structure is achieved by sending a special dividend with greater value than normal. Thus, the value of equity (stock price) will go down, which will reflect the dividend paid to shareholders.

4.3 The Third Combination

The final one is the opposite of the first approach, which is collecting money by issuing stocks to the market and collecting them to pay debt. However, this strategy is not closed most of the time. Because according to the pecking order theory, the cost needed to issuing stock is higher than debt, the companies only use this method when they are overleveraged and desperately needs to reduce its debt.

5 Possible Factors of Changing Capital Structure

Generally, factors that can affect the capital structure should be divided into two different types: external and internal factors. For a firm's managers, they have to adjust the capital structure level to their best in order to maximize the value of the firm and decrease the bad effect brought by these factors.

5.1 External Factors

The first external factor is the degree of development of the country. In developing countries, since the income level per person is relatively lower, the total cash flow in the market is not sufficient motivation and sources for firms to issue debt and stocks for development. Also, most developing countries do not have a complete financial system, which means it is hard to collect scattered capital and transform it into investment. So, in developing countries, companies are hard to change the capital structure into maximum. However, in developed country, large number of financial institutions can make sure the smoothness and legality of capital turnover to satisfy these companies' demand for capital structure.

The second external factor is the economic cycle. The economic cycle is defined as the fluctuation of a country's economy between expansion and recession [4] (See Fig. 1).

Normally, it is measured by the gross domestic product (GDP) level. When the economy is in a recession, firms generally want to reduce the amount of debt they hold since most debt has a maturity date and in a recession condition, it is hard to get

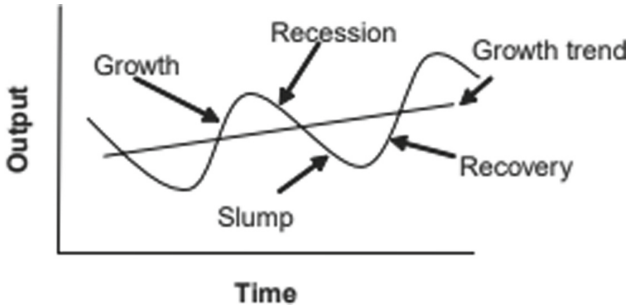

Fig. 1. Economic cycle [4] (Madhani, P. Rebalancing Fixed and Variable Pay in a Sales Organization: A Business Cycle Perspective. Compensation &Amp; Benefits Review, vol. 42(3), 2010, pp. 179-189, Licensed by the author)

sufficient income to pay for the debt they hold. In order to avoid the risk of defaulting, the corporation is more willing to have stock funding rather than debt funding. Conversely, under expansion conditions, companies are more willing to lend money from outside, and invest in positive NPV projects to make more profit based on the pecking order theory. In conclusion, companies are more leveraged in a growth state than in a contraction.

The industry that a company lives in is the third external factor. Some companies trade in a monopoly or oligopoly condition, which means only one or a few firms dominate most of the market power. Because the pressure to survive is lower, they may choose to issue debt to raise capital. In contrast, a firm in a competitive market like electronic devices industry. Many firms have to compete with each other for the same types of products, so the revenue of a firm is more uncertain. Most firms, therefore, wish to be more unlevered for the purpose of facing the risk brought by debt.

The last external factor is tax. It has been mentioned that interest payments can be used to offset the tax paid to the government. So, it become the reason for corporations to increase their debt-to-equity ratio, and the profit they will make tends to move up.

5.2 Internal Factors

From the other perspective, it is the inner factor. The first factor, which is the most obvious one, is the scale of the company. Much research like Stulz, 1990 has shown that the relation between leverage and company size is positive [5]. For a large-scale company, most of them will do diversification to reduce the unsystematic risk, and they can achieve this goal by acquiring and merging other small companies. Acquiring and merging can be divided into two types: horizontal and vertical. Horizontal acquisition means big companies acquire those that compete in the same market (selling the same type of products). It can improve the scale of the company further, which can not only collect the rival's advantage in production but also achieve the goal of positive economics of scale. Positive economics of scale means the average cost of production will decrease as the scale of a company improves. Also, acquisition can effectively decrease the risk burden of one company, and it can stop the losses in a sudden time when there is a crisis in the market. Vertical integration has the same purpose as horizontal. But vertical immigration

is exercised by acquiring companies in the same production line. For example, a car company want to do a vertical acquisition by purchasing companies that produce the components needed to manufacture a car. Compared with buying components from the market, this process can not only effectively save the cost in production but also improve the efficiency of production. These big companies have stale income sources as the market share of their products improves after the mergers and acquisitions. Thus, the ability to hold debt is better in big companies than small-medium size firms.

The second one is the profitability of the firm. The relationship between a company's profitability and the debt on its balance sheet is positive in theory, which means the more profit a company makes, the more debt they will owe. Since the theory advocates that higher profitability firms needs more debt to offset the interest payment they need to pay. However, in real life, leverage has a negative relationship with profitability. For example, Kester in 1986 proved this opinion by comparing the data in Japan and Us. The principle it will refer to is the pecking order theory. For profitable firm, they prefer internal financing more than debt financing since it can not only help companies to raise capital easily but also reduce the risk and the cost of financing.

The third internal theory is the dividend policy of a company. If the board of directors cannot bear the risk of issuing debt and the dilute their percentage of shares by issuing new stocks. They will decide to use the profit for internal financing to develop in the future instead of paying out dividends to shareholders. However, Because of the uncertainty of investing in projects. Gordon (1959), Lintner (1956) and Walter (1963) proposed the bird-in-hand theory [6] [7] [8]. In the theory, they conclude that investors are more willing in holding dividends in the current rather than benefiting from the value increase of their stocks in the future. This theory assumes that investors prefer safer certain dividends compared with uncertain capital gains in the future. A good example is Coco-Cola. Since the 1920s, Coco-Cola has stably paid dividend to its shareholders and the number of dividends has increased from 1964. As a result, firms can only be financed by debt and stocks with the purpose of investment.

The next one is the asset structure of firms. The assets owned by a firm can be classified into two categories: tangible assets and intangible assets. Tangible assets are those assets with a physical appearance, like equipment or cars. Intangible assets do not exist in the physical form like patents. When a company plans to raise capital by issuing bonds. Potential investors may not easily decide to invest in this debt because of the information asymmetry. Investors do not clearly know about the current condition of the company, including its profitability or liquidity of the company. If a company issues short-term debt but the liquidity of the firm is quite low, the company will probably default. Thus, companies are going to issue collateral bonds, which enable them to eliminate the credit risk. The collateral bond means companies use similar value of company's tangible asset for mortgaging. If a company is in default, assets for mortgage will be delivered to the debt holder according to their weight. Also, using collateral bond can decrease the agency cost in a limited amount [9]. So, the benefit of collateral bonds is that corporations are able to afford more bonds as the value of assets for mortgage they provide increases, and the company will probably become more leveraged. However, Bevan & Danbolt (2002) researched and found that long term bond is in positive relation

with capital structure, but short-term debt has a negative relationship [10]. A good real-world example is Poland, because most of the companies in Poland mostly have short term debt [3]. On the other hand, the types of assets the company owned which is suitable for company for mortgage is a reason for the determination of capital structure. For instance, real estate enterprises generally issue more bonds, but some technology development companies are less likely to issue debt for financing.

What's more, a changing capital structure can be redeemed as a weapon to avoid hostile takeover. Generally, companies with less debt can more easily become the target of acquisitions or mergers since the acquirers do not need to undertake more debt after acquiring. But the risk that a bond will produce will ask a company to use the bond for protection. Although issuing bonds will decrease the percentage weighted of shareholders in the company, issuing new stock (not to the acquirers) to the market will increase the difficulty of acquisition as the amount of money needed rises.

Lastly, the decision about how to the change capital structure is made by the board of directors and managers of the firm based on their judgment about the future prospective of the economy. If the assessment is downbeat, firms are more likely to reduce the debt to decrease the probability of default. Conversely, if they anticipate that the economy will have a positive development, companies may choose to have more debt for financing and do more investing for the purpose of having a higher payoff in the future.

6 Conclusion

In conclusion, the capital structure is affected by many factors, including internal and external factors. These only a portion but are the dominant factors. Also, because these factors are changing all the time and may correlate with each other, it requires the decider to make more precise judgment about the future perspective of the market and appropriate actions. The limitation of this paper is the incompleteness of summarizing all aspects of factors, and the perspective of this research is to collect factors as much as possible. Finally, combining all of factors into consideration, the change of structure can not only be the approach for company to raise capital but also be the weapon to protect the company from the risk from the market.

References

1. Pamela, P., Analysis of Financial Statements, New York: Wiley, 1999, p. 92.
2. Myers, S., & Majluf, N., Corporate financing and investment decisions when firms have information that investors do not have. Journal Of Financial Economics, vol. 13(2), 1984, pp. 187-221.
3. Mazur, K., The Determinants of Capital Structure Choice: Evidence from Polish Companies. International Advances In Economic Research, vol. 13(4), 2007, pp. 495-514.
4. Madhani, P., Rebalancing Fixed and Variable Pay in a Sales Organization: A Business Cycle Perspective. Compensation &Amp; Benefits Review, vol. 42(3), 2010, pp. 179–189.
5. Stulz, R., Managerial discretion and optimal financing policies. Journal Of Financial Economics, vol. 26(1), 1990, pp. 3-27.
6. Gordon, M., Dividends, Earnings, and Stock Prices. The Review Of Economics And Statistics, vol. 41(2), 1959, p. 99.

7. Lintner, J., Distribution of incomes of corporations among dividends, retained earnings, and taxes. The American Economic Review, vol. 46(2), 1956, pp. 97–113.
8. Walter, J., Dividend Policy: Its Influence On The Value Of The Enterprise. The Journal Of Finance, vol. 18(2), 1963, pp. 280-291.
9. Jensen, M., & Meckling, W., Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal Of Financial Economics, vol. 3(4), 1976, pp. 305-360.
10. Bevan, A., & Danbolt, J., Capital structure and its determinants in the UK - a decompositional analysis. Applied Financial Economics, vol. 12(3), 2002, pp. 159-170.